DIGITAL COMMONS
@ UNIVERSITY OF SOUTH FLORIDA

University of South Florida
Digital Commons @ University of South Florida

UIS Bulletin

Newsletters and Periodicals

12-2022

UIS Bulletin, Volume 64, No. 2, December 2022

Nivaldo Colzato

Follow this and additional works at: https://digitalcommons.usf.edu/uis_bulletin

Recommended Citation

Colzato, Nivaldo, "UIS Bulletin, Volume 64, No. 2, December 2022" (2022). *UIS Bulletin*. 34.
https://digitalcommons.usf.edu/uis_bulletin/34

This Text is brought to you for free and open access by the Newsletters and Periodicals at Digital Commons @ University of South Florida. It has been accepted for inclusion in UIS Bulletin by an authorized administrator of Digital Commons @ University of South Florida. For more information, please contact digitalcommons@usf.edu.

UIS BULLETIN
Union Internationale de Spéléologie
Volume 64-2 - December 2022

GROUNDWATER SUMMIT 2022

UN-Water Summit on Groundwater

The UIS back at UNESCO Headquarters in Paris to talk to the world about karst aquifers

SEE ALSO:

- The first years of the UIS by the Past President Arrigo Cigna
- The UIS and its global recognition
- The newly elected Bureau 2022-2025
- Reports of commissions
- Minutes of the UIS Bureau meetings and General Assembly
- The UIS Archive in Postojna, Slovenia
- The Cave Time Capsule that will only be opened in 2091
- The UIS Prizes 2021/22 and France Habe Prize 2022
- Updated news about the 19th ICS and its excursions

and much more in the 108 pages of this issue ...

Contents

UIS BULLETIN
Official publication of the UIS for publicizing the activities of the UIS and the state of the art of international speleology. This publication is only available digitally and may be distributed freely.
© 2022 UIS

EDITOR IN CHIEF
Nivaldo COLZATO (Brazil)

LAYOUT AND EDITION
Nivaldo COLZATO (Brazil)

DISCLAIMER
The views and opinions expressed in this bulletin are those of the authors and do not necessarily reflect the official policy or position of the International Union of Speleology or its Bureau members unless stated. UIS reserves it rights to admit or refuse any article that does not fulfill UIS standards or criteria.

Union Internationale de Spéléologie
Founded in Postojna, Slovenia, 1965
The UIS is a non-profit, non-governmental worldwide speleological organization that promotes the development of interaction between academic and technical speleologists of a wide range of nationalities to develop and coordinate international speleology in all of its scientific, technical, cultural and economic aspects.

NON DISCRIMINATION POLICY
The UIS prohibits discrimination against its member nations, volunteers, and providers on the base of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status or sexual orientation. Should you have any question, please direct your inquiriry to:

Dr. Johannes MATTES
UIS General Secretary
secretary@uis-speleo.org
Alternatively, write to:
Union Internationale de Spéléologie
Titov trg 2 - 6230, Postojna - Slovenia

http://www.uis-speleo.org/

MEMBER OF
International Science Council
The global voice for science
https://council.science/

TABLE OF CONTENTS

Editorial: *The motto that builds the UIS* 3
President's Column - *by Nadja Zupan Hajna: "History, Present and Vision"* 4
UIS President's Report to the General Secretary - *by George Veni* 6
The Report of the UIS General Secretary - *by Fadi Nader* 8
UIS Treasurer's Report to the General Assembly - *by Nadja Zupan Hajna* 13
The closing of the International Year of Caves and Karst 2021/22 17
The first years of the UIS - *by Arrigo Cigna* 18
The new UIS Bureau 2022-2025 21
The UIS Archive in Postojna, Slovenia 24
Report of Commission on Artificial Cavities 28
Report of Commission on Bibliography 30
Report of Commission on Cave Rescue 34
Report of Commission on History of Speleology 36
Report of Commission on Informatics 38
Report of Commission on Karst and Caves Protection 41
Report of Commission on Physical Chemistry and Hydrogeology of Karst 43
Report of Commission on Pseudokarst 47
Report of Commission on Volcanic Caves 50
The second Cave Animal of the Year: BATS 53
The UIS Prizes 2021/22 Awarding Ceremony 55
The UIS France Habe Prize 2022 winner 60
The Cave Time Capsule begins its journey through time in Savoie, France 61
Mini S4 - Summer School Workshop on Speleothem Science in Austria 64
The UIS and its global recognition 67
UIS at the United Nations Groundwater Summit 69
19th International Congress of Speleology 2025 in Brazil - updated news 71
The ICSs and the pre- and post-congress excursions 76
Minutes of the UIS Annual Bureau Meeting in France 81
Minutes of the UIS General Assembly in France 89
Minutes of the UIS Bureau Virtual Meeting 95
In memorian - Pindi Setiawan (Indonesia) 98
In memorian - Yavor Shopov (Bulgaria) 100
Calendar of Events 101
UIS Bureau 2022/2025 102
List of UIS Commissions and Working Groups 103
List of Member Countries 106
Annual Contributions and Bank Account 107

Before submitting articles for the UIS Bulletin, please CLICK HERE!
Deadline for submissions for the next issue (Vol. 65-1): June 15, 2023

ENGLISH LANGUAGE EDITOR FOR THIS ISSUE:
Ged CAMPION *(UK, UIS Adjunct Secretary)*
Patricia SEISER *(USA, UIS Adjunct Secretary)*
George VENI *(USA, UIS Former President)*

REMEMBER: SAVE A TREE; DO NOT PRINT IF UNNECESSARY

Editorial

THE MOTTO THAT BUILDS THE UIS

By Nivaldo Colzato (Brazil)
UIS Vice President of Operations / UIS Bulletin Editor
nivaldo@karinaetiquetas.com.br

Dear speleologists, cavers and cave lovers around the world, we are glad to share with you one more issue of the UIS Bulletin that brings, as usual, news and important achievements of speleology and the UIS.

If you opened the file and went straight to the index, you may have noticed the wide variety of topics covered, since a testimonial about the "old" days of the UIS, passing through others that show how fruitful the current period is, and still others that project good perspectives for the speleology and the UIS in the near future.

This is the dynamic of an ever-active association that has been facing challenges for decades, is always looking for alternatives to solve the most diverse issues that arise, adapts to global changes, and, above all, improves, and evolves.

This is the UIS, created in 1965 on the initiative of a group of scientists knowledgeable about the diversity and extension of karst areas around the planet, who also understood the need for an international association to develop speleological science at a global level as well. It was this brilliant group who managed and looked after the UIS at a time when the means of communication available were just letters, telex, and fixed telephones, that is, "wired". Virtual meetings, for instance, a common practice today, were unthinkable possibilities back in the 1960s or 1970s.

Little by little, year after year, the inevitable transformations were coming and the UIS was being adapted, moulded, but always moved forward. At its helm, the founding pioneers were followed by other important figures, many of them with decades of good service rendered to the Union and the global speleological cause.

This is the team that the Italian Arrigo Cigna is part of. A renowned scientist, fond not only of science, but mainly of the collective and institutional ideal, Arrigo has been active in international speleology since 1960, when the UIS did not yet exist. He attended the 4th International Congress of Speleology (ICS), in 1965, when the UIS was effectively founded, and he never left it. Elected as President in 1973, he completed his second term in 1981. Since then, as Past President, he has been present not only at events but in many issues involving the UIS.

In July 2022 Arrigo spoke at the opening of the 18th ICS, in Le Bourget-du-Lac, France. His words, reproduced on *page 18*, reveal the backstage that led him to the Presidency of the UIS, in addition to other important passages and actions that contributed to the welfare of the Union.

Arrigo, who has just turned 90 is, above all, passionate about UIS. His actions as an advisor are always clear and objective in the sense of seeking what is best for the Union. In this regard, he will certainly be very pleased to read this issue of the Bulletin. Besides being the most illustrated ever—191 photos and 42 images as well as 514 links for one-click access to websites or emails—it brings many good news that show the growth of the UIS and its evolution as a worldwide leader in speleology.

A report that should be here is about the 18th ICS. Unfortunately, the organizing committee was not able to finish it in time and it is therefore expected to be in the next issue.

Even so, there are other important topics reported here, such as the activities of nine commissions; a newly elected Bureau 2022-2025; the winners of the 2021/22 UIS Prizes and France Habe Prize 2022; the good news about the organization of the 19th ICS in 2025 in Brazil and its scheduled excursions; anyway, we have here an issue that portrays the great moment that the UIS and world speleology are experiencing. The closing of the International Year of Caves and Karst 2021/22, for example, points to about 850 events held around the world, which represents a total success that has certainly changed the way people see caves and karst.

The presence of the UIS at the UNESCO Headquarters for three times in a short period of 15 months deserves to be highly celebrated too. The great success achieved has given to the UIS unprecedented global recognition, which shows that we are heading in the right direction. At the same time, it means also that there is still a lot of work to be done.

Dear Arrigo, as you can see, this is the UIS that you, and so many others, put a lot of effort into, and also dreamed of. That entity created by a small group of enthusiasts grew, became truly global and capable of contributing to the development of speleology and the protection of caves and karst even in times of difficulties.

And do you know why? That's because the UIS has been surrounded by people like you, who, among other ideals to be followed, seek to practice your own motto ***"what can I do for the Union,"*** and never ***"what can I get from the Union."***

Good reading!

The President's Column

HISTORY, PRESENT AND VISION

By Nadja Zupan Hajna (Slovenia)
UIS President
zupan@zrc-sazu.si

Photos: At karst & caves field in Canada, August 2022

The central event for speleology and karstology is the International Congress of Speleology (ICS), held every four years. The first congress was held in Paris in 1953, and in July 2022 the 18th ICS was held in the French town of Le Bourget-du-Lac. The organization of the Congress was fraught with many difficulties, but the organizers and volunteers did everything they could to try and overcome these difficulties so we must thank them for their efforts and making the Congress possible.

At the Congress, we met, reported on new underground discoveries and scientific achievements, exchanged knowledge and experiences, and made many new acquaintances and friends.

During the event, the Delegates of the UIS Member States met twice for the General Assembly (GA), reviewed their activities, made plans for work before the next congress, accepted new member states, confirmed the location of the next Congress in 2025, in Brazil, and elected a new Bureau. The UIS Bureau has a mandate of four years, and members are elected by the national representatives of the member states; currently there are 57 countries.

At the second meeting of UIS GA, I was elected as the new UIS President. For me personally, this election to the presidency is a great honor resulting from the many years of recognition in karstological and speleological circles, gained through my scientific work in the field of karst geology and geomorphology and speleogenesis, as well as at the Union level. I have been a member of the Bureau since 2009, where I served first as Adjunct Secretary and then as Treasurer. At the same time, I was also the official representative of UIS in Slovenia, where the UIS has been registered since 2002 and has its headquarters in Postojna.

The UIS was also founded in Slovenia (then Yugoslavia) at the 4th International Congress of Speleology in 1965, more precisely at the closing ceremony of the Congress in Postojna Cave. It was only when I came home from Le Bourget-du-Lac that I realized that the year I was elected President was also the 20th anniversary of the registration of the UIS in Slovenia. I see the future of UIS as continuing to be the global association where cavers and scientists collaborate and share their experiences, problems, and solutions.

PAUL GRIFFITHS

Stone Corral, Tumbler Ridge UNESCO Global Geopark, British Colombia: *Prospection of cave entrance.*

CAROL RAMSEY

Snaring Mountain, Jasper National Park, Alberta: *During field trip on glacio-karst with Greg Horne.*

In particular, I hope that cavers and karst scientists will work together at the local, national, and regional levels and share their experiences at the global level in the UIS. Therefore, I invite young and enthusiastic people to participate, organize and collaborate in the various tasks under the umbrella of the UIS Working Groups and Commissions.

I also believe that the UIS can still exist as a non-governmental, non-political, voluntary, non-profit society that is not based on paid professionals and groups of employees. I do not think money is the answer, it always causes arguments between friends. At the moment the UIS has enough money to support small international projects of the commissions and to organize events.

Currently, the focus is on the exploration of caves in remote parts of the world, for example in Africa. In recent years, significant discoveries have been made in China, Laos, Vietnam, Mexico, Georgia, and elsewhere in the world. Speleologists are constantly improving their knowledge of various aspects of karst and caves and developing ever more advanced technologies.

Scientists, many of whom are cavers, have contributed to the recognition of past global climate changes and current and future climate trends. Speleological research is also involved in space exploration on the Moon, Mars, and other planets, so cave and karst researchers also collaborate with NASA and ESA in training astronauts and in understanding lava caves and other possible cave-bearing rocks that may be found outside Earth.

Of course, one of the main issues of the UIS is karst and cave protection, and for that there should be a strong and active group of people working within the UIS Cave Protection Commission, and one or two Adjunct Secretaries working on protection strategies, and if they are able, even at UN level. I hope that with the newly elected Bureau we can improve the work of the UIS in this area.

Protection of the karst underground, caves, water and biota were also the main goal of the UIS International Year of Caves and Karst (IYCK) 2021/22, which was one of the major accomplishments of the previous Bureau and should continue to be pursued in the coming years at all levels of the UIS, by cavers, scientists, educators and managers, and at local, national, international, and global levels.

I hope that the newly elected members of the UIS Bureau will make an important contribution to the future development of international speleology, to improve the relations between cavers and scientists, and to the protection of caves and karst on a global scale with upcoming projects.

© NADJA ZUPAN HAJNA

International group at Karst Medicine Lake, Jasper, Alberta.
LEFT TO RIGHT: *Franci Gabrovšek, Carol Ramsey, Paul Griffiths, Nadja Zupan Hajna, Greg Horne, and Bojan Otoničar.*

UIS PRESIDENT'S REPORT TO THE GENERAL ASSEMBLY: 2017-2022

By Dr. George Veni (USA)
UIS President 2017-2022
gveni@nckri.org

[EDITOR'S NOTE: This is the report presented to the UIS General Assembly on 24 July 2022]

The past 5 years have been excellent and challenging years for the UIS. We started with high hopes and big dreams, and while some were not possible, we had other great successes—even if a little different from what we first planned. COVID limited and hurt the world, and while COVID is not gone, we have found ways to live with it and continue toward our goals.

This report is a summary of some of our major accomplishments. There isn't enough time to list everything or all the details, which is disappointing to not recognize all the dedicated speleologists and their important works to advance speleology. But here is a short list of some of the things we've done over the past 5 years:

• Twelve member countries scanned the paper proceedings of their International Congresses of Speleology so all UIS congress proceedings from 1953 are now digital. This is a total of 21,219 pages, including this congress. This is a priceless record of cave exploration, descriptions, science, and protection projects for nearly 70 years.

• The UIS Commissions have been busy. In just the current issue of the UIS Bulletin we have major reports and successes from: Cave Diving, Informatics, Karst and Cave Protection, Materials and Techniques, and Physical Chemistry and Hydrogeology. You will hear these reports and more today.

• All UIS Bulletins are now digital. The 73 paper issues were collected, digitally cleaned, and scanned to preserve a total of 903 pages of speleological history.

• We produced 10 UIS Bulletins during these 5 years with an average of 57 pages per bulletin and 93 photos and graphics per bulletin. This is the most productive period in speleology recorded in the UIS Bulletin.

• The UIS funded and sponsored 16 expeditions and 30 conferences, projects, and events, even though we had two years of limited activity because of COVID. A total of 9,150 euros were paid by the UIS to support these international expeditions and projects. These events do not include activities for the International Year of Caves and Karst. I encourage our commissions and member countries to contact the UIS Bureau and ask for support for your projects, and even if there is no financial support, UIS moral support and the UIS logo can help your projects find money and more partners.

© NATIONAL CAVE AND KARST RESEARCH INSTITUTE

George Veni in Parks Ranch Cave, USA.

• The original plan was for the International Year of Caves and Karst to be recognized by the United Nations or UNESCO. Unfortunately, that was not possible. But our new friends at UNESCO encouraged us to organize an International Year independently with our member countries and to find more new friends. We did that, and as of yesterday, we have 262 partner organizations, 23 are international organizations, and the others are from 51 counties. Together we have organized 680 events so far, which have reached tens of millions of people around the world.

This International Congress of Speleology is also an important event for the International Year. When we close this congress in one week, we will also close the International Year, but remember this is only ceremonial. The International Year will continue through the end of 2022, so please continue to organize more events and programs!

• You have received two major publications produced for the International Year. Karst, Caves, and People is an excellent book to teach people about caves and karst. The greatly updated Guidelines for Caves and Karst Protection, which was co-published with IUCN and is available online, will protect and save many caves and karst areas from damage or destruction—but only if you use it and share it. Please use and share both books.

GEORGE VENI

Past UIS President Dr. Julia James (second from left to right) *discusses her research in Jenolan Cave with other karst scientists during the 17th International Congress of Speleology in Australia in 2017. The UIS needs more dedicated scientists to join the UIS commissions and continue to grow cave research worldwide.*

• The most significant event of the International Year was held on September 13th last year when UNESCO invited us to celebrate the International Year at UNESCO Headquarters in Paris. For the first time in history, the great importance of caves and karst were presented to governmental leaders from around the world, and since then we have been involved more with UNESCO and other major organizations. You will hear from two, one (from the IUCN) during the Opening Ceremonies for the Congress today, and one next week (from the International Science Council) as we close the congress.

• And there have been big challenges for UIS too, especially in the past year. COVID delayed this congress by one year, and the war in Ukraine required the UIS to consider its position, which was released as a statement with a recommendation to the General Assembly. There will be time later today if the General Assembly wishes to discuss the Bureau's recommendations or other topics.

The theme of the International Year of Caves and Karst has been "Explore, Understand, Protect." This is what the UIS has been doing for 57 years. This theme and the enthusiasm of the International Year need to continue far into the future. As I retire from serving as UIS President for the past 5 years, I will continue to advise and assist whenever possible. The UIS is an incredible organization. Here are three points of advice to grow UIS even further:

1) Please continue to work with and support your local, regional, and national speleological organizations. That is vital. But also consider working with a UIS Commission or running for election to the UIS Bureau at an International Congress. If you are not sure what you can do to help, ask! If you have ideas for how you can help, tell us!

2) If you are scientist, your activity in the commissions is especially important. Scientific programs once organized by UIS are now organized by other groups. They "Understand," as in our theme, but they need the explorers and protectors who are in the UIS. Build the commissions and their projects and symposia in the UIS, which can offer the complete picture to Explore, Understand, and Protect.

3) We opened the door at UNESCO. Now we need to keep it open by continuing to stay involved with global organizations, even if only in small ways. If we are not seen, are not in the room with them, are not active, we will be forgotten. We must not be forgotten! Continue having high hopes and big dreams and reach for them whenever possible.

The most important thing to remember is that together we do great things. We have reached tens of millions of people with the International Year of Caves and Karst. Since my first year as UIS President I have been reminding everyone about the great strength represented in our name:

- **International:** *Everyone*
- **Union:** *Working together*
- **of Speleology:** *For speleology*

Don't forget this. I will continue to assist the UIS, but you are the future of speleology. Make it a great future!

THE REPORT OF THE UIS SECRETARY GENERAL

for the period from August 2017 to July 2022

PRESENTED ON JULY 24, 2022, AT THE UIS GENERAL ASSEMBLY

By Dr. Fadi. H. Nader (Lebanon)
UIS Secretary General 2005-2022
fadi.nader@orange.fr

Fadi H. NADER
UIS Secretary General 2005-2022

Dear Cavers and National Delegates, Ladies and Gentlemen, Distinguished Guests, Dear Friends,

It is a traditional duty for the UIS Secretary General, together with the President and Treasurer to present short but exhaustive reports to the General Assembly on the activity of the International Union of Speleology, of the Bureau and the Secretary General between the previous congress (2017 Sydney – Australia) and the present one (2022 Savoie – France). This time, we are one year later than the usual 4 years period between congresses due to the Covid-19 pandemic and associated crises.

Seventeen years ago, in 2005 (Athens, Greece), I was elected Secretary General while I was, at that time, the President of the Spéléo-Club du Liban, founding organization of speleology in Lebanon. Many things happened since that date including my move to France while Lebanon went on non-ending episodes of mishaps and disasters. Allow me here, to share with you the pain, I and many Lebanese cavers are facing today and the loss and disintegration of our history and country.

At the UIS Bureau, I followed the paths paved before me by great people, it has been an honor for me, and vicariously extended to the Lebanese caving communities, to be part of this tradition. Since I was elected as Secretary General after Pavel Bosak, I follow the same format handed to me by him, seventeen years ago, whom unfortunately and for the first time was not able to be with us. I am very grateful to him and may other friends and colleagues for all the support I had throughout these years.

The help of all the members of the UIS Bureau – including past presidents and honorary members, head of commissions and many others – made this difficult task easier and efficient. Together, we have faced many obstacles and difficulties, while trying always to modernize our organization in terms of its statutes, internal regulations and procedures. The support of the various General Assemblies and delegates from all member countries was essential for everything done so far. Thank You!

Allow me to share with you, first, the results of the UIS financial support to international speleological expeditions and events (proposed by cavers as well as commissions), which were coordinated by UIS Vice President of Administration, Zdenek Motycka for the last 5 years. May I also remind you that the establishment and procedures for such funding was built by the Bureau and voted on in the last International Congress of Speleology (part of the UIS official documents and procedures).

A total amount of 6,550 € was granted to UIS Commissions, upon request. In addition, since 2018, 9 projects have been supported financially by the UIS – based on application and review – with a total budget of 9,150 €. This shows in a concrete way how the UIS Bureau together with the support of the General Assembly can reach out to any caver and caving groups anywhere in the world. I hope on the behalf of all of us that these initiatives – now that they have clear and ratified mechanism and procedures can be boosted in the future to reach out many more expedition and event projects.

The UIS Bureau regularly update on its activities and resolutions through the UIS Bulletin that is published electronically only – since 2008 – on the UIS website, both of which have been tremendously upgraded since 2013 by the hard work of Nivaldo Colzato, Jasmina Rijavec under the guidance of Efrain Mercado with non-stop support by George Veni.

The upgraded UIS website had in the last two years 71,899 unique visitors and 106,821 number of visits.

Since the previous congress in 2017 (Sydney) until July 2022, 10 UIS Bulletins have been published (#59-2 (2017), #60-1, #60-2 (2018); #61-1, #61-2 (2019); #62-1, #62-2 (2020); #63-1, #63-2 (2021); and #64-1 (2022), consisting of 568 pages, 743 photos and 189 images.

Nivaldo went on and digitized the first 38 issues of the UIS Bulletin (from 1970 to 1993), which are now available online. A great wealth of our Union and history is now available to all.

Yet, allow me to share here one of our concerns with respect to the UIS Bulletin that relates to the low amount of contributions from our commissions and here I ask on the behalf of the whole Bureau for more effort from the active commissions to be made to continuously feed the Bulletin with articles and news.

Also, you will all know that for the past few years we have been on Facebook, and even more recently on Twitter and Instagram and YouTube. The UIS Facebook Group has now more than 3,400 members. The UIS Facebook Page reached 122,957 people (861 people like page, 1,013 people follow page). 23,316 views were registered on UIS YouTube (with 777 subscribers).

Activities and achievements around the world

Even through the difficult times of the pandemics and associated crises, numerous important activities and achievements related to the world of caves and karst took place since the last speleological congress that was held in Sydney in Australia in 2017. For instance, the 4th Middle East Speleology Symposium took place, for the first-time outside of Lebanon, in Antalya (Turkey) with joint Lebanese and Turkish efforts (SCL, ASPEG and AKÜMAK) illustrating the continuously developed speleology in this part of the world (https://issuu.com/aspeg/docs/2019_02_14_mess4_proceedings).

Major discoveries were made in China, Croatia, Mexico, Georgia and other places around the globe. We keep improving our knowledge on several aspects related to karst and caves and develop more advanced technologies – including the utilization of drones, laser-scanners, numerical modelling and imaging, as well as advanced caving and rescue techniques, cave surveying/mapping, photography and filming. The Caver's Dictionary keeps on adding new translation languages. The 27th language is Chinese (including Pinyin). New and updated links and bibliographic entries. Soon to be added on the website will be new Slovakian terms and grouping by subject, as well as the current alphabetical order.

Collectively, cave scientists (many of them cavers) contributed to predicting global changes and evolution of the past, modern and future climatic trends (e.g. new technologies using clumped oxygen isotopes and U-dating). Speleothems represent one of the first objects for such analyses – they must be valued and protected. Commissions have been pushing further the limits of our knowledge on various levels.

The 3D mapping of underground cavities and karstic conduits (photogrammetry, LIDAR, numerical modelling) helps to better understand the subsurface complexity and subterranean waterflow. This will certainly be a major area for research in the future for being able to predict, prevent and solve problems related to groundwater. We have to thank all involved for their continuous efforts and achievements.

Caves and Karst Protection

Since our 2018 yearly UIS Bureau meeting (Ebensee, Austria), we have explored ways to engage at the United Nations level for protecting caves and karst – initiative by Baerbel Vogel. This resulted in a series of actions:

1. Attendance at High-Level Political Forum on Sustainable Development at the UN headquarter in New York in 2018;

2. Participation at the United Nations Economic Commission for Europe UNECE Regional Forum for Sustainable Development in Geneva in 2019 and 2022;

3. Attendance to the United Nations Environment Assembly (UNEA 5) in Nairobi in 2022; and

4. Attendance to Stockholm+50 conference in Sweden in 2022). We hope to reach the legal status of a NGO at the Economic and Social Council ECOSOC which provides access to UN conferences. All such activities increase the visibility of UIS and cave protection and will make our organization an important partner for sustainable development plans in the future.

UNESCO and the International Year of Caves and Karst

The UIS continues to contribute to UNESCO. Since 2011, UIS has been an associate member of UNESCO's International Council for Science Unions (ICSU). In 2017, ICSU and the International Social Science Council (ISSC) merged to form the International Science Council (ISC).

UIS remained associate member of ISC since then. We have also contributed to the ICSU Scientists' Responsibility Act.

We continue to have cordial support from the International Union of Geography and the International Union of Geological Sciences, among other international scientific unions. ISSC and several UNESCO entities helped us tremendously throughout the IYCK project.

Since the 50th anniversary of the UIS celebrated in Postojna (in Slovenia) on the 19th of June 2015, under the honorary patronage of his Excellency Mr. Borut Pahor, the President of the Republic of Slovenia, the UIS Bureau with a dedicated committee worked hard to succeed an International Year of Caves and Karst (IYCK) aiming to increase the public awareness to explore, understand and protect caves and karst, worldwide.

The IYCK 2021 year was launched officially through a virtual kick-off on 26th of January 2021 (due to Covid-19 pandemic), but we also managed to organize a IYCK day at the UNESCO headquarter in Paris on the 13th of September 2021 to celebrate the IYCK. This event was organized under the patronage of the UNESCO Director-General, by the UIS in partnership with the Permanent Delegation of the Republic of Slovenia to UNESCO.

I will not repeat the information given by our President George Veni on this exceptional event, but I encourage you all to check the dedicated website for the IYCK (http://iyck2021.org/) to realize the incredible amount of effort made by the UIS family all over the world – even in extremely difficult times.

One example of such initiatives associated to the IYCK and coordinated by an exceptionally dedicated UIS Bureau adjunct secretary, Baerbel Vogel is the "International Cave Animal of the Year" initiative. This has been done in 2021 and 2022, successfully (check UIS Bulletin #62-2 and #63-2). Cave beetles won the 2021 competition after campaigns in Australia, Austria, Brasil, Germany, Greece, Italy, Portugal, Switzerland, USA, and Spain. This year (2022) International Cave Animal of the Year are bats supported by Australia, Austria, Germany, Italy, Switzerland and Spain.

Our plan was to close the IYCK year at the 18th ICS congress, which was supposed to take place the previous year (in 2021), but again the Covid-19 pandemic did not allow us to do so and the IYCK closing event like the ICS were postponed until 2022.

100 years of Martel's publication

Yet the year 2021, has another important significance for karst. It is also the 100th year anniversary of the publication of Edouard Alfred Martel's *Nouveau Traité des Eaux Souterraines* (New Treatise on Underground Waters), which revolutionized the understanding of the importance of caves to karst aquifers. Martel's work inspired others to explore and study caves, which led to the creation of the International Union of Speleology (UIS) in 1965.

18th International Congress of Speleology

I am looking forward to the coming week at the 18th ICS, here in Savoie-Technolac (France), to meet all of you – cavers and scientists of the whole world. I am looking forward to sharing your experience, knowledge, results as usual, but also to have fun and entertainment, to meet old and new friends.

For, what is caving without friendships that has no limits? The preparation of this 18th ICS (2022) was nothing easy, especially with so many obstacles (covid-19, world economy crisis, visa, etc.). The organizers of this congress spared no efforts, and we all owe them a tremendous debt. May I kindly ask you to give them a round of applause.

Member Countries and National Delegates

Before the 17th ICS in (2017), the UIS consisted of representatives of 54 member countries from all continents. Today, the UIS include 52 "active" member-countries that have honored their financial duties towards the Union. I must thank Nadja Hajna Zupan for her exceptional effort in having our books up-to-date. Following the UIS Statutes, Member countries which do not honor their payment duties will not be considered affiliated to the Union and will need to re-apply to become Member-Countries. The UIS Bureau pledges on your behalf to apply the Statutes.

I have to mention again, like in the previous General Assemblies, that the mechanism of contacts with Member-Countries via national delegates remains very problematic, especially when there are several self-appointed delegates, and numerous national federations or associations in the one country. In some countries the legality of so-called elected or selected national delegate(s) is questionable in terms of their capacity and right to represent the whole community of cavers in their countries.

To be the National Delegate to the UIS represents a duty and should not be about self- promotion because the delegate will represent cavers and national caving bodies and should expect no income or prestige in return. The delegate must remember that he/she represents ALL the cavers of their country and not the one Federation, Association or Club to which they belong. The National Delegate does not represent the government of his/her country and he/she cannot be imposed upon by governmental institutions. This is the very spirit of the UIS and it is expressed by entirely voluntary work for the sake of the community.

The UIS Bureau 2017-2022

The UIS Bureau 2017-2022 was composed as follows: George Veni *(USA)* as the President, Zdenek Motycka *(Czech Republic)* as Vice-President of Administration, Efrain Mercado *(Puerto Rico)* as Vice-President of Operations, Fadi H. Nader *(Lebanon)* as Secretary General, Nadja Zupan Hajna *(Slovenia)* as Treasurer, and Bernard Chirol *(France)*, Baerbel Vogel *(Germany)*, Gyula Hegedus *(Hungary)*, Mladen Garasic *(Croatia)*, Nivaldo Colzato *(Brazil),* Satoshi Goto *(Japan),* and Tim Moulds *(Australia)* as Adjunct Secretaries.

The UIS Bureau followed all the caving activities in member and also non-member countries. In the last five years, the UIS Bureau members attended and contributed to tens of international speleological events around the world (some were done virtually).

We have been present at the International Science Council (ISC), International Show Caves Association (ISCA), Latin America and The Caribbean Speleological Federation (FEALC), European Speleological Federation (FSE), Asian Union of Speleology (AUS), Balkan Speleological Union (BSU), amongst others who I cannot all list here. In general, such international conventions and meetings are increasing, expressing the healthy growth of speleology, globally. As group, the UIS Bureau members worked as a team, almost continuously in touch by email, skype/zoom and facebook. I would like to thank all of you very much for your co-operation and self-dedication.

The UIS Bureau met four times, i.e., on 25, 26 and 27 August 2018 in Ebensee (Austria), on 11 and 12 September 2019 in Bohol (Philippines), 9 and 10 September 2020 (online/virual), and 12 and 14 September 2021 in Paris, France.

The UIS Bureau focused its main efforts to organizThe UIS Bureau focused its main efforts on organizing the IYCK and to continuously provide solution to several emerging problems and normal administrative tasks, e.g., UIS exposure, diversification of financial sources and financial state-of-the-art, karst and cave protection and preservation; contacts with UNESCO, ICSU and ISCA, co-operation with other non-governmental institutions, Commissions, connection to national delegates, and public relations.

UIS Activity

The activity of the UIS, its bodies and member countries can be assessed from the various events, regularly published on the UIS webpages, in the UIS Bulletin and in other speleological magazines, journals and newsletters, and social media (Facebook, Twitter, Instagram). The final reports and financial reviews were completed by June 30th, 2022, and are on the pages of this Bulletin).

The Finances

See a separate report by Nadja Zupan Hajna, Acting Treasurer, on page 13 of this issue.

I would like simply to announce to you that our overall budget in 2017 was around 50,191 USD and 37,600 Euro, and it is today around 50,882 USD and around 37,542 Euro (June 30, 2022). This means that our accounts are healthy and we expect to receive additional receipts at this General Assembly as Member-Countries dues are paid.

UIS Bureau, based on the request of Member Countries, proposes an amendment of the list of categories of member countries and their respective annual fees (check specific point in agenda and proposed text for amendment of Internal Regulation, Clause 6, on ***page 89*** of this issue).

The Commissions

The structure of UIS Commissions was voted on at the last General Assembly. A lot of Commissions worked efficiently with substantial outputs (e.g., publications, symposia, conferences, workshops). About 13 of these entities reported their activities for the period 2017-2022 – today we have 20 commissions.

Commission on Archaeology and Palaeontology in Caves
Commission on Artificial Cavities
Commission on Arts and Letters
Commission on Biology
Commission on Bibliography
Commission on Cave Diving
Commission on Cave Mineralogy
Commission on Cave Rescue
Commission on Glacier, Firn, and Ice Caves
Commission on Education
Commission on History of Speleology
Commission on Informatics
Commission on Karst Hydrogeology and Speleogenesis
Commission on Long, Deep and Large Caves
Commission on Materials and Techniques
Commission on Physical Chemistry and Hydrogeology of Karst
Commission on Protection of Caves and Karst
Commission on Pseudokarst
Commission on Speleotherapy
Commission on Volcanic Caves

The General Assembly must vote on the continuing activities of the Commissions. The new UIS Bureau must deeply analyze the situation of individual Commissions and to search for better future solutions – some inactive entities should be discontinued. Click here to access the updated list of UIS Commissions.

The UIS Bulletin

The Bulletin was published regularly since the last ICS (Sydney, 2017), with two issues published per year (as mentioned above). We ask you again to help in submitting articles, especially that now there is a simple and straightforward way to prepare such articles with a standardized format (found on the website).

The International Journal of Speleology

Since 2013 the **IJS** is exclusively electronic through the Karst Information Portal (and with the University of South Florida). It is our top medium for publication of scientific achievements. Prof. Bogdan Onac has followed on from Prof. De Waele and is doing an excellent job as Editor-in-Chief since the last congress. In addition, the IJS is on SCI-extended and with, currently, a very good impact-factor (2021) 1.8.

Co-operation with other NGOs, governmental and private bodies

Colleagues and members of the UIS co-operate with the International Union of Conservation of Nature (IUCN). This was expressed by the recent organization of the IYCK day at the UNESCO in Paris and the publication of the Guidelines for Cave and Karst Protection. We have continuous contact with ISC (ICSU), as Associate Member. However, we do not yet have an excellent relationship with ISCA.

The relationships of the UIS with FEALC, the European Federation, the Asian Union of Speleology is continuously improving. The UIS stands as the world-umbrella organization of speleology and relates on its connections with regional and national bodies.

The UIS future

The future of the UIS, a non-governmental, non-profit organization, based on voluntary efforts, remains critically challenging for any UIS Bureau. We have modernized the statutes, the internal regulations, guidelines, and procedures. We have a clear and rich website and we are highly visible on social media.

We do also have our means for prestigious scientific and non-scientific publications – internationally available open access and recognized. In other words, we have managed to bring UIS to be recognized as a prestigious international scientific union but even now, cave- and karst-scientists are becoming increasingly independent of the UIS and its commissions.

At the same time, some exclusively sporting and touristic activities are becoming a major threat to our tradition, as we believe caving must remain a mix of science, sports and culture and never a strictly competitive sporting activity. Our Code of Ethics clearly states that no competition should take place in caves.

Though we are convinced of the importance of voluntary work and basis for the operations of our organization, we still lack the necessary resources to function effectively as a non-governmental, non-profit organization within the realms of UNESCO and similar international networks.

The future of UIS must also involve the individual cavers of the whole world. UIS (General Assembly, Bureau and Commissions) need to listen to their needs, and cavers in turn need to consider themselves part of the UIS. This is a necessity before attempting to convey their messages (and voice) to larger authorities such as the National/Government institutions and international organizations (UNESCO, UN). Do not wait for the UIS Bureau, be pro-active and tell the UIS Bureau your needs and aspirations. In the last few years, this method functioned very well when the UIS Bureau was able to support national initiatives to protect caves (such as Brazil, Colombia, …).

We witness continuously huge damage to karst features and caves all over the world. We can claim minor success in protecting some of them, but there are many we still to fight for. This is a continuous battle and I hope that we will be able to be more successful in the future. Here again, the IYCK provided a pertinent step towards global awareness and cave protection, but it should be only the beginning to a new era. Why not a non-ending IYCK?

We should succeed in supporting cavers irrespective of geopolitical and economical situations. The UIS Bureau has now applied with success new mechanisms for raising funds and supporting speleological projects and expeditions with the dedication of Zdenek Motycka. This must certainly to be amplified and reaches out to many more cavers around the world.

Dear friends, at the end of this week you will elect the new UIS Bureau. Please, elect persons who are geographically spread over all continents. The concentration of members from one continent is not very useful for the Bureau activities: our operations need persons from Europe, Asia and Africa (including the Middle East), Australia, North America, Central and South America and Caribbean.

Dear friends, I hope that I covered the most important topics concerning the UIS and some of the lessons we learnt during the last number of years. Do not hesitate to approach me, and any member of this Bureau, for any question, suggestions or comments.

Fadi H. Nader

UIS Secretary General 2005-2022

UIS TREASURER'S REPORT TO THE GENERAL ASSEMBLY: 2017-2022

By Nadja Zupan Hajna (Slovenia)
UIS President
UIS Treasurer 2017-2022
zupan@zrc-sazu.si

Union Internationale de Spéléologie
Titov trg 2 - 6230, Postojna - Slovenia
www.uis-speleo.org

Treasurer
Phone office: +386 5 700 1937
Fax office: +386 5 700 1999
E-mail: zupan@zrc-sazu.si

Dr. Nadja Zupan Hajna
ZRC SAZU Karst Research Institute
Titov trg 2
6230 Postojna, Slovenia

Bank Account: Mednarodna speleološka zveza- UIS

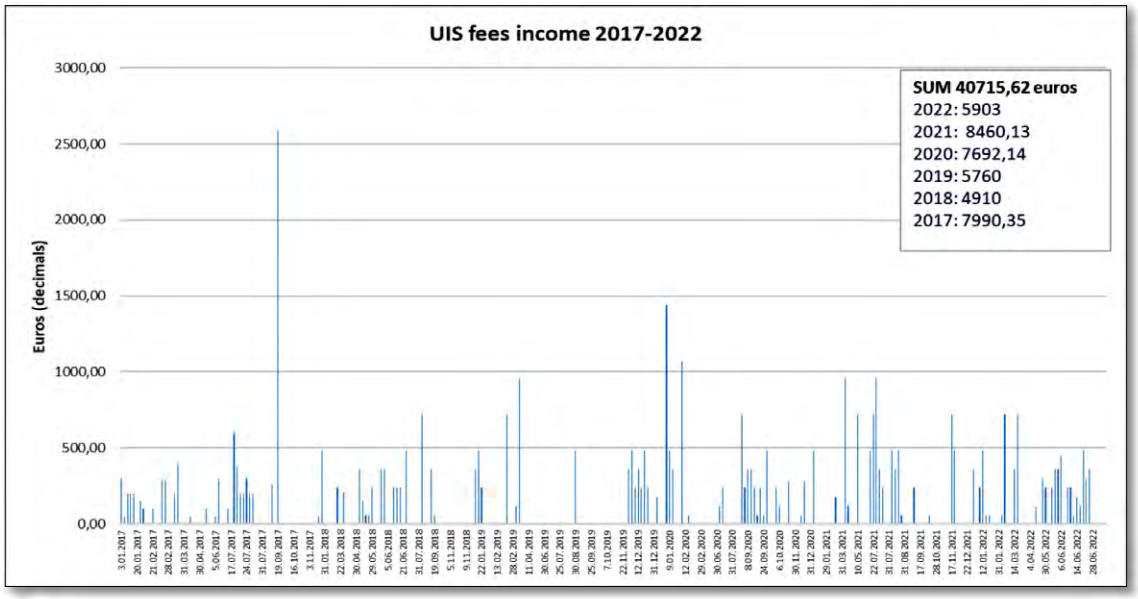
- Change in the bank package in 2021 (mandatory).
- Authorized persons on the account: 1) Nadja Zupan Hajna (only with UIS debit card); other authorized signatories are 2) Pavel Bosak (CZ, past UIS GS), 3) Franjo Drole (Karst Research Institute), 4) Andrej Mihevc (SI, past UIS AS) in 2022 its replacement by Mladen Garašić (HR, UIS AS)
- Annual tax reports (prepared by a contracted accountant) and work reports.
- Euros and USD partitions of the account

UIS account balance on June 30, 2022 (details per year at the end of this report)

- **37,542.93 euros**
- **50,882.33 USD**

Income (2017 - 2022)

- Mainly from membership dues, mostly regular payments from member countries.

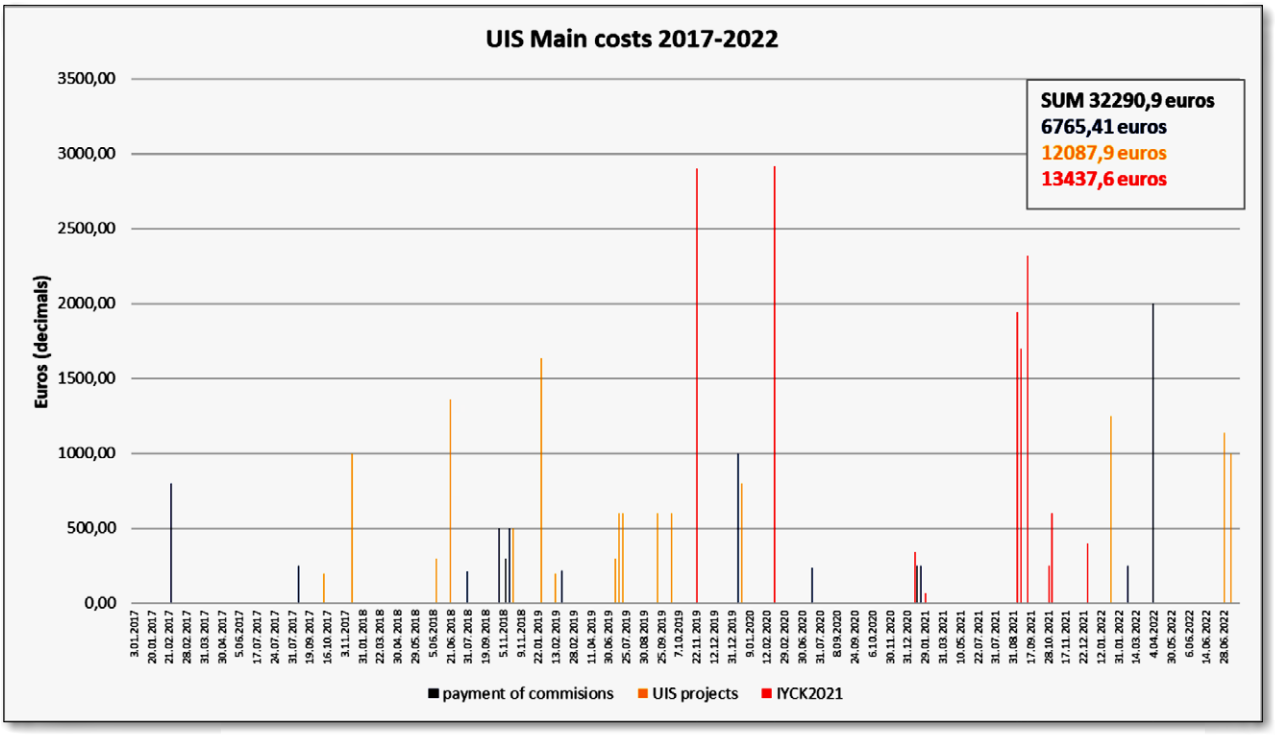


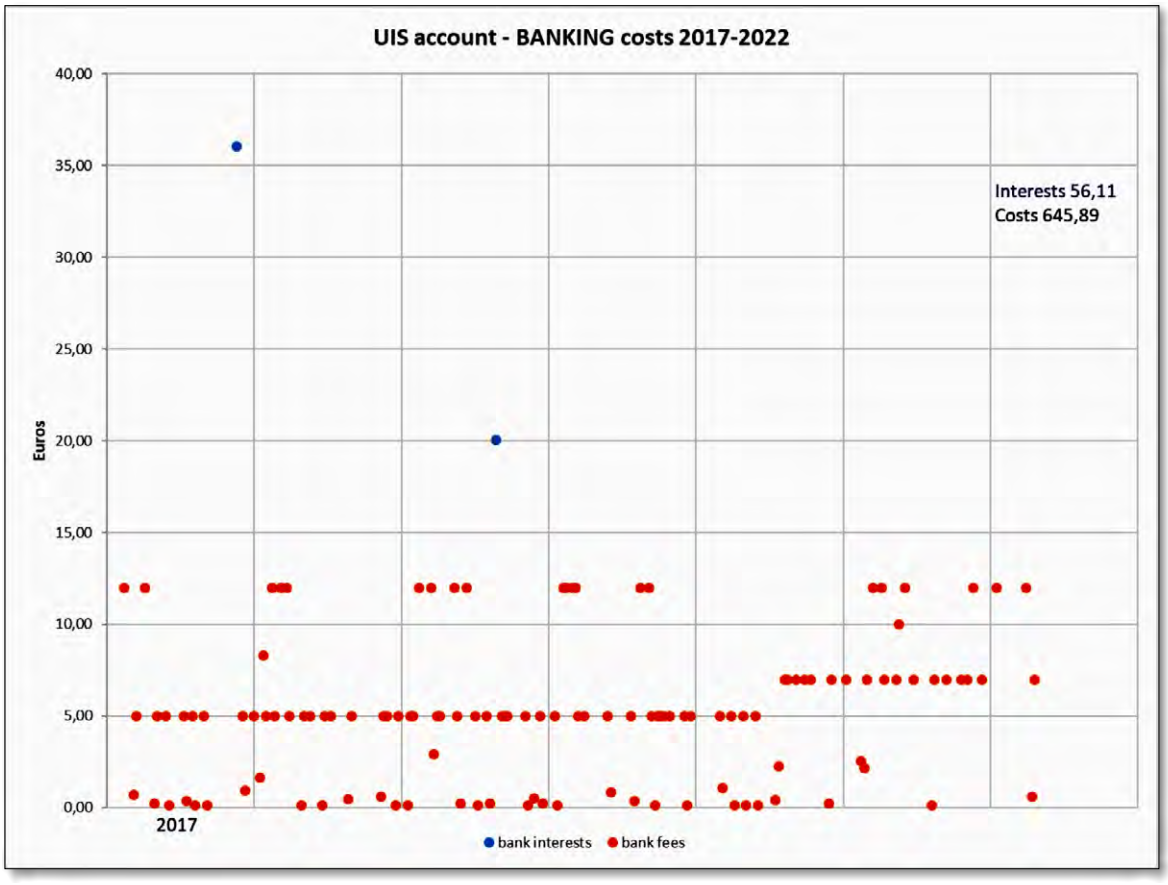
Planned income in 2022 and beyond:

- Cash payments of UIS membership dues during Congress.
- Payment of UIS membership dues from new members
- Donations

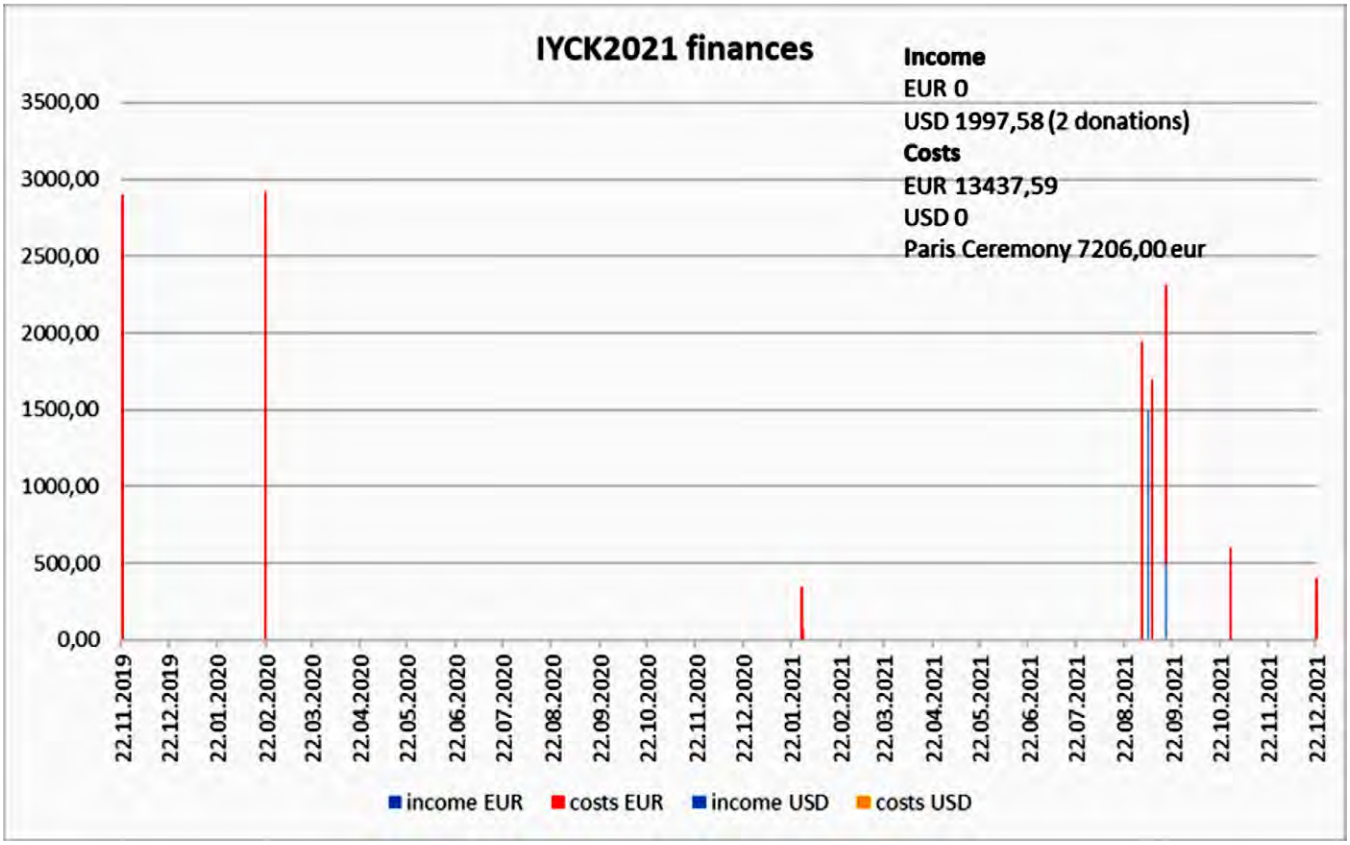
Payments (2017-2022)

- To commissions (activities, prizes, ...)
- IYCK 2021 organization
- Support of international events and expeditions
- Membership fees to the International Science Council (ISC)
- Banking
- Accounting





INTERNATIONAL YEAR OF CAVES AND KARST 2021 - FINANCES



Planned costs in 2022 and beyond:

- Payments for actions already approved: 1) 900 euros to project "Virtual speleological field trip in Greece" (decision June 2022) and 2) 1000 euros to "Rwanda Lava Caves" expedition (decision February 2022); 3) scanning of the UIS archive (approved 1000 euros/student work); 51,15 USD Fadi Nader reimbursement for UIS domain payment for 2022 and 2023
- Payments to commissions, prizes, expeditions,
- Requests (1200 eurs D. Gillieson reimbursement for UIS Guidelines editing costs)
- Regular and approved costs for the functioning of the UIS.

Miscellaneous

- Problems with PayPal account since 2017 (there are 901.98 euros left); in 2022 arrangements in progress.
- Long debt with promise to pay at Congress: Algeria
- Reported problems with payment of dues from member countries - UIS Bureau decisions:
  1) Cuba, Bureau decision of non-payment 2018-2021 (to Congress); but in 2022 Birmingham Grotto (USA) donated Cuban contributions to UIS for 7.5 years
  2) Argentina (2022) asked for 50% discount on debt due to financial problems;
  3) Indonesia (2022), request deferred payment; payment plan will be reported at the end of 2022 - UIS Bureau agreed (17/6/2022);
  4) Lebanon, Bureau decision on non-payment 2018-2021 (to Congress);
  5) Venezuela, Bureau decision on non-payment 2018-2021 (to Congress);
- My proposal: non-payment for Ukraine starting in 2022, until the war ends and normalcy returns.

UIS FINANCIAL REPORT 2017-2022 (UNTIL JUNE 30)

Account 2017	USD
From 2016	**15.211,71**
Income 2017	35.219,34
Expenses 2017	-238,95
Balance	34.980,39
Excel record	50191,26
Bank 31.12.2017	**50.191,26**

Account 2017	EUR
From 2016	9.253,76
Income 2017	31.549,57
Expenses 2017	-3.202,58
Balance	28.346,99
Excel record	37.600,75
Bank 31.12.2017	**37.600,75**

Account 2020	USD
From 2019	48612,08
Income 2020	4,88
Expenses 2020	-91,95
Balance	-87,07
Excel record	48.525,01
Bank 31.12.2020	**48.525,01**

Account 2020	EUR
From 2019	37.164,57
Income 2020	7.692,14
Expenses 2020	-6.757,69
Balance	934,45
Excel record	38.099,02
Bank 31.12.2020	**38.099,02**

Account 2018	USD
From 2017	**50191,26**
Income 2018	564,11
Expenses 2018	-35.000,00
Balance	-34.435,89
Excel record	15755,37
Bank 31.12.2018	**15.755,37**

Account 2018	EUR
From 2017	37.600,75
Income 2018	4.910,00
Expenses 2018	-24.655,10
Balance	-19.745,10
Excel record	17.855,65
Bank 31.12.2018	**17.855,65**

Account 2021	USD
From 2020	**48525,01**
Income 2021	2425,26
Expenses 2021	-68,19
Balance	2357,07
Excel record	50.882,08
Bank 31.12.2021	**50.882,08**

Account 2021	EUR
From 2020	38.099,02
Income 2021	9.028,49
Expenses 2021	-9.690,54
Balance	-662,05
Excel record	37.436,97
Bank 31.12.2021	**37.436,97**

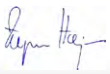
Account 2019	USD
From 2018	15.755,37
Income 2019	35.160,11
Expenses 2019	-2303,4
Balance	32.856,71
Excel record	48.612,08
Bank 31.12.2019	**48.612,08**

Account 2019	EUR
From 2018	17.855,65
Income 2019	27.980,05
Expenses 2019	-8.671,13
Balance	19.308,92
Excel record	37.164,57
Bank 31.12.2019	**37.164,57**

Account 2021	USD
From 2021	50.882,08
Income 2021	0,25
Expenses 2021	0
Balance	0,25
Excel record	50.882,33
Bank 30.6.2022	**50.882,33**

Account 2022	EUR
From 2021	37.436,97
Income 2022 (6)	6.743,00
Expenses 2022 (6)	-6.637,04
Balance	105,96
Excel record	37.542,93
Bank 30.6.2022	**37.542,93**

Postojna, July 1, 2022 ***Dr. Nadja Zupan Hajna***



UIS LEGAL REPRESENTATIVE IN SLOVENIA

Union Internationale de Spéléologie
Titov trg 2 - 6230, Postojna - Slovenia
www.uis-speleo.org

Treasurer
Phone office: +386 5 700 1937
Fax office: +386 5 700 1999
E-mail: zupan@zrc-sazu.si

Dr. Nadja Zupan Hajna
ZRC SAZU Karst Research Institute
Titov trg 2
6230 Postojna, Slovenia

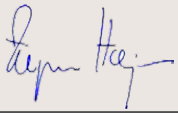
Zupan Hajna Nadja: UIS Special (Legal) Representative in Slovenia since 2010.

UIS has been registered in the Slovenian Business Register (ePRS) and the Register of Beneficial Owners (eRDL) since 2018, where Zupan Hajna Nadja is personally responsible for the transparency of UIS' international financial transactions.

Statute

Without the signature (Secretary General and 2 Auditors) of the GA minutes of Sydney 2017, I couldn't carry out the official approval of the Statutes in Slovenia.
- The GA Sydney voting meeting minutes (with the highlighted paragraph that the bylaw change was unanimously approved) need to be signed at GA at the 18th ICS.
- Review of acquisition activities code books according to the Official Gazette have to be done.
- After I can translate the bylaws into Slovenian and write up a report on which articles are changed.

Postojna, July 1, 2022 **Dr. Nadja Zupan Hajna**



The Closing of the INTERNATIONAL YEAR OF CAVES AND KARST 2021/22

The Opening of New Opportunities!

By Dr. George Veni (USA)
UIS Past President 2017-2022
gveni@nckri.org

As I write these words, there are less than two weeks left in the International Year of Caves and Karst. Three weeks ago we celebrated our 800th event at the United Nations Groundwater Summit *(see page 68)*. Since then, we received many late but very welcome reports of other events, and we now have 846 events!

It is too soon to summarize the excellent work of our many partners for the past two years. Next year I will write a report that describes what we've accomplished. My hope is that report will be used successfully in the years ahead to find more support for increased cave and karst exploration, research, and protection.

For now, as the year closes, I ask you all to open yourselves to the new opportunities you've created. Look back on what you've done, the people you've taught, and organizations you've inspired. Now turn to the years ahead and keep those relationships with you. Build on them. Carry the spirit of the International Year forward. Explore, Understand, Protect, for as long as you can.

The people you have reached can change the world with you, but not through one conversation or one event. Expand the conversations into long stories of friendships, where caves and karst will not be forgotten—where you and your organizations will be called to join and assist whenever cave and karst issues arise.

You do not need to do everything or join every activity, but at least be present to give support where needed and possible. Be present so caves and karst are never forgotten. You are the future. From what I've seen you do over the 2021-2022 International Year of Caves and Karst, it will be a great future!

Young people, such as from the July 2021 IYCK Summer School of Karst and Speleology in Poland, are the future of speleology. But so are the older people who teach them. Together, we will make tomorrow a better world for caves and karst.

UIS HISTORY IN FOCUS

THE FIRST YEARS OF THE UIS

A brief tour through the beginnings of the Union narrated in first person.

By Arrigo Cigna (Italy)
UIS Past President 1973-1981
arrigocigna@gmail.com

[EDITOR'S NOTE: This text refers to the lecture given by Arrigo Cigna on 25 July 2022 at the Opening Ceremony of the 18th International Congress of Speleology (ICS), in Le Bourget-du-Lac, France]

July 25 2022: *Arrigo Cigna at the 18th ICS: Historical testimony of someone who has dedicated his life for the common good.*

Dear authorities, dear friends and colleagues,

Unfortunately many of these are no longer with us, but I am extremely pleased to welcome you here at this International Congress which has been delayed by the virus spread all over the world. Now after so many years since the foundation of our Union I would like to recall here some facts concerning such old time.

My first beginning inside the Union was after two terms of our President founder, Bernard Gèze. I remember when he, who could not to be re-elected according our statute, asked me if I had advanced my candidature as president. Obviously, such a proposal was totally unexpected, so I accepted only after a long insistence by Gèze. Another candidate was Vladimir Panos, strongly supported by the authorities of his country and more qualified in my opinion. But the reasons given by Gèze were that I could speak both English and French, some interest in science and many contacts in the speleological world.

This was a consequence of the International Symposium of Speleology, organized in 1960 in Villa Monastero, Varenna, Lake of Como, Italy. It was a top institution where Enrico Fermi had his school of physics. The symposium was organized by Salvatore Dell'Oca, one of the most relevant Italian speleologists. But he ignored English and I was his interpreter getting world-wide contacts in the speleological world.

I remember that I was obviously flattered by the proposal of Gèze but also very sorry to run against my good friend Vladimir Panos, but unfortunately the heavy influence of the communist party ruling his country was really strong and overwhelming on his freedom to travel. Anyway, once I was elected president, I established the best cooperation with Vladimir to avoid any possible competition with him.

At that time, in 1965, in Naples there was a cholera outbreak and many friends were unable to attend the congress so that I was obliged to move very fast among the congress sections to deliver scientific papers in their place.

I would recall here the very first years of the UIS life before such a memory would fade. What it was achieved during this time was the result of the efforts of a large number of persons who dedicated much of their time and money to the development of the Union itself. I would emphasize this particular fact: when the Union was founded, the widest spread feeling was ***"what can I do for the Union"*** that is, what my contribution would be and not ***"what can I get from the Union."*** Thanks to the joint efforts of very many persons the Union grew from a small numbers of enthusiast people to a world-wide organization able to contribute to the development of speleology overcoming many difficulties.

In particular, some friends are quite unforgettable for their contribution to our Union. The first Statutes were drafted by Gordon Warwick, professor at the University of Birmingham, and supported by a small commission of the board.

The limit of two consecutive periods in the same position together with the rule that members of the boards must belong to different countries was established in order to have e good rotation of people. An exception for the position of General Secretary was accepted on account of the bureaucratic tasks to assure a good continuity between successive boards.

At that time, contacts were rather slow and such a position could constitute the best connection between boards elected in the General Assembly. Indeed Hubert Trimmel, elected in Olomouc, covered his task for 20 years and was the real soul of the Union when he performed the tasks that now are currently shared among several people. In particular he produced the UIS Bulletin for 23 years collecting the contributions, typing the text and delivering the material to the printer.

The Speleological Abstracts, which were produced since 1970, are still an important achievement of the Union. Such an important tool is available for some important and widespread scientific organizations but somewhat incredible for such a relatively small scientific branch as speleology. As I said before, I was in contact with many speleologists all over the world. Antonio Nuñez Jimenez, from Cuba, was one of them and after the revolution in Cuba I feared for him having no news about him. Only later I could read in "Time" a note stating that he was the most illustrious collaborator of the "Lider Maximo" Fidel Castro, and, therefore, he did not suffered any negative problem.

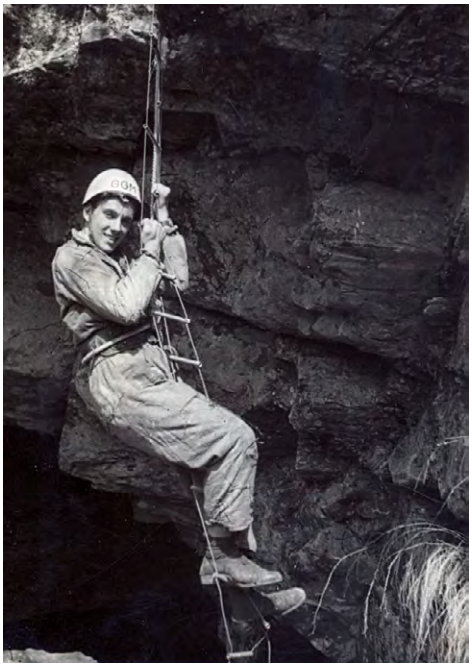
Successively, I met him during a visit he paid in Milano when he told me that in Cuba he was caving always with his gun because they feared the insurgence of an attack from the US. An amusing interference between speleology and politics happened when Antonio Nuñez Jimenez, during another visit to Italy, he decided to meet Paolo Forti upsetting any official program. The Italian authorities were unable to understand why such a Cuban big boss was interested in a politically insignificant associate professor.

The fact that Paolo was one of the most eminent Italian speleologists played no importance at all for them. In any case the meeting could take place, also if the street close to Paolo's home was desert of normal traffic and full of policemen.

Since I have quoted Paolo Forti I must confess you, a role we played in the first time of the life of our Union: As Bernard Gèze directed my candidature to the Union's Presidency, we did the same for the next presidents and board members.

Our leading goal was the best advantage for the Union and not by any personal interest: A general criterium was a rotation among countries from different parts of the world, a scientific background, a good organizational capacity. Obviously "our" candidates fulfilled such requirements in different proportion, anyway the candidates democratically elected by the General Assemblies were quite good. A friend of mine defined such a procedure "guided democracy": of course, it works perfectly if, and only if, it is applied free from any personal interest with the unique scope of providing the best results for our Union.

Indeed, I utilized such a "dark influence" when in 1990 the International Show Cave Association was founded in Frasassi. During a night, the draft of its statutes was prepared by a small number of peoples including, among others, Jeanne Gurnee and myself. My care was to avoid any possible competition with our Union since it has a much wider interest in any kind of caves, natural, artificial, wild or developed.



Arrigo in action during his young times.

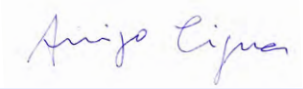
1981, IN BOWLING GREEN, USA - *Left to right*: *Antonio Nuñez Jiménez (Cuba), Arrigo Cigna (Italy), Hubert Trimmel (Austria), and Adolfo Eraso Romero (Spain), at the 8th International Congress of Speleology.*

Another important principle was the issue to avoid a concentration of people from the same country; our old friends Gordon Warwick considered this criterium already in the first edition of our Statutes by establishing that board members must always come from different countries.

Now let me conclude this memory of the early times of the Union with a strong and warm wish for the future. Anyone involved in its management be moved by the idea of contributing to the best of the Union and not as a source of benefits for himself.

It should be also rather important the role of the scientific research. Sporting cavers are quite useful, I dare say essential for scientists, but UIS cannot be involved in races as it has already pointed out many times because these races are opposite to the criterium of a good approach to the protection and conservation of the environment.

My sincere wishes for a nice caving from a very old timer with cave research in his heart.



ARRIGO CIGNA IN SOME OFFICIAL EVENTS OF THE UIS

2005, IN KALAMOS, GREECE:
Four Past Presidents of the UIS at the 14th ICS.
(left to right) Arrigo Cigna, José A. Labegalini, Julia James, and Derek Ford.

2009, IN KERRVILLE, USA, *at the 15th ICS.*

2013, IN BRNO, CZECH REPUBLIC:
Arrigo and Nivaldo Colzato at the 16th ICS SpeleoBar.

2015, IN POSTOJNA, SLOVENIA: *Signing the list of attendance at the 50th anniversary of the UIS.*

JULY 2022, IN LE BOURGET-DU-LAC, FRANCE: *Arrigo (using mask) at the UIS General Assembly of the 18th ICS (upper photo), and enjoying a French celebration during the event (above).*

2017, IN SYDNEY, AUSTRALIA, *at the 17th ICS.*

THE NEW UIS BUREAU

Elected by the UIS General Assembly of the 18th ICS, the new group will led the Union until July 2025.

By José Ayrton Labegalini (Brazil)
UIS Past President
ja.labegalini2@gmail.com

The UIS was founded in 1965, at the second session of the General Assembly of the 4th International Congress of Speleology (ICS) on September 16 in Ljubljana, the capital of what was then Yugoslavia (now Slovenia). Representatives from 22 countries (Australia, Belgium, Bulgaria, Congo, Czechoslovakia, Denmark, East Germany, France, Great Britain, Ireland, Italy, Japan, Lebanon, Poland, Romania, the Soviet Union, Spain, Sweden, Turkey, United States, West Germany, and Yugoslavia) were present and voted. The first Statutes were approved, and the first Bureau elected.

According the Statutes, the first UIS Bureau was composed of a President (Bernard GÈZE, France), two Vice-Presidents (Gordon T. WARWICK, Great Britain, and Stjepan MIKULEC, Yugoslavia), and a Secretary General (Albert ANAVY, Lebanon). Four years later, in 1969, at the 5th ICS (Olomouc, Czechoslovakia), the positions of two Adjunct Secretaries were created to allow for the inclusion of two additional countries to be represented in the Bureau.

The UIS was founded in 1965 by representatives from only 23 countries. The number of member countries of the UIS had increased to 39 by 1977, during the 7th ICS (Sheffield, Great Britain). At this Congress the number of countries represented in the UIS Bureau was also increased from six to ten and the number of Adjunct Secretaries was increased from two to six.

Year after year new member countries were added to the UIS. In 1989, during the 10th ICS (Budapest, Hungary), the number was 51; thus, two more Adjunct Secretaries were added to the Bureau, and the number of countries represented in the Bureau increased from ten to twelve. This number of twelve people from twelve different countries remains to this day. In 2009, during the 15th ICS (Kerrville, USA), the two Vice-Presidents began to take on different and specific roles, one as Vice-President of Administration and the other as Vice-President of Operations.

The finances of the UIS had been managed by one of the Adjunct Secretaries, who then acted as treasurer. With the steady growth of UIS and the consequent increasing complexity of the financial management of the organization, a new amendment to the UIS Statutes was made in 2017 at the 17th ICS (Sydney, Australia), and the function of UIS Treasurer was created. The number of Adjunct Secretaries, therefore decreased from twelve to eleven in order to maintain the same number of people in the Bureau.

The current UIS Bureau, elected for the period 2022 to 2025, was elected by the UIS General Assembly at its second session during the 18th ICS (Le Bourget-du-Lac, France) on Sunday, August 31.

The elected members, their respective positions and member countries are as follows:

President:
Nadja Zupan Hajna *(Slovenia)*

She has served the UIS Bureau since 2009, first as Adjunct Secretary and then as the Union Treasurer from 2017-2022—Since 2010 she has also been the official UIS Representative in Slovenia, where the Union has been registered since 2002. She communicates with the registration and tax authorities and reports to them on the work and financial reports.

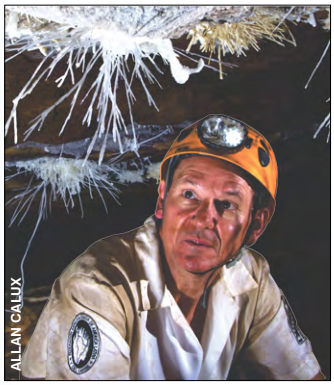
She is also the UIS representative in the Slovenian Business Register (AJPES - ePRS) and the Register of Beneficial Owners (eRDL), where she is personally responsible for the transparency of international financial transactions (prevention of abusees through money laundering, terrorism financing, etc).

She has been very actively involved in the organization and activities of the International Year of Caves and Karst (IYCK 2021) and most other initiatives of the UIS Bureau.

Vice-President of Administration:
Zdeněk Motyčka *(Czech Republic)*

After nine years serving the UIS Bureau, in the first term as Adjunct Secretary and on the second as Vice-President of Administration, the past president of the Czech Speleological Society is reelected to the same position in the Bureau; Zdeněk will continue to serve the UIS and will do his best to help the entity to be a modern global association for speleologists from all around the world. During this second term in this position, he wants to focus more on personal communication among the UIS community, which was disrupted by the Covid pandemic.

Vice-President of Operations:
Nivaldo Colzato *(Brazil)*



After nine years as UIS Adjunct Secretary and UIS Bulletin Editor (17 issues under his responsibility), the past President of the Brazilian Speleological Society and past Bureau member of the Latin America and the Caribbean Speleological Federation (FEALC), Nivaldo will continue his effort to the aggrandizement of the UIS, not only in the Bulletin but to improve other tasks that are already under his responsibility, such as the coordination of the UIS Prizes process and awarding ceremony, the organization of the UIS documents into the UIS format, and as UIS Representative at the 19th ICS (Brazil 2025), where he is also an active member of the Organizing Committee.

General Secretary:
Johannes Mattes *(Austria)*

Johannes is new to the UIS Bureau, but he brings the necessary characteristics to repeat the feats of his countryman Hubert TRIMMEL as UIS General Secretary. As a caver, historian of science at the Austrian Academy of Sciences, former General Secretary of the Austrian Speleological Association, and president of the 12th EuroSpeleo Forum in Ebensee (2018) he has learned and benefited a lot from the caving community, its internationality and diversity. As the UIS General Secretary he can to give back his knowledge and experience to the community and contribute to the success of the Union.

Treasurer:
Mladen Garašic *(Croatia)*

After nine years serving the UIS Bureau as Adjunct Secretary, the past president of the Croatian Speleological Federation (HSS), European Federation of Speleology Past-Vice President, was elected as Treasurer. Because the UIS bank account must be in Slovenia, the UIS Treasurer needs to live on this country or very close by. Since Nadja, the past Treasurer, is now the UIS President and the UIS Statutes does not allow for two people from the same country in the Bureau, the problem was solved with the election of Mladen for this position. He lives close to Postojna (only 190 kilometers), in Zagreb, Croatia, knows important laws in Slovenia, speaks the Slovenian language and is one of the authorized persons for the UIS account.

Adjunct Secretary:
José Maria Calaforra *(Spain)*

José Maria is the second Spanish citizen to be elected to the UIS Bureau. The first one was Adolfo Eraso, who was president from 1981 to 1986. As past-President of the Spanish Speleological Society and his relations with other international associations related to caves and karst activities, he has the necessary background to collaborate administratively in the development of speleology and its diffusion on an international scale from a social, scientific and recreational point of view, which also are aims of the UIS.

Adjunct Secretary:
Gerard Campion *(UK)*

His gained considerable experience jointly working and collaborating in speleology as bureau member of the European Federation of Speleology. He is an active caver and expedition leader, who understands the important link between the sport of caving and the science of Speleology, which probably were important considerations in his election for the UIS Adjunct Secretary. He hopes to assist the UIS to increase its collaboration between speleologists in all areas, scientific, exploration and cave protection, and enhance the connections between regional bodies and the UIS in all aspects of speleology.

Adjunct Secretary:
Marc Mentens *(Philippines)*

© M. MENTENS

He has a *sui generis* situation in the UIS Bureau, because he was elected as Adjunct Secretary representing Philippines, but he is Belgium citizen; this is the first time in the UIS history that a citizen of a country is elected to represent member country. His proposal to promote caving for young cavers in developing Asian countries (e.g., Philippines, Malaysia, etc.) by providing resources, information, equipment, scholarships, and trainings, probably was the key that aroused the confidence of the delegates by electing him as the representative of Southeast Asia in the UIS Bureau. Marc has in his aims to encourage young cavers in developing countries of the region, as well as to facilitate the growth of caving in these far-flung communities and as they grow into their own capable organizations, they grow alongside UIS and hence the international caving community.

Adjunct Secretary:
Mario Parise *(Italy)*

© M. PARISE

Mario, as Vice-President of the Italian Speleological Society, is having been involved in activities of the UIS, both as President of the UIS Commission on Artificial Cavities and as Italian Delegate for many years, in reality since 2009. As a scientist working in the field of karst hydrogeology and speleogenesis, he may contribute to the UIS future; as he is familiar with UIS, he may help it in the next years, after the Covid pandemic, to restart a variety of activities to promote speleology and knowledge of karst environment worldwide, including building up of a deep awareness on the need to protect karst and its natural resources, in order to improve visibility and importance of UIS at all levels.

Adjunct Secretary:
Patricia Seiser *(USA)*

© P. SEISER

Patricia has a wide variety of cave and karst knowledge and experiences that can benefit/contribute significantly to the UIS projects as well as to her member country projects: management, conservation and protection, education, exploration, and rescue. With her background and current position as Cave and Karst Management Science Director of the US National Cave and Karst Research Institute (NCKRI) and US National Park Service/National Cave and Karst Program Coordinator, she has a significant network of cavers and scientists throughout the US and also internationally to draw upon for assistance and to connect with others to aide in achieving goals and projects, which perfectly can add, join or support the UIS aims.

Adjunct Secretary:
Nathalia Uasapud *(Colombia)*

N. COLZATO

Nathalia is the first Colombian citizen to be elected to a UIS Bureau, As a geologist engineer with a master's degree in environment and development, Nathalia has been dedicating her efforts for many years to make environmental studies in the karst regions of Colombia and she has also participated in study groups that share knowledge between academy and industry, making deals with mining companies to encourage them to know, understand and protect caves and karst in her country. Now, this is an essential task due to the new law that protects karst areas in Colombia. In the UIS Bureau, she can share this experience with the UIS community so that many other countries can develop similar achievements, mainly in Latin America and the Caribbean.

.

Adjunct Secretary:
Bärbel Vogel *(Germany)*

© B. VOGEL

After 5 years serving as Adjunct Secretary, Bärbel was reelected to the same position, in recognition of her work and as a sign that the delegates trust in her proposal for continuing working for the UIS. In her first term, she was a member of the Working Group for the International Year of Caves and Karst 2021/2022. Although this project will come to an end this year, she thinks that UIS could continue and strengthen the cooperation with the IYCK partners and international institutions. A project close to her heart is the International Cave Animal of the Year, which she hopes will continue to engage members and increase visibility and diversity. Due to her illness, she can no longer travel without restrictions, but she enjoys participating online, and with great optimism declares: "The only advantage is that I am almost always available at home"..

UIS HISTORY

THE UIS ARCHIVE IN POSTOJNA

How the storage is done, its current content, and future perspectives.

By
Pavel Bosák (Czech Republic)
UIS Bureau Honorary Member
Responsible for the UIS Archive
bosak@gli.cas.cz

Zdeněk Motyčka (Czech Republic)
UIS Vice-President of Administration
z.motycka@mediform.cz

To the UIS Bureau meeting and UIS General Assembly (Le Bourget-du-Lac, France, on July 2022)

The UIS Archive is located in the 3rd floor of the historical building (Castle), the seat of the Karst Research Institute (IZRK) ZRC SAZU and the UIS, in Titov trg 2, 6230 Postojna, Slovenia. Place and furniture have been granted by courtesy of the management of the IZRK ZRC SAZU.

The aim of the UIS Archive is to collect all materials related to (1) the establishment and function of the UIS, its representatives and bodies and (2) UIS activities, including organization of the UIS International Congresses of Speleology and expeditions, conferences, meetings and other events under the auspices of the UIS and/or utilizing the UIS logo, including all printed and other materials related to such events.

The UIS Internal Regulations and other documents expect especially:

(1) the delivery of all paper and electronic materials involving activity of all elected UIS Bureau members, Honorary members and Past-Presidents to the UIS Archive: (a) every 2–3 years, and/or (b) when their term of office is complete, if the materials are not delivered to their successors;

(2) three detailed reports each year from the Organizing Committee of each International Congress of Speleology for the archives of the Union and to evaluate the Organizing Committee's progress. The Bureau may request more reports if it believes more information is necessary;

(3) General Secretary sends a copy of all new documents at the end of each 4-year term of office to the archives of the UIS;

(4) Commission President submits a written report of the activities of the Commission following each General Assembly meeting of the UIS for documentation in the UIS archives;

(5) the Librarian at each UIS Documentation Centre is responsible for the presentation of an oral report about the present situation of the Documentation Center of the UIS, as well as a written report containing an index of the publications available at the center, at each UIS General Assembly meeting for inclusion in the UIS archives.

Karst Research Institute ZRC/SAZU in Postojna, Slovenia: *Since July 20, 2002, the UIS offices are in this iconic building in space provided by the government via the Institute of Karst Research of the Slovenian Academy of Arts and Sciences. That's where the UIS Archive are stored.*

The UIS Archive has been operating on no cost and volunteering bases. The person responsible for the UIS Archive has been visiting the place usually once to three times a year. In urgent cases, UIS Treasurer (Nadja Zupan Hajna) has been providing the

final copy and delivery and/or eventual search in the Archive (accompanied by students).

Present content of shelves (general items)

Archive materials were collected from some past-UIS officers, especially Presidents and Secretaries General, i. e. from H. Trimmel, J. A. Labegalini, A. Eraso Romero, A. A. Cigna, F. Habe, A. Anavy, P. Forti, C. Ek, P. Bosák, V. Panoš, A. Mihevc, N. Zupan Hajna and include correspondence, documents, etc.; however even those are not always complete, in some places only rudimental.

In a "better" state are materials from J. A. Labegalini (only correspondence, incl. electronic printed to paper), P. Bosák (completed what he had until 2009) and partly also from H. Trimmel (excluding those still deposited in Vienna).

Missing are especially materials from the very beginning (e. g. from B. Gèze and others), and from D. C. Ford or J. M. James. There is high interest to obtain something from surviving dependants of A. Eraso Romero and B. Gèze (at least copies even electronic, scanned to PDFs).

Accounting documents (from banks and auditors) are plus or minus complete and deposited in the Archive (incl. 2015) from General Secretaries: Trimmel, Ek, Bosák and later from Treasurers: Mihevc and Zupan Hajna.

International Congresses of Speleology

From 6th 1965 Postojna/Ljubljana up to 17th 2017 Sydney – official materials issued by Congress organizers are highly incomplete, incl. prints (Proceedings, abstract books, excursion guides, Circulars, leaflets, posters, etc.) as well as other things produced with the UIS and Congress logos (badges, T-shirts, bags, flags, stickers, pins etc.). Correspondence of the UIS officers with Congress organizers is scattered in some personal boxes and it is highly incomplete up to rudimental (4/1965 – we have all volumes. 6/1973 – we have only excursion guides, no Proceedings! 13/2001 – we have only Vol. 2. 15/2019 – we have all 2 vols + supplement. 16/2013 – we have all 3 vols + all excursion guides and other prints. 17/2017 – we have Vol. 1 and 2 but not final version. ICS materials 1 to 5, 7 to 12 and 14 are missing completely).

Public relation items are completely missing (news in newspapers, journals, magazines, CD/DVD or similar media with TV/broadcasting, related activities, etc.) – not only related to the UIS Congresses and karst/cave events, but also relating to UIS activity itself. They are included as only few documents in some personal boxes.

UIS Departments, Commissions/Working Groups, and Committees

These are highly rudimental and not only concerning the documents from their daily life and activities. Most of body-related prints are not available. Documents are missing for some Departments and Commissions/WGs from their whole lifespan and/or from different periods of their activities. Some (but mostly single) documents (letters) are included in personal boxes of past-UIS officers (Presidents, Secretaries General, especially in boxes with Trimmel materials).

Leaflets concerning speleo/karst-activities, events, education, caves etc. Not documented in the list, only arranged according to countries (I plan to documents them piece by piece in 2022– 2023).

Relations with UNESCO before late 1997

UNESCO prints until 1997 are nearly complete. The early history of relations with the UNESCO is completely missing (before the acceptation as former C category of affiliated institutions) except single documents (letters) in boxes of Eraso and Trimmel.

NADJA ZUPAN HAJNA

2017: *Pavel Bosák (left), responsible for the UIS Archive, and Zdeněk Motyčka, during one of their regular visits to the UIS office to work on the archive organization.*

NADJA ZUPAN HAJNA

2022: *Bosák and the new scanner: 1,821 papers are scanned so far.*

UIS principal documents

Versions of Statutes, Regulations, Recommendations for Congress Organizers – also partly incomplete, only rare documents concerning the UIS foundation are located in Trimmel boxes.

Relations with ICS, ISCA, IUCN, IGU, FEALC, and SFEU

Also highly incomplete to rudimental.

UIS Bureau Meetings (regular/annual, not regular)

Highly incomplete documentation before 1993 and after 2009.

UIS Bulletin

Prints of Trimmel and Bosák (Editors-in-Chief) – complete + 20 pcs of each 1991, 1994–2005 and related items (addresses for distribution, originals for prints 1994–2005). No printed versions of electronic UIS Bulletins available at all as well as electronic files documenting their preparation (since 2005); e-UIS Bulletin was downloaded from the UIS web site.

Book Paleokarst

The archive contains complete documentation related to the book Paleokarst (Academia-Elsevier 1989) – the first book printed by international publishing house where the UIS is mentioned (includes also complete correspondence and publication agreements, text and figure/table copies, print foils etc.; donated by Bosák).

NADJA ZUPAN HAJNA

One of the shelves with UIS documents and correspondences. Many important materials are still missing in the archive dtto.

Journals

The Archive includes journals obtained as exchange copies for UIS Bulletin by General Secretary (Bosák 1993–2009). Exchange numbers and volumes before 1993 are missing completely. They are hopefully deposited at Trimmel´s address in Vienna, as they were missing in Trimmel´s office in Natural History Museum in Vienna. The same concerns include exchange items after 2009 (except Norway journal Grottan, which has been delivered regularly to UIS Archive in Postojna also after 2009). Journals are completed in duplicates of some other journals obtained from different sources (mostly collected by Bosák).

Monographs and other prints

The Archive includes some monographs and other prints obtained as exchange copies for the UIS Bulletin by General Secretary (Bosák 1993–2009; some also later) or as donations. It is completed in some duplicates (monographs) from different sources.

Both journals and monographs are organized according to size (A4 and smaller). Journals are organized according to journal name; monographs according to registration number.

Speleo/karst-related calendars and posters

The Archive collects some speleo/karst-related calendars and posters (arranged according to registration numbers). There is idea to deliver them to the Notrjanski muzej (Postojna) with good collections of such prints, except items related to UIS Congresses and other UIS activities/event (e. g. IYCK) or having the UIS and/or IYCK logos.

Pins and stickers

The Archive collects some pins and stickers (only karst/speleo-related) – now registered in the list (arranged according to registration numbers).

Official posters

The Archive contains also official posters (+ constructions in covers) from different activities and prepared for the future and general use (UIS promotion etc.).

Hardwares, digital storage, and backup

The Archive is equipped by the PC donated by the Institute of Geology, Czech Academy of Science. The new one was delivered to the Archive on October 11, 2021, now fully in function. The PC is included in the IZRK internet network.

The PC is also connected to the NAS (Network Attached Storage), where electronic archive of UIS is located. The NAS contains 4 HDD discs, with capacity of 4 TB. Data are redundantly backed up. Storage is connected also to the ZRC SAZU internal network.

Till now, there are 20,290 files stored, in total 122 GB of data. Most of files are electronic documents of UIS Bureau from 1993 to 2009, full agenda of 12th ICS and 13th ICS, all ICS Proceedings and all UIS Bulletins, the agenda of the IYCK and parts of some other agendas.

Digitalization in course

In 2022, thanks to new scanner, digitalization of paper archive could start. The UIS Bureau decided to invest 1,000 € to start the scanning. During spring of 2022, first 1,821 papers files were scanned (for approx. half of invested amount).

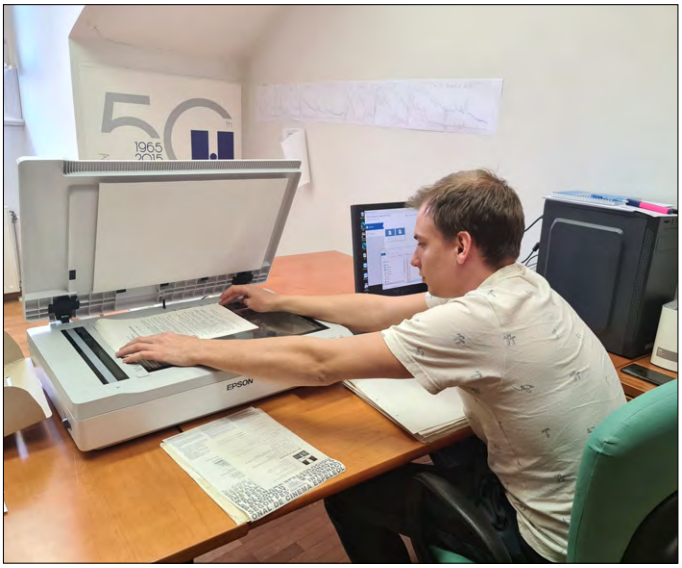
Physical arrangement

The archive materials are not arranged according to demands concerning professional archives. The evidence is only in basic up to primitive manner – shelve contents, list of boxes and their rough content etc. The materials (documents, prints, etc.) are mostly collected in hard-paper Archive Boxes, some (e. g. correspondence of J. A. Labegalini) is simply bounded to volumes without covers.

Extra space available

There is still some place in the UIS room in the IZRK ZRC/SAZU for future documents, prints and other items related to the UIS activity *sensu lato*.

Dr. Johannes Mattes contacted H. Trimmel's family. In their house in Vienna, there is room with correspondence, documents (incl. UIS) and Hubert´s library. The idea is to transport this archive as a unit from Vienna to Postojna archive. The library should be preserved as a unit 4 documenting the personality of Hubert Trimmel. The decision about library will be done after the inspection *in situ* after negotiations of Johannes with sons and wife of Hubert when they allow it.



NADJA ZUPAN HAJNA

2022: *Student scanning UIS document.*

The decision depends on space needed to deposit library in the UIS Archive in Postojna. In any case, the UIS Archive is highly interested in items from library obtained as exchange for the UIS Bulletin in 1993 and before, when H. Trimmel served as Secretary General – can be identified from the list of journals in the UIS Archive starting from 1993/1994.

NECESSARY STEPS FOR FUTURE (recommendations and proposals)

Not documented history means no future and existence!

More intensive interest of present and past UIS officers (UIS Bureau Members and Honorary Members, Department and Commission/WG officers, UIS-related event organizers, especially of the UIS Congresses, symposia, conferences etc. using the UIS logo). They have to deliver all UIS-related materials (printed, not-printed, public relation, others, electronic docs) to the UIS Archive CONTINUOUSLY, not only after termination in function. If not delivered continuously, materials are lost (thrown out after the respective person died)! e. g., materials from the Secretary General – Fadi Nader – are completely missing, dtto for the most recent UIS Presidents, Kyung-Sik Woo and George Veni, and number of other UIS officers, past and recent, especially those who are not candidates for positions starting in 2022.

To look for any UIS-related materials, especially from 1950 to 1965 but also younger, in archives of past-UIS officers and/or in their inheritances(!) to try to fill blind time-sections (*hint sunt leones*). Especially, to try to press the FFS for Gèze documents, at least copies, as they promised years ago, still without any results even after reminders (recent information – e-mail – of Christophe Gauchon from June 27, 2022: I have looked for these papers in different places /Geze's family, laboratory of Moulis, National School of Agronomy.../ and there is nothing anywhere...).

The complete documentation of not printed documents, paper by paper, document by document, thing by thing according (or close) to archive rules and demands has to be realized – to find personnel to do that and finances.

The complete scanning and/or photos of not printed documents/things and deposition of electronic versions in the cloud to be realized – to find personnel to do that and finances (started by M. Hajna in 2022, but scanning only of low per cents of Archive content was finished).

In Praha and Brno, Czech Republic, on July 7, 2022

Artificial Cavities Commission

ACTIVITY REPORT 2017-2022

Visit us:
www.artificialcavities.wordpress.com/

By Mario Parise (Italy)
President
mario.parise@uniba.it

This report briefly summarizes the main activities carried out by the Commission on Artificial Cavities in the time span between 2017 (after the Sydney Congress) to the present. This was a very difficult time, due to spread of the pandemic, and consequently all activities have been seriously affected by this extraordinary situation.

From 20 to 25th May 2019, the 3rd assembly of Hypogea, the International Congress of Speleology in Artificial Cavities, was held in Dobrich, Bulgaria. This congress like the previous two was very successful and followed the tradition of the congress held in Cappadocia (Turkey) in 2017 and the previous one in Rome (Italy) in 2015.

The event was organized and chaired by Alexey Zhalov, with the support of the whole UIS Commission on Artificial Cavities.

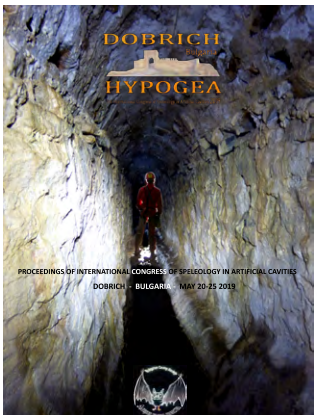


Figure 1: *Proceedings (left) and logo of the Hypogea 2019 Congress in Bulgaria (right).*
Click on the image to access the document.

As is usual in the Hypogea Congresses, the proceedings were distributed among participants at the time of the congress *(Fig. 1)*. They included 36 articles, subdivided into the following categories:

- **Hypogean civilian dwellings**
- **Geology, geomorphology, environmental hazards**
- **Religious structures**
- **Underground hydraulic works**
- **Mining works**
- **Military and war works**

More than 80 authors from 8 countries contributed to the proceedings (Bulgaria, Czech Republic, Germany, Italy, Russia, Serbia, Turkey, and Ukraine). There were 30-40 attendees registered, and several field trips organized, which included visits to a number of early Byzantine rock cut churches and monasteries. Overall, the congress was well organized and the published volumes of high quality and interest for the both the novelty value of technologies used to explore and document artificial cavities, and for updating some well-known study areas as well.

This was the main event because the occurrence of the pandemic had precluded other activities taking place. Some of the UIS Commission members also contributed to significant publications such as a book by Springer, in the series "Lecture Notes in Civil Engineering", contributing a map showing underground heritage in the Mediterranean area, published in 2019 *(Fig. 2)*.

Furthermore, we also contributed to the Speleomedit initiative, last year in Marina di Camerota (Italy), providing a chapter in the book edited by Ferdinando Didonna and Francesco Maurano, providing a map of rock-cut sites in the Mediterranean basin, and with the classification of the related hydraulic works *(Fig. 3)*. From this followed the series of online seminars organized by Speleomedit, in which we participated, and I personally hosted a seminar on April 20th this year.

The Commission also worked, in collaboration with the UIS Working Group on Survey and Mapping, under the coordination of Philippe Hauselmann, in order to define a list of symbols dedicated to mapping artificial cavities. The work was managed mainly by Philipp Hauselmann, Roberto Bixio and myself, and resulted in a specific set of symbols dedicated to the issue of artificial cavities *(Fig. 4)*. We plan to present these in the near future.

As for the future, we are planning the next Hypogea congress, which will be a face-to-face event. This 4th assembly will be held once again in Italy, following a most successful event in 2015 in Rome. It will take place in Genoa *(Fig. 5)*, on the north-western coast of Italy, very close to France, and easily accessible from many areas with a variety of travel possibilities. It will be held in May/June 2023, and during the months ahead we will disseminate news about the congress, and the call for papers.

We confirm our intention to keep the Hypogea tradition, and to publish the proceedings at the time of the congress.

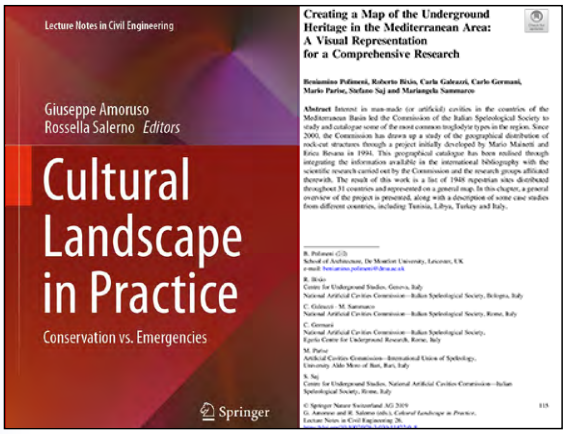


Figure 2:
Cover of the Springer book (left) and first page of the contribution concerning underground heritage in the Mediterranean Basin (right).

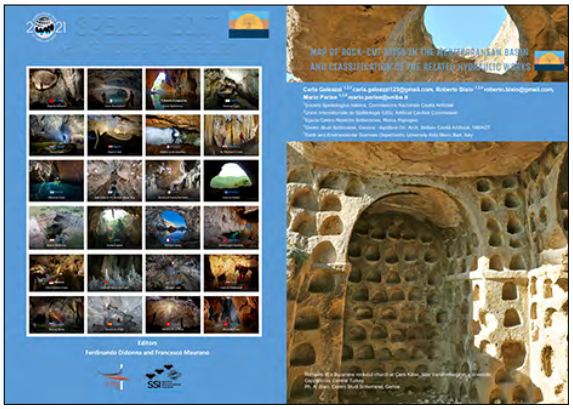


Figure 3: *Cover of the Speleomedit book (left) and first page of the contribution by the UIS Commission on Artificial Cavities (right).*

GENOVA Hypogea 2023

Figure 5: *Logo of the Hypogea 2023 Congress, to be held in Genova,, Italy, in 2023* (drawing: R. Bixio).

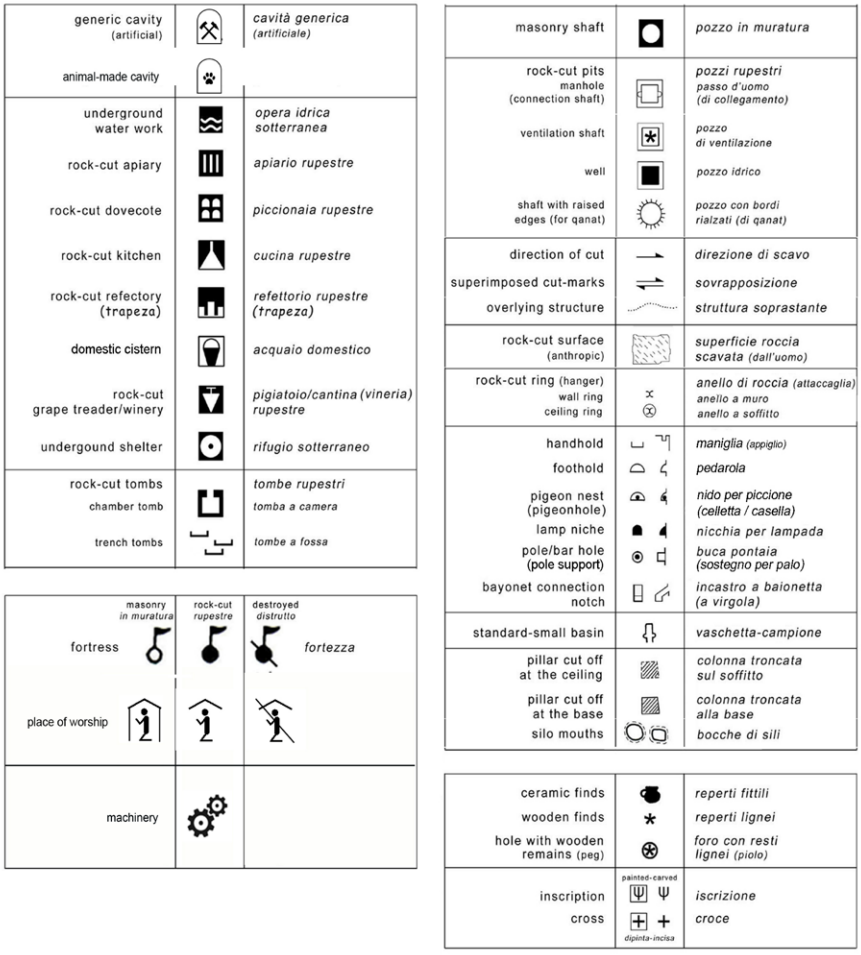


Figure 4: *Preliminary set of symbols for artificial cavities (joint work by the UIS Commission on Artificial Cavities and the UIS Working Group on Survey and Mapping).*

COMMISSION ON BIBLIOGRAPHY
Commission de Bibliographie

ACTIVITY REPORT 2018-2022

Visit us:
http://www.ssslib.ch/bbs/

By Patrick Deriaz (Switzerland)
President
patrick@ssslib.ch

LES PUBLICATIONS À L'HEURE DU NUMÉRIQUE

Depuis une dizaine d'années, les textes sont souvent distribués uniquement sous forme numérique, particulièrement dans le cas des bulletins de club. A contrario, les beaux ouvrages continuent à être publiés sous format papier; certaines associations impriment un bulletin annuel ou semestriel de belle facture.

Le format numérique s'impose, et il n'y a pas une bibliothèque qui se doit d'ignorer cette tendance. Le travail du bibliographe reste pourtant le même: collecter et classifier l'information, qu'elle soit numérique ou papier.

Ensuite le bibliothécaire aura à cœur de conserver tous ces documents: des locaux pour le papier et des serveurs pour les fichiers informatiques.

LES ULTIMES BBS PAPIER

A destination des collaborateurs du BBS, en priorité, deux numéros ont été publiés ces dernières années, contenant des analyses inédites. Ces bulletins à la mise en page minimale sont directement issus d'un export en pdf des analyses. Ils sont disponibles en téléchargement ici: https://www.ssslib.ch/bbs/news/.

Le no 53 regroupe les analyses de 2014, et le no 54 des analyses de 2015-2019.

SOUTIEN FINANCIER

Depuis le début du BBS, en 1969, celui-ci a toujours bénéficié du soutien de la commission de spéléologie de l'Académie des Sciences naturelles et de la Société Suisse de Spéléologie. Ce soutien, régulier, a permis de financer l'impression des ouvrages papier, et plus récemment de soutenir les développements informatiques.

LE BBS SUR WIKICAVES

La première étape a consisté à développer sur wikicaves un environnement de consultation des 120'000 analyses, jusqu'alors diffusées sur un CD annuel. Plus tard, un environnement de saisie (des analyses BBS) a été construit, et un *"back office"* a été développé afin de valider les analyses par les coordinateurs de pays.

Depuis le printemps 2022, le site est passé en production. Les prestations sont le suivantes:

- Consultation libre de toutes les analyses (120'000 références).
- Export des analyses recherchées.
- Respect de la classification matière et régions du BBS.
- Mise en ligne "instantanée" des analyses validées.
- Insertion du pdf de l'article analysé; lors de la recherche, le pdf inséré est lisible et peut être imprimé.

- Possibilité d'importer en masse des analyses sous un format excel, y.c. avec les fichiers liés.

- Possibilité à tous de saisir une analyse d'un ouvrage. Il suffit de créer un compte, et de commencer à saisir les informations.

LE FUTUR

Grâce aux développements sur la plateforme wikicaves, il est devenu plus facile d'analyser les publications parues et de voir le résultat de son travail dès qu'il est validé.

L'importance des coordinateurs et des collaborateurs de chaque pays est immense. Sans eux, il n'aurait pas été possible de publier annuellement une bibliographie mondiale de revues à thème spéléologique.

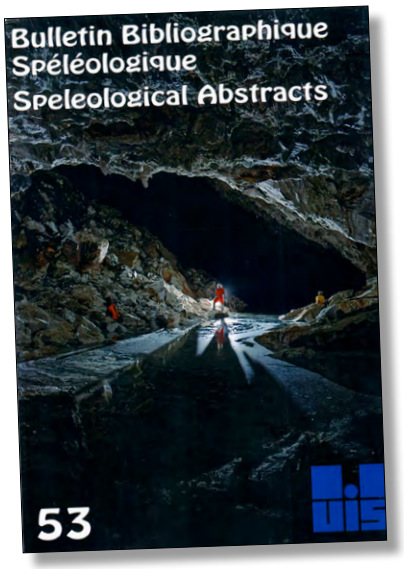
Depuis 1990, je me suis occupé du BBS, tout d'abord en collaborant avec Reno Bernasconi, puis en prenant la responsabilité de la commission de bibliographie, donc la production annuelle du BBS était le mot d'ordre.

Il est temps pour moi de laisser la place à une nouvelle équipe qui dispose, grâce à wikicaves, d'une infrastructure pleinement opérationnelle.

Un grand merci à toutes les personnes qui ont participé à l'aventure du BBS, et en particulier à Daniela Spring, Michele Sivelli, Michel Laumanns, Nathalia Gouffioul, Marcel Meyssonnier. Et une pensée à toutes les personnes que j'ai oublié de citer.

RÉFÉRENCES

- Wikicaves: https://grottocenter.org
- Le site du BBS: https://www.ssslib.ch/bbs/
- Histoire du BBS: https://www.ssslib.ch/bbs/histoire/
- Bernasconi, Reno; Deriaz, Patrick (2009): 38 years of publication of the Speleological abstracts. - In: 2009 ICS Proceedings, volume 3: 1970-1973.
- Deriaz, Patrick (2017): The challenging transition to an electronic speleological documentation, PROCEEDINGS OF THE 3RD INTERNATIONAL SYMPOSIUM OF SPELEOLOGY. Varenna (Como, Italy), April, 29th-30th, 2017. Memorie dell'Istituto Italiano di Speleologia S. II, XXXIII, 2018, pp. 95-102.



LES ULTIMES BBS PAPIER: Cliquez sur l'image pour télécharger. *Click on the image to download.*

RÉUNION DE LA COMMISSION BIBLIOGRAPHIE DE L'UIS

Le 29 juillet 2022 à l'occasion du 18ème Congrès International de Spéléologie de l'UIS

Présents: Patrick Deriaz, Frédéric Urien, Manolo Diaz, Alain Gresse, Claude Alliod, Graziano Ferrari, Michele Sivelli, Claude Mouret.

Absents excusés: Ana Häuselmann, Zdeněk Motyčka, Philipp Häuselmann est présent pour assurer la traduction Anglais/Français.

BILAN DES ACTIVITÉS DE LA COMMISSION BIBLIOGRAPHIE DE L'UIS DURANT LES 4 DERNIÈRES ANNÉES

Patrick Deriaz, président de la Commission Bibliographie présente la situation actuelle concernant le BBS 120'000 analyses réalisées par les collaborateurs du BBS

MEETING OF THE UIS BIBLIOGRAPHY COMMISSION

July 29, 2022, on the occasion of the 18th International Congress of Speleology of the UIS

Present: *Patrick Deriaz, Frédéric Urien, Manolo Diaz, Alain Gresse, Claude Alliod, Graziano Ferrari, Michele Sivelli, Claude Mouret.*

Excused absentees: *Ana Häuselmann, Zdeněk Motyčka, and Philipp Häuselmann is present to ensure the English / French translation.*

REVIEW OF THE ACTIVITIES OF THE BIBLIOGRAPHY COMMISSION OVER THE PAST 4 YEARS

Patrick Deriaz, President of the UIS Bibliography Commission announces that the Speleological Abstracts (SA)/Bulletin Bbliographique Spéléologique (BBS)

sont désormais disponibles en ligne sur le site: https://grottocenter.org. Sur ce même site, il est possible à toute personne de contribuer, par exemple pour présenter ses travaux et les faire connaître.

Il est possible aux organisations qui réalisent des analyses de documents de fournir ces analyses sous forme de fichier et il est très facile de les intégrer dans le BBS. La collection d'analyses du *Karst Information Portal* de l'Université de Floride du Sud (USF, EUA), (près de 7'000 analyses) vient d'être intégrée dans le BBS. Une présentation de ce travail a été réalisée lors de la table ronde Karstlink lors du Congrès par Xiying Me, Bibliothécaire de l'USF.

Désormais le BBS peut être utilisé pour archiver les fichiers que l'on souhaite rendre accessibles durablement. Cet archivage peut être réalisé soit par les contributeurs, dans le respect du droit d'auteur, soit pour un lot de documents par un modérateur de Grottocenter. Un exemple a été présenté avec la collection des analyses et des fichiers du Petit Usania, (https://grottocenter.org/ui/documents/130138).

La Société Suisse de Spéléologie finance le BBS depuis près de 50 ans. Elle souhaite continuer à soutenir ce projet en apportant un financement à l'association Wikicaves pour permettre de corriger des bugs et développer de nouvelles fonctionnalités.

Un échange a lieu après cette présentation sous forme de questions / réponses:

1 - Est ce que les contributions sont directement accessibles quand une personne la réalise? Non, un modérateur de Grottocenter doit la vérifier. Il peut décider de la refuser, de la valider et éventuellement de la corriger avant de la valider. Cela permet en particulier de vérifier que le droit d'auteur est bien respecté

2 - Que sont devenus les personnes qui contribuaient au BBS? Patrick a ressenti une certaine lassitude et il trouvait difficile de relancer sans cesse les contributeurs. Michele explique qu'il a arrêté de contribuer car il relançait les contributeurs qui ne répondaient plus et il devait alors réaliser seul les analyses pour toute l'Italie Frédéric propose que les informations de base soient directement collectées auprès des centres de documentation, auprès des éditeurs de documents.

Michele va poser la question pour l'Italie, la question a été adressée au Centre National de Documentation Spéléologique (CDNS) de la Fédération Française de Spéléologie (FFS). Tous les centres de documentation seront interrogés. Du coup les personnes qui contribuent au BBS pourraient se concentrer sur la partie intéressante du travail comme réaliser les résumés, mettre à jour les informations sur les éditeurs, associer les documents aux cavités dont il est question.

3 - Pourquoi Frédéric a proposé à l'USF de récupérer les données qui sont disponibles dans le BBS sur Grottocenter pour les intégrer au Portail d'Information sur le Karst (KIP)? Le KIP est un projet de l'UIS pour archiver les documents liés au Karst. A un moment, il était question que le BBS soit

120,000 abstracts contributed by BBS volunteers are now available online on the https://grottocenter.org website. On this same site is possible for anyone to contribute, for example to present their work and make them known.

It is possible for organizations that perform document reviews to provide abstracts as a digital file and it is very easy to integrate them into the BBS. The collection of abstracts from the Karst Information Portal of the University of South Florida (USF), USA, (nearly 7000) has just been integrated into the BBS. A presentation of this work was made during the Karstlink roundtable at the Congress by Xiying Me, USF Librarian.

Now the BBS can be used to archive the digital files that you want to make permanently accessible. This archiving can be done by contributors, in compliance with copyright laws, or for a batch of documents by a Grottocenter moderator. An example was presented with the reviews and files from the collection of La P'tit Usania, (https://grottocenter.org/ui/documents/130138).

The Swiss Speleology Society (SSS) has been funding the BBS for almost 50 years. They wish to continue to support this project by providing funding to the Wikicaves association to help fix bugs and develop new features.

An exchange took place after the presentation in the form of questions/answers:

1 - Are the files directly accessible when a person contributes them? *No, a Grottocenter moderator has to check them. They can decide to refuse, validate and possibly correct the contributions before validating them. In particular, this makes it possible to verify that copyright laws are respected.*

2 - What happened to the people who contributed to the BBS? *Patrick has grown tired of the work and he found it difficult to constantly remind contributors. Michele explains that he stopped contributing because he was chasing contributors who no longer responded and he then had to carry out the reviews for all of Italy on his own. Frédéric proposes that the basic information be collected directly from the documentation centers, from the document publishers.*

Michele will ask the question for Italy, the question has been addressed to the National Center for Speleological Documentation (CDNS) of the French Speleological Federation (FFS). All documentation centers will be queried. As a result, the people who contribute to the BBS could concentrate on the interesting part of the work such as making the abstracts, updating the information on the publishers, associating the documents with the caves in question.

3 - Why did Frédéric proposed to USF to take the data that is available in the BBS on Grottocenter to integrate into the Karst Information Portal (KIP)? *The KIP is a UIS project to archive Karst-related documents. At one point, there was talk of the BBS being integrated into the KIP. Patrick*

intégré au KIP. Patrick a préféré travailler avec l'association Wikicaves pour des raisons linguistiques.

Les données du BBS font l'objet de sauvegardes régulières. Pour assurer leur pérennité sur le long terme, il est préférable que plusieurs structures les gèrent. Cela présente d'autres intérêts: plus de personnes ont accès aux informations et les utilisent. Chaque organisation est capable de fournir des outils différents pour travailler avec ces données ce qui enrichit la manière dont elles peuvent être utilisées. La licence appliquée aux données permet ce type de partage avec l'USF ou avec n'importe quelle autre organisation.

4 - Est ce qu'il est possible d'associer un document à une région comme le Vercors? Actuellement les documents du BBS peuvent être associés à une liste de régions qui ont été définis par la commission Bibliographie. Une difficulté est apparue car la liste des pays et des régions dans le BBS ne correspond pas à la réalité, qui évolue.

Un développement pourrait être réalisé pour que les personnes puissent également choisir un pays parmi ceux qui sont reconnus par l'ONU, puis une région qui existe actuellement dans chacun des pays. Des services permettent d'avoir ces informations toujours à jour, dans toutes les langues.

Dans Grottocenter le Vercors est un massif. Sur Grottocenter chacun peut créer un massif correspondant à ses besoins et dessiner son périmètre: par exemple un site protégé ou le bassin versant d'une rivière. Puis associer ce massif à un document. Cette fonctionnalité existe déjà.

PLAN D'ACTION

1 - Patrick est d'accord pour conserver la présidence de la commission. Ana accepte d'en assurer la coordination, elle dispose de peu de temps mais maitrise de nombreuses langues ce qui est un atout pour la Commission Bibliographie.

2 - Les personnes qui souhaitent participer à la commission Bibliographie de l'UIS doivent adresser un message à Frédéric à l'adresse president@wikicaves.org. Ils seront alors inscrits sur une liste de discussion qui permettra les échanges entre les membres de la commission. Toutes les personnes sont les bienvenues, il ne faut pas hésiter à relayer cette information.

3 - Des conférences vidéos vont être organisées pour présenter comment il est possible de contribuer au BBS sur Grottocenter. Ces conférences auront lieu, non par pays, mais par langue. Il faudra que localement l'information soit rapportée. La première conférence a été organisée en Espagnol à l'occasion du 14eme Eurospeleo Forum entre le 9 et le 11 septembre 2022.

4 - Le Centre Espagnol de documentation spéléologique souhaite rejoindre le réseau des centres de documentation de l'UIS. La page avec la liste des centres de documentation de l'UIS va être mise à jour.

Désormais les documents mis à jour concernant le BBS sont disponible ici
https://wiki.grottocenter.org/wiki/GrottoCenter:Fr/bbs
et https://wiki.grottocenter.org/wiki/GrottoCenter:En/bbs.

preferred to work with the Wikicaves association for linguistic reasons.

BBS data is backed up regularly. To ensure their sustainability over the long term, it is preferable that several organizations manage BBS data. This has other benefits: more people have access to the information and can use it. Each organization is able to provide different tools to work with this data which enriches how it can be used.

The license applied to the data allows this form of sharing with the USF or with any other organization.

4 - Is it possible to associate a document with a region like the Vercors? *Currently BBS documents can be associated with a list of regions that have been defined by the UIS Bibliography Commission. A difficulty has arisen because the list of countries and regions in the BBS does not correspond to reality, this is being addressed which is changing.*

A development could be made so that people can also choose a country among those recognized by the UN, and then a region that currently exists in each of the countries. Services make it possible to have this information always up to date, in all languages.

In Grottocenter the Vercors is a massif. On Grottocenter everyone can create a massif corresponding to their needs and draw its perimeter: for example a protected site or the catchment area of a river and then associate this massif with a document. This feature currently exists.

ACTION PLAN

1 - *Patrick agrees to keep the presidency of the commission. Ana agrees to coordinate it. Although she has little time she has mastery of many languages which is an asset for the UIS Bibliography Commission.*

2 - *People who wish to participate in the UIS Bibliography Commission must send a message to Frédéric at the address president@wikicaves.org. They will then be added to a mailing list which will allow exchanges between the members of the commission. All people are welcome, do not hesitate to relay this information.*

3 - *Video conferences will be organized to present how it is possible to contribute to the BBS on Grottocenter. These conferences will take place, not by country, but by language. The information will have to be reported locally. The first conference was organized in Spanish on the occasion of the 14th Eurospeleo Forum between September 9th and 11th 2022.*

4 - *The Spanish Speleological Documentation Center wishes to join the network of UIS documentation centers. The page with the list of UIS documentation centers will be updated.*

From now on the updated documents concerning the BBS are available at
https://wiki.grottocenter.org/wiki/GrottoCenter:Fr/bbs
and https://wiki.grottocenter.org/wiki/GrottoCenter:En/bbs.

Cave Rescue Commission

ACTIVITY REPORT 2017-2022

By Gyula Hegedüs (Hungary)
President
hegedusgyula@t-online.hu

The UIS Cave Rescue Commission (CRC) was founded as one of the first three Commissions of the UIS when it was established in 1965. The commission has worked well over the past decades. The CRC held conferences in different countries over the past four years and held commission meetings during International Congresses of Speleology (ICS). The meetings have dealt with different topics around rescue activity like medical, technical, communication, responsibility, insurance policy, legal, and other important aspects. Its tasks are to share rescue information and experiences among the UIS member countries.

The last conference was held in Vaumarcus, Switzerland in 2015 and a short meeting was held in 2017 during the 17th ICS, in Sydney, Australia. There were no other activities since that time due to the long illness and the death in 2021 of Christian Dodelin, who was then President of the commission.

It was at this time that UIS decided to reorganize such an important commission and a meeting was held in July 2022 during the 18th ICS in France, where we also scheduled a Cave Rescue Symposium. At this symposium, those present agreed on the importance of reorganizing the commission and elected me as President to lead on this work.

The first task is to re-build the relationships with the rescue organizations in the UIS member countries and to re-establish communication channels between all, by organizing a mailing list, homepage, etc.

Besides this, we will join efforts on the organization of the 14th International Cave Rescue Conference (ICRC), which will be held in Spain in 2024. As soon as we have news about this event, we will inform everyone through the UIS channels. It will therefore be the first time that Spain will host the ICRC.

In the past ICRC's have been held as follows:

- **1st** - Mozet, *Belgium 1971*
- **2nd** - Eisriesenwelt, *Austria 1975*
- **3rd** - Sheffield, *Great-Britain 1977*
- **4th** - Zakopane, *Poland 1979*
- **5th** - Aggtelek, *Hungary 1983*
- **6th** - Cividale, *Italy 1987*
- **7th** - Budapest, *Hungary 1989*
- **8th** - La Chaux-de-Fondes, *Switzerland 1997*
- **9th** - Sart-Tilman, *Belgium 2002*
- **10th** - Athens-Kalamos, *Greece 2005*
- **11th** - Aggtelek-Jósvafő, *Hungary 2007*
- **12th** - Dryanovo, *Bulgaria 2011*
- **13th** - Vaumarcus, *Switzerland 2015*

So, the 14th ICRC will come at a time of reorganization and improvement of the UIS Cave Rescue Commission. The event will also be a great opportunity for us to discuss and decide how to continue the work as well as finding better way to develop it. This will be one of the main goals of the CRC promoting cave rescue and providing information for all UIS member countries.

For that, we are already committed to building a much closer relationship and collaboration among cave rescue organizations around the world as well as to assist countries where more help is needed to make them more effective in the field of cave rescue. That is an integral part of the Commission's mission. However, to achieve this goal, we must have everyone's support and collaboration. So please join us!

If you have questions or suggestions, please, don't hesitate to contact me at any time at hegedusgyula@t-online.hu

KALAMOS, GREECE, JULY 2005: *At the 14th International Congress of Speleology, André Slagmolen (left), who died in 2007, passes the presidence of the UIS Cave Rescue Commission to Christian Dodelin, who died in 2021.*

SYDNEY, AUSTRALIA, JULY 2017: *Participants of the UIS Cave Rescue Commission meeting during the 17th International Congress of Speleology (ICS). Five years later, the CRC joined again at the 18th ICS and a new period of success has just begun.*

PRESIDENTS OF THE UIS CAVE RESCUE COMMISSION

Alexis de Martynoff
(Russia)
(1965-1981)

Mike Meredith
(United Kingdom)
(1981-1987)

André Slagmolen
(Belgium)
(1987-2005)

Christian Dodelin
(France)
(2005-2021)

Gyula Hegedüs
(Hungary)
(2022-)

ACTIVITY REPORT 2017-2022

HISTORY OF SPELEOLOGY COMMISSION

By Bernard Chirol (France)
President/UIS Adjunct Secretary 2017-2022
bearchirol@orange.fr

[EDITOR'S NOTE: This is the report presented to the UIS General Assembly in Le Bourget-du-Lac, Savoi, France, on 24 July 2022]

Dear UIS Officers, dear colleagues, at first, I must pay a tribute to **Christian Dodelin**, following his recent death. He was a precious friend of the UIS Delegation and Bureau, his actions will remain in our memories for long time all over the world.

Concerning the HISTORY COMMISSION, I must remember when it started for me, as an older caver but younger UIS member. To learn more, you can read the 523 pages of the book published during Postojna meeting for the 50th Birthday of the creation of the UIS (Labegalini, 2015).

The commission was originally managed by our Austrian colleague Karl Mais. Hubert Trimmel was temporarily in charge after Karl's death but Hubert's destiny meant he had no time to work on it. In Brno (2013), a new President had to be found. Friedhardt Knolle and I decided on a candidate for the future direction of the commission.

Since 2013, we have tried to stay in contact with cave historians all over the world. We meet during conferences and have private meetings in the respective countries of Europe and many contacts by electronic mail or post. We try to inform the wider community about our work and help each other when some of the subjects require collaboration. The first time Laurence Tanguille and I spoke about a World Congress in Lyon was in 2013, and finally here we are in Le Bourget-du-Lac!

However, I must thank all the karstologists, cavers and speleologists for all the information shared during the past years. I have personally appreciated the solidarity for my most recent work, about the feminine contribution to the history of speleology. The book is available in French and also an edition in English. Order to bearchirol@orange.fr.

Our network is very active, and we will continue to work together. A new common project must be decided perhaps during this International Congress of Speleology 2022. I would like to propose one on - how the vectors of the world development of speleology are determined.

As I have already proposed to the French Federation of Speleology (FFS) Administration, I suggest a work about how SPELEOLOGY could be more at the heart of UNESCO as an intangible world heritage, just as Alpinism obtained it's prominence in UNESCO.

Johannes Mattes proposed that we have a devoted webpage for the History Commission, which is a good idea.

Stephan Kempe and Johannes Mattes were working on an edition and translation of Joseph A. Nagel's manuscripts, a precious source which needs to be disseminated more widely.

You can read the last UIS Bulletins containing our reports that give a landscape of the activity of the world members. Who are they? These are all the researchers working to discover the historical roots of karstology.

For example, re-known researchers, Trevor Shaw, Stephan Kempe, Vlado Bozic, Pino Guidi, Arrigo Cigna, Paolo Forti, F. Knolle and all our Central European colleagues who are very active in writing about history in Slovenia, Croatia, Bosnia, Hungary, etc. Forgive me for not being able to mention all of them but I have special respect for the Austrian Johannes Mattes who is working on the history of publications and the Englishman Frank Pearson, who has included history as part of his PhD.

I visited Gorizia in 2021 where the Karst Institute welcomed me, and I presented my "World history of karstology" lecture. I thanked them (Maurizio Tavagnutti). Also, in Autumn I viewed Marina di Camerota's fantastic film "Il Buco" awarded in la Mostra de Venise!

On a personal basis, I obtained some results when working on world caving history following on from the Brno Conference (2013).

In addition to my regional research in France, I have been impressed by the richness of historical data from many countries around the world.

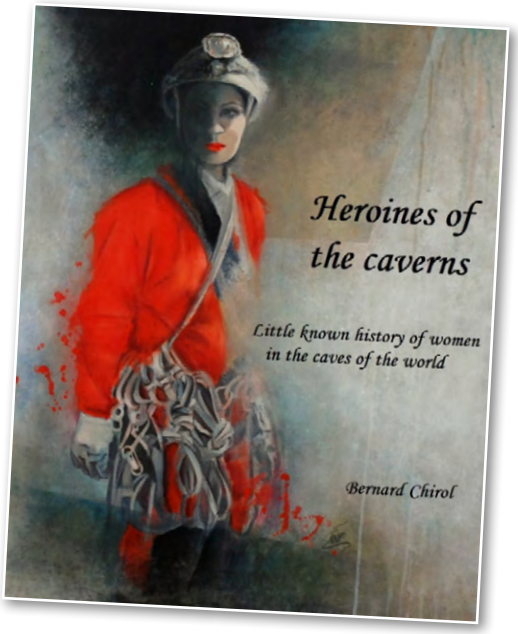
JULY 27 2022: *Bernard Chirol during the Wednesday Excursion of the 18th International Congress of Speleology (Le Bourget-du-Lac, France).*

A new project for me could be a book (online) continuing the history of cave and karst science, following on from the work of Trevor Shaw concentrating on 1900 onwards. This would be a very big task!

Since 2017, as mentioned, I've continued to update my database on female contributions to speleology (sport and science). I have received considerable amounts of world spelological data which gives a rich knowledge of this subject and I hope to soon disseminate amongst the speleological community.

There is also the publication of a book recently (May 2022/IYCK) about the LOSS of the RHONE-River (France). Information about this were given in presentations at the ICS in Sydney, and congress in Ebensee, Austria etc. I recently proposed a new president for our Commission but Johannes Mattes, the candidate, was elected for UIS Bureau General Secretary and so for the time being we are keeping the present status quo.

Finally, I can report that there were 27 lectures about caving history presented during the 18th ICS.

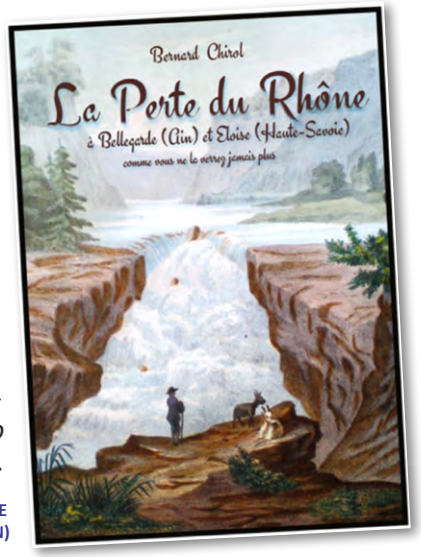


To celebrate the International Year of Caves and Karst 2021/22 and the great role of women in speleology, Bernard Chirol published the book **Ces Heroines des Caverns/*Heroines of the Caverns - Little known history of women in the caves of the world*.**

(CLICK ON THE IMAGE TO ACCESS THE PUBLICATION)

LA PERTE DU RHÔNE (2022): *Book by Bernard Chirol devoted entirely to the loss of the Rhône river from the angle of Earth sciences, the history of tourism, and speleology. Even submerged since 1948 under the waters of the powerful dam of Génissiat, in France, this famous tourist spot in the world for centuries still has many things to tell you...*

(CLICK ON THE IMAGE TO ACCESS THE PUBLICATION)



NAT. LIBR. VIENNA

The natural bridge in old part of the Postojnska jama, Slovenia.

NAT. LIBR. VIENNA

View into the Vilenica Jama, Slovenia.

ABOVE AND RIGHT: *Drawings from the manuscripts of the Court Mathematician Joseph Anton Nagel on his travels to Lower Austria, Styria, Carniola (Slovenia), and Moravia (Czech Republic) in 1747/48. The commission members Stephan Kempe and Johannes Mattes are currently working on an edition and translation of Nagel's precious manuscripts into English.*

ACTIVITY REPORT 2017-2022

INFORMATICS COMMISSION (UISIC)

Cave and karst documentation, mapping and data

By Peter Matthews (Australia)
President
matthews@melbpc.org.au

Web: https://www.uisic.uis-speleo.org
Forums: https://www.uisic.uis-speleo.org/forum/

The aim of the UIS Informatics Commission (UISIC) is to encourage and facilitate the systematic collection and responsible use of cave, karst and related data on an international basis. Formed in 1986 at the 9th International Congress of Speleology, UISIC is a Commission of the Union Internationale de Spéléologie / International Union of Speleology (UIS).

The work of the Commission is carried out either in Sub-commissions or in Projects: Sub-commissions for where there is an ongoing role, and Projects for finite tasks which will eventually be completed. These replace UISIC's earlier Working Groups to better fit with the UIS structure changes of 2017.

This report covers our work in the five years since the 2017 Congress in Sydney, Australia. Our groups have made good progress as below, but other projects are waiting for volunteers to help. If you would like to contribute to any of the groups below, please email their leader directly via the website. We could really use some cave documentation oriented people who are adept at developing web-based applications.

With the intense work that has been going on in the Commission over the last couple of years or so, parts of our website have got out of date. This is gradually being corrected. On the other hand, we have now installed our cavedata forums for discussing all things cave and karst documentation etc., and for use by each of our sub-commissions or projects as required.

An old but important issue which has arisen during the period is that of balancing the need for ready access to cave and karst information against the need to protect the caves and cave owner relations. One size does not fit all, and so some serious discussion is being started to reach a consensus and strategy to accommodate the requirements of each country, and to produce a UIS Guidelines document on this topic.

After 36 years as President of the commission it is time for me to step down in favor of someone more energetic and outgoing to lead our team and promote our many projects with new enthusiasm. My invitations during the last few congresses for someone to take over have not been taken up, so to precipitate some action I am stepping down at the end of this period, i.e. at this year's ICS in France. I will not be leaving the commission, only leaving the presidency, and will continue to work on some of the commission's projects. It is hoped to have a new president in place by the time of the ICS, but if not, our UISIC meeting at the ICS will be run by Philipp Häuselmann of Switzerland (Thanks, Philipp!), as I am not able to get to Europe this year.

We were fortunate this year to finally get a Vice-president – Mike Lake of Australia. Mike is very familiar with cave documentation, and instigated and has managed the web-based Australian Karst Index Database for many years.

Following are brief reports of the work done over the period by our sub-commissions and projects, not in any particular order. More details about all our sub-commissions and projects can be seen on our website and forums above.

Survey and Mapping Sub-commission

Web: https://www.uisic.uis-speleo.org/wgsurmap.html
Leader: Philipp HÄUSELMANN *(Switzerland)*
Project: ***Mapping symbols for artificial cavities***
Philipp HÄUSELMANN *(Switzerland)*

This project is now essentially ready for final voting and subsequent publication after a few details were sorted out during the ICS. - *PH*

Publications Exchange Sub-commission

Web: https://www.uisic.uis-speleo.org/publexch
Leader: Michele SIVELLI *(Italy)*

Michele has done considerable work furthering the aims of the sub-commission and has produced a new spreadsheet for discussion. His detailed report of progress, and the spreadsheet, are available via the PESC web page on the UISIC website. - *PM*

UIS-WikiCaves Sub-commission

Web: https://www.uisic.uis-speleo.org/wikicaves/index.html
Leader: Didier BORG *(France)*

A proposal has been sent to the UIS Protection Commission to initiate a project with UNESCO in order to collect data on the underground environment. A partnership has been set up with a French Geopark so that Grottocenter provides the services it needs. This partnership will be presented in September at the Congress of European Geoparks. - *Frédéric Urien, Didier Borg*.

Project: GrottoCenter Data Protection Updates

Forum: https://www.uisic.uis-speleo.org/forum/viewforum.php?f=10
Leader: Didier BORG *(France)*

The UIS gave a grant which allowed for new developments on Grottocenter that makes it possible not to disclose the location of a cave while still sharing information. A new letter is being sent to UIS Delegates and federations to ask them to indicate their expectations in terms of sharing information on caves, and to invite them to share data and sign a partnership with the Wikicaves association in order for Grottocenter to work in a manner suitable for the caves of their country.

A UISIC forum has been set up to discuss the necessary changes. - *Frédéric Urien, Didier Borg*.

KarstLink Sub-commission

Leader: Eric MADELAINE *(France)*

KarstLink is a protocol to transfer cave and karst data between databases via the semantic web.

The project was launched following the Sydney congress (2017), and important objectives have been achieved.

SUMMARY OF MAIN ACTIVITIES:
https://www.uisic.uis-speleo.org/exchange/karstlink/index-en.html

ONTOLOGY WITH EXAMPLES AND INSTRUCTIONS:
https://ontology.uis-speleo.org/

Karstlink is used by Grottocenter to make its data available and to collect the data available via CSV. The Karst Information Portal makes its data available with CSV Karstlink files.

In the next period we aim to:

• describe new entities in the Karstlink ontology (e.g. scientific observations, sensor data, etc.).

• work with all the organisations and agencies managing cave data so that they may use Karstlink to make them accessible.

• create new services, usable by the whole community and allowing the collection of data related to the underground environment. - *Frédéric Urien, Eric Madelaine.*

Caver's Multi-lingual Dictionary Sub-commission

Web: https://www.uisic.uis-speleo.org/lexintro.html
Leader: Mladen GARAŠIĆ *(Croatia)*

Since the Sydney Congress we have added Chinese (including Pinyin), our 27th language, and have added or updated several new links and bibliographic entries. Recently we have received a full set of Slovakian terms and they are currently awaiting processing. Soon to be on the website will also be a version of the Dictionary with the terms grouped by subject, as well as the current Hungarian alphabetical order. - *PM*

Project: Cave and Karst Glossary

Web: https://www.uisic.uis-speleo.org/lexgloss.html
Leader: Peter MATTHEWS *(Australia)*

We have long wanted to link definitions to the Dictionary's terms, and we now have the collaboration of Malcolm Field to convert his well-established Lexicon of cave and karst terms into a web-based linkable glossary. This will of course be useable by both the Dictionary and KarstLink's vocabulary/ontology, as well as by anybody else.

Once established, we will then work on integrating definitions in other languages. We are currently awaiting the opportunity to start the real work – volunteers welcome! - *PM*

Data Exchange Sub-commission

Leader: Peter MATTHEWS *(Australia)*

Karst Data Interchange Sub-commission

Web: https://www.uisic.uis-speleo.org/exchange/kdi/index.html
Leader: Mike LAKE *(Australia)*

The *Karst Data Interchange* (KDI) is a simple UTF-8 text-based format for transferring cave and karst data between independent databases by caving groups et al., when the complexities of *KarstLink* and the Internet are not required.

It was first successfully used by the Australian Speleological Federation in producing its *Australian Karst Index 1985* book, and in converting its Karst Index Database from a PC-based system to the current web-based system.

That early format is now being brought into the modern age, soon for discussion and publication. - *PM*

Project: Data Transfer Guidelines

Forum: https://www.uisic.uis-speleo.org/forum/viewforum.php?f=8
Leader: Jill Rowling *(Australia)*

This project aims to produce a set of Guidelines for ratification by UIS to facilitate the responsible sharing of cave and karst data, one of the UIS core aims, while at the same time recommending techniques for the appropriate suppressing of data for sensitive caves.

A letter is being sent to all country federations and UIS Delegates inviting them to contribute their requirements to the Guidelines. A UISIC forum has been set up to discuss the content and build up the Guidelines for submission to UIS for eventual publication. - *PM*

UIS CAVE GLOSSARY PROJECT

UIS has started a project to produce an extendable, multi-lingual glossary of cave and karst terms that is both human-readable and machine-readable.

The project is being run by the Dictionary Sub-commission of the UIS Informatics Commission (UISIC) and aims to create a web- and Linked Data-accessible cave and karst glossary of terms that also provides definitions linked to the terms in the existing Caver's Multi-lingual Dictionary.

In the first instance it will start by converting an existing comprehensive and professional glossary into a term-addressable web page, linked to the terms in the Multi-lingual Dictionary. This glossary will also be incorporated into the UIS KarstLink Ontology for Linked Data.

Everyone interested is invited to follow or contribute to the project.

Full details of the project can be found on the project's web page and forum:

Web:
https://www.uisic.uis-speleo.org/lexgloss.html

Forum:
https://www.uisic.uis-speleo.org/forum/viewforum.php?f=19

Draft Glossary:
https://www.uisic.uis-speleo.org/lexgloss1.html

Multi-Lingual Dictionary:
https://www.uisic.uis-speleo.org/lexintro.html

KarstLink:
https://uisic.uis-speleo.org/exchange/karstlink/index-en.html

Peter Matthews - *Project Leader*
Mike Lake - *Assisting*

LOOKING FOR A NEW UIS INFORMATICS PRESIDENT

The founding President of the UIS Informatics Commission (UISIC), Peter Matthews, has stepped down after 36 years on the job in order to encourage someone more energetic and outgoing to now lead the Commission into the future.

There is plenty happening in the Commission, we have a very competent Vice-President, and we are now looking for a new leader who:

- ***is passionate about all aspects of cave and karst documentation***
- ***has a vision for the future of the Commission and its work***
- ***is keen to encourage our existing team of volunteers in their various projects***
- ***and is keen to promote the benefits of our work to the general speleo community, and to the relevant scientific, management, and cave protection communities***

You can find out more about the Commission and the range of work that our volunteers are doing from our website and our new forums:

Website: https://www.uisic.uis-speleo.org **Forums:** https://www.uisic.uis-speleo.org/forum

HOW TO APPLY

There may be several applicants for this position, so please send an email to:
Peter Matthews (*matthews@melbpc.org.au*), setting out why you would be the best candidate.
Also happy to discuss via Skype, Zoom, phone, or whatever.

Karst and Cave Protection Commission

ABOVE: Speleothems from China in a garden in Harissa, Lebanon.

ACTIVITY REPORT 2017-2022

By Jean Pierre Bartholeyns (Belgium)
President
jp.bartholeyns@gmail.com

Objectives and retroactivity

The main objective of the Commission has been to promote and support all efforts aimed at protecting the caves and karstic ecosystems for which it has been called upon, but also to facilitate the exchange of experience and related information by disseminating them via the UIS website and social networks.

Membership and structure

The Commission is open to anyone interested who wishes to get involved on a voluntary basis. Since August 2011, the Commission has set up a multinational and interdisciplinary Scientific Committee composed of 7 people. In 2019, in order to broaden his skills, José Ayrton Labegalini (Brazil, UIS Past President) joined the group.

Achievements

The France Habe Prize *(fig. 1)* was organized like since 2013 and recorded, in this period of the International Year of Caves and Karst 2021/22 (IYCK), a greater number of applications.

The Commission responded to many requests

- information on cave and park management methods and possible means of protection (France, Cyprus, Macedonia, Kyrgyzstan, Philippines);
- discussing lighting issues (Mexico, Philippines);
- support to try to solve several cases of threat of cave destruction by writing personal and targeted letters to the political and administrative authorities concerned (Bermuda, Brazil, Malaysia);
- advice and opinions for projects: improvement of a tourist cave website (France), musical project in a cave (Italy-Emirate), archaeological research (Tunisia), workshop organization (Cyprus, Iran), or the protection by classification of a cave (Laos).

The Commission took part in workshops to disseminate best practices in caves (Belgium, Brazil, Cyprus, Romania). The Commission also carried out an investigation into the sale of concretions and launched a project to inventory protection laws at the international level *(fig 2 and photo on the top of this page)*.

Fig. 1: FRANCE HABE PRIZE 2020 *awarded to* ***Somos Los Cenotes*** *who claim to be the voice of the cenotes. Since the dawn of times, cenotes have provided life giving water to the soul of Mexico. The cenotes are threatened by developers who do not appear to realize how vital these iconic natural wonders truly are.*

FIG 2: *Gigantic bamboo scaffolding from the 1980s to "pick" the voluminous speleothems from the ceiling of Longniandòng, Dōnglán, China, to sell them.*

FIG 3: Qeshm Salt Cave, Iran. *Dazzling whiteness of 2.5 m long salt speleothems are in the list of the top 100 geological sites on our planet by the International Union of Geological Sciences and the UNESCO Global Geoparks Program.*

After having sought the support of the UNESCO delegation in Belgium and support to expand the UNESCO file, the Commission has obviously invested in the promotion of the IYCK. A more detailed report of these actions can be obtained on request.

To conclude

Despite increased awareness and better education of target audiences, "protection" still remains a hot, intense, and constantly evolving subject, sometimes even retrograde, as is the case in Brazil and Iran.

The Commission is very grateful to the members of the scientific committee for their support, encouragement and voluntary cooperation in the pursuit of its objectives. It welcomes the increase in information messages sent to her spontaneously. It thanks the authors and encourages this type of initiative. It also expressed her thanks to Jasmina Rijavec, the UIS webmaster, for putting her information quickly on the UIS website.

The future of the commission

During its meeting of 07/28/2022 held in Le Bourget-du-Lac during the 18th ICS in France, the Protection Commission took note of the 23 responses received to the 4 questions of the widely distributed "In your opinion" survey. beginning of July 2022. It would like to thank all those who took the time to answer them, to make suggestions and to give their justified opinion.

Given the diversity and interest of the responses received, those present wished to be able to reflect on them at greater length to better synthesize them in order to determine the most important and urgent objectives. They will also then decide on the most appropriate methods and means to meet the demands and needs encountered at the national level in terms of communication, information, education, support or even the drafting and dissemination of a global report on the evolution of the state of protection of caves and karst.

Rather than creating a new dedicated commission, it was also decided to integrate into the concerns and activities of the UIS Karst and Cave Protection Commission the issues relating to the management of karst and speleological heritage, which constituted the theme flagship of this 18th International Congress of Speleology (cf. Symposium 1) *(fig. 3)*.

The result of this work will then be distributed to all those involved in the protection of known caves and karst or to interested parties who request it.

In the wake of the International Year of Caves and Karst, protection is a key issue that should be linked to the work of all other UIS commissions.

In the absence of remarks or objections, Jean-Pierre Bartholeyns will continue as President of the Commission.

Good news

At its first meeting on July 31, 2022, the new UIS Bureau voted a budget of €300, instead of €200 previously, for the France Habe Prize.

UIS Commission on Physical Chemistry and Hydrogeology of Karst

Follow us on

ACTIVITY REPORT 2017-2022

By Yavor Shopov (Bulgaria)
President from 1983 up to November 11, 2022

[EDITOR'S NOTE: Due to Yavor's death, his email has been removed from the article. See obituary on page 99 of this Bulletin]

The UIS Commission on Physical Chemistry and Hydrogeology of Karst has 141 members from 36 countries.

Recently the primary activity of the commission is related to its International Program *"Techniques for Remote Location of Caves" (RLC)* using thermal vision technique. The original program leaders were Prof. Yavor Shopov from Sofia University, Bulgaria and Dr. Ivo Baroň form Museum of Natural History in Vienna, Austria. Dr. Ivo Baroň it is no longer active in the program.

This program is very interesting, because it has the potential to improve links between scientific and caving activities of the UIS. It aims to detect and locate unknown caves and help to expand cave exploration in new regions. It is very useful for finding new caves in difficult to access regions and even on other planets. Remote sensing of new caves is very important for future manned exploration of Mars and the Moon (Shopov, 2017). Finding caves on Mars and the Moon is of vital importance for their future exploration because caves are most appropriate for shelters of astronauts from the deadly cosmic radiation at the first stages of the planet exploration (Shopov, 2013, 2017, 2019).

The International Program on Techniques for Remote Location of Caves (RLC) consists of the following stages (Shopov, 2013, 2017a, 2019; Shopov, et al., 2021):

1. *To optimize techniques on the surface and to perform calibration of it with mapped caves.*
2. *To use it to locate unknown caves.*
3. *To put observational instruments on drones to locate unknown caves from the sky.*
4. *To put observational instruments on microsatellites.*
5. *To propose to NASA to use these techniques for location of caves on Mars.*

The RLC program has already achieved stages 1-3 (Shopov et al., 2021) and is ready to start stages 4 and 5 depending on availability of financial resources.

Development of the Technique for Remote Location of Caves using thermal cameras mounted on a drone was successfully accomplished from 2017-2021 under a Bulgarian research grant of Bulgarian Science Foundation to Yavor Shopov (Shopov, et al., 2021, 2021b). Four thermal cameras, including one integrated on a drone were obtained through the grant. This equipment can now be used worldwide for work in the frames of the RLC International Program to expand cave exploration into new regions.

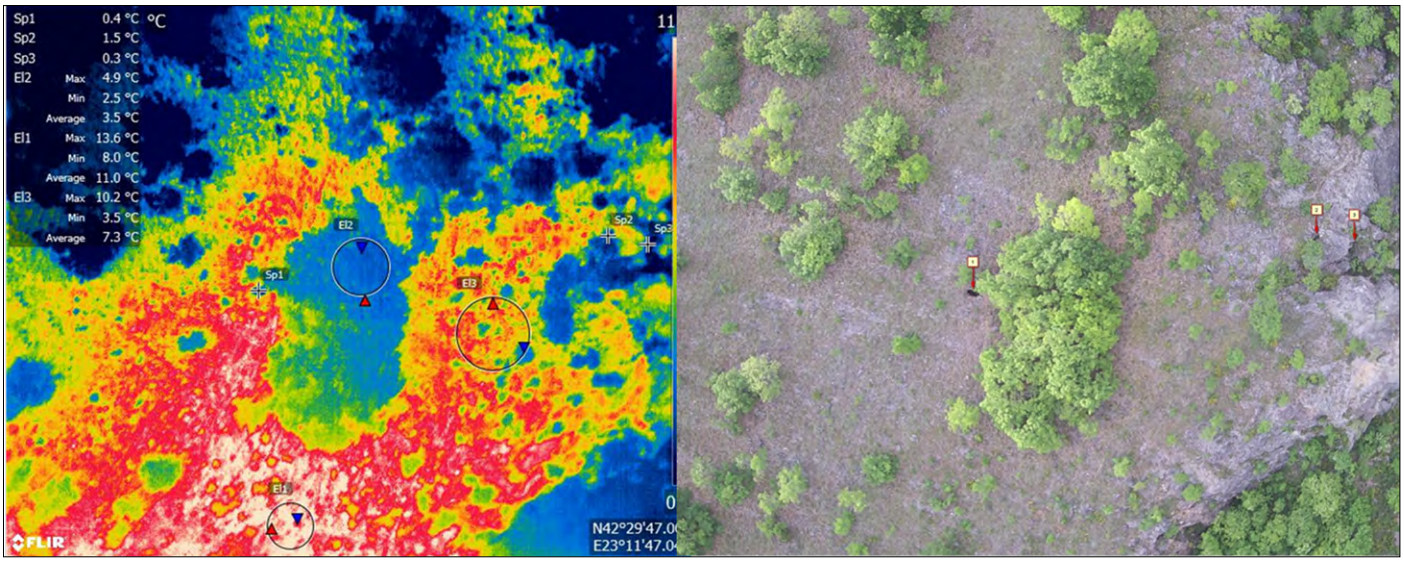


Figure 1: *A thermal image of Bosnek Karst taken from a drone from the height of 130 meters with a radiometric thermal camera (left). A shot of the same area from 130 meters high with a visible camera (right). Sp1, Sp2 and Sp3 are unknown cave entrances. Temperatures of the relevant spots and areas of the terrain (upper left) are measured from its thermal image captured by the radiometric thermal camera.* Images by Ognian Ognianov.

This project demonstrated that aerial survey for remote location of caves using a coaxial pair of thermal and visible cameras mounted on a drone can detect a much greater number of entrances of underground cavities than detailed systematic ground survey by experienced cavers. For example: one site has been the subject of a detailed search for caves by three national cave expeditions in the 1970s and seven expeditions in the last four years. Only nine caves were found in the research area during the last 50 years.

The aerial survey detected significantly more cave entrances within hours. Entrances of 57 underground cavities were located by the thermal camera from a drone including the nine known caves in the research site (Shopov, et al., 2021).

Thus, 48 new entrances of underground cavities were located (Shopov, et al., 2021a). During the subsequent ground survey eight additional unknown caves were found in the research area (Shopov, et al., 2022). This demonstrates that this technique is very efficient and reveals great possibilities to raise the level and sophistication of techniques for location of unknown caves to a much higher level. Obtained results are a significant step forward in the-State-of-the-Art of the location of unknown caves (Shopov, et al., 2021b, 2022).

So far, we have achieved stage 3 of the Program and have developed a technique for remote location of caves by thermal cameras mounted on a UAS (Shopov, et al., 2019, 2021b, 2022). We demonstrated that this technique is very efficient for finding the location of new caves in temperate climate regions. We obtained good portable equipment for application of this technique worldwide. Now we have to expand to additional research areas and countries to determine optimal working conditions of the technique for different types of local climate We also wish to find new caves in difficult to access regions around the world.

The last task is huge. It will take a great deal of time and effort, so we expect it to continue for a prolonged period of time. It requires participation of many cavers from all possible countries, thus raising the international dimensions of the program.

Figure 2: *Visible image of the entrances of the three new caves presented on figure 1, taken from a 130 meters high from a UAV. Entrance 3 is located in a vertical section at the edge of the cliff and is therefore not clearly visible in the photograph. Entrance 2 is partially covered with bushes.*

To facilitate this effort please send this information to your colleagues or friends from the speleological community who may be interested in some form of collaboration. Anybody interested to collaborating in this large-scale international effort should emailed to the UIS Secretary General Johannes Mattes through secretary@uis-speleo.org to become members of the research team and to receive details regarding the research plans of the RLC program.

Later this year we will begin the acquisition of some parts of the equipment for stage 4 as a part of a Bulgarian grant for development of a Bulgarian Center of Excellence in Mechatronics, which is leaded by Y. Shopov. Thus stage 4 will start simultaneously with the geographic expansion of stage 3.

The 18th International Congress of Speleology in France included a Special Session on "Geophysical methods & location of unknown cave" (including remote location of caves) within Symposium 9 "Topography, Mapping, 3D, Documentation". It was the best place to get familiar with the results and potential of the International Program on Remote Location of Caves (RLC) of the UIS Commission on Physical Chemistry and Hydrogeology and to establish collaborations to expand its field work in other countries. This will be the main task of the program in the near future. Thus, immediately following the session we had the meetings of the Commission and of the RLC Program.

At the second General Assembly of UIS Commission it was proposed to drop co-leadership of Dr. Ivo Baron from the RLC Program and to elect Dr. Dino Grozic form Croatia, as the vice-leader. It also proposed to include LIDAR and Near IR techniques for location of caves and to use it together with the Thermal IR technique.

It was also proposed to start remote location of new caves in all possible countries around the World to rise international dimensions of the program.

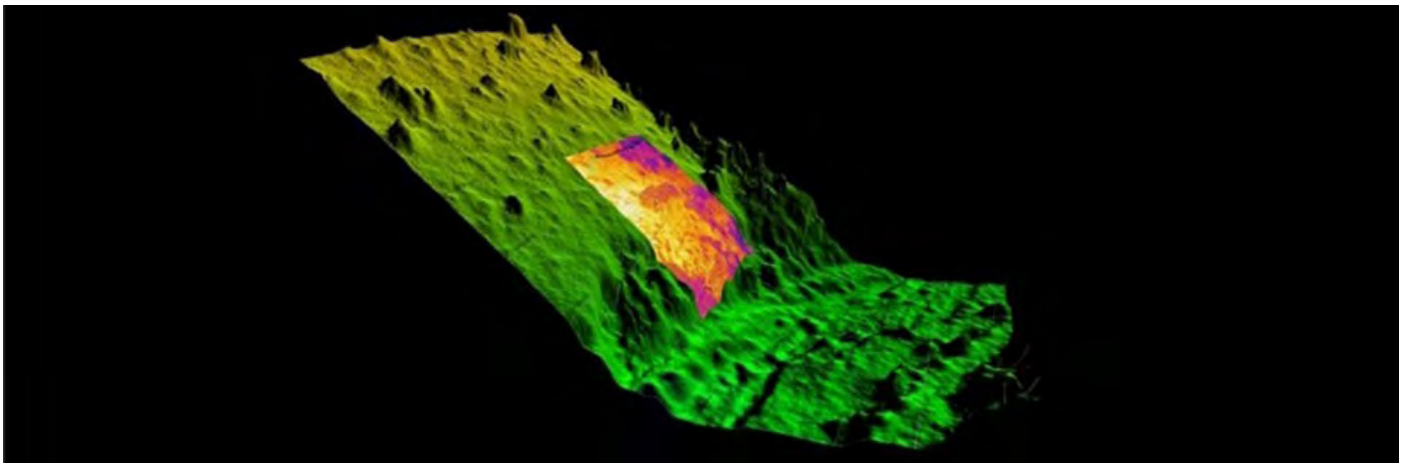


Figure 3: *3D model of a Bosnec karst terrain by O. Ognianov with imposed thermal image (fig.1, left).*

We demonstrated that this technique is also very helpful to locate unknown entrances of known caves *(fig.4)*.

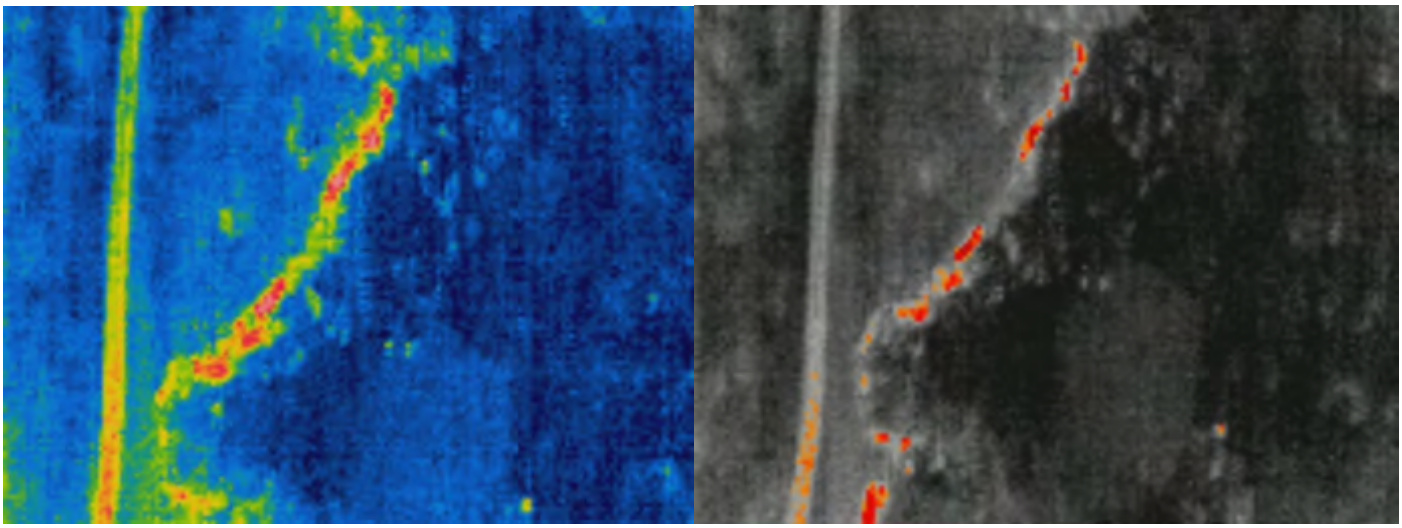
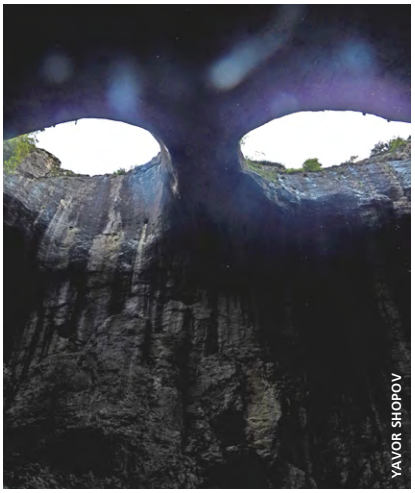


Figure 4: *Aerial thermal photography around the entrance of Duhlata cave, Bosnek, Bulgaria (29.02.2020, 06:50 a.m.). Images by Anton Filipov* (in memory). **Left:** *thermal image presented in a color scale from dark blue to bright red.* **Right:** *a thermal image presented in gray tonality with an emphasis on the objects with the highest temperature in orange-red color showing cave air outlets.*

The Second International Program for Cave Research (IPCR) had two leaders, Prof. Yavor Shopov and Prof. Giovanni Badino, from the University of Torino, Italy, but unfortunately, Badino died, and we are searching for an equivalent leading expert on cave climate to replace him and for funding for the necessary equipment.

Operation of the IPCR program needs some specific equipment, so it cannot start to function properly until we obtain funding for its operation. So, at this time, the main activity of the Commission is focused on its RLC International Program, but we will also continue IPCR program.

Any suggestions for additional activities are more than welcome if they are properly developed and have realistic funding sources .



Prohodna Cave, *the most famous cave in Bulgaria because of the skylights, which look like eyes, so the cave is known to the general public as "Eyes of the God". It is located in the Karlukovo karst region, one of the four typical karst regions of the world studied by the Commission International Program of Genesis and Evolution of Karst (PIGEK), led by the UIS Past President Adolfo Eraso Romero (1934-2021) and Marian Pulina in the 80-es.*

REFERENCES

SHOPOV Y.Y. (2013) Activity Report of Commission on Physical Chemistry and Hydrogeology of Karst of International Union of Speleology (UIS). UIS Bulletin, Vol.56 (1), pp.18-19.

SHOPOV Y. (2017) Using thermal vision cameras for remote location of caves on Mars for immediate shelters for astronauts and storage chambers Journal of Aeronautics & Aerospace Engineering, May 2017, Volume 6, Issue 2, 64

SHOPOV Y. (2017a) Activity Report Physical Chemistry and Hydrogeology of Karst Commission. UIS Bulletin, Vol.59 (2), pp.76-78.

SHOPOV Y. (2019) The international program on "Techniques for remote Location of Caves" (RLC) of the international union of speleology (UIS) and Bulgarian Project related to it. - Abstracts of the 13th EuroSpeleo Forum 26-29 September 2019, Dolni Lozen, Sofia, Bulgaria. p.79

SHOPOV Y., O. OGNIANOV, A. FILIPOV AND I. R IVANOV. (2019) Development of Technology for Remote Location of Unknown Underground Cavities and Deep-Seated Rockslides by Unmanned Air Systems (UAS) Journal of Physics: Conference Series 1368 (2019) 032032, doi:10.1088/1742-6596/1368/3/032032.

SHOPOV Y., K. PETKOVA, O. OGNIANOV (2021) Progress Report of the International Programme for Techniques for Remote Location of Caves (RLC). UIS Bulletin, vol. 63-1, pp.18-22.

SHOPOV Y., K. PETKOVA, O. OGNIANOV, D. GERGOVA (2021a) Remote Location of Unknown Caves and Deep-Seated Rockslides in Sveshtari World Heritage Site by Unmanned Air Systems (UAS). 28th Annual Meeting of the European Society for Astronomy in Culture. Stara Zagora, Bulgaria, September 6th - 10th, 2021, Cultural Astronomy & Ancient Skywatching, ed. By P. Maglova & A. Stoev. pp. 121- 124.

SHOPOV Y., K. PETKOVA, O. OGNIANOV (2021b) A new technique for remote location of unknown caves and deep-seated faults by unmanned aerial systems (UAS) Review of the Bulgarian Geological Society, vol. 82, part 3, 2021, p. 225–227.

SHOPOV Y., K. PETKOVA, O. OGNIANOV (2022) New Caves Found by Remote Location of Caves (RLC) International Programme with Thermal Camera from a Drone. UIS Bulletin, vol. 64-1, pp.15-19.

Pseudokarst Commission

ACTIVITY REPORT 2017-2022

Visit us:
http://www.pseudokarst.com/

By

Jan Urban (Poland) - *President*
urban@iop.krakow.pl

Rudolf Pavuza (Austria) - *Vice-President*
rudolf.pavuza@NHM-WIEN.AC.AT

Hartmut Simmert (Germany) - *Secretary*
hartmut.simmert@t-online.de

Functionaries of the Commission

- **Jiří Kopecký** *(Czech Republic) - Honorary President*
- **István Eszterhás** *(Hungary) - Honorary President up to 2nd August 2020*
- **Jan Urban** *(Poland) - President*
- **Rudolf Pavuza** *(Austria) - Vice-President*
- **Hartmut Simmert** *(Germany) - Secretary*

Members

Jiří Adamovič, Ilya Agapov, Ivo Baroň, Bartosz Baturo, Pavel Bella, Peter Crossley, Filip Duszyński, Ludovít Gaál, William R. Halliday, Kacper Jancewicz, Jiří Kopecký, Jan Lenart, Konstantin Kostov, Włodzimierz Margielewski, Douglas Medville, Jan Paul van der Pas, Rudolf Pavuza, Wioleta Porębna, Saul Riffel, Juan Ramón Vidal Romani, Jill Rowling, Hartmut Simmert, Rabbe Sjöberg, Herman de Swart, George Szentes, Peter Tarsoly, Maurizio Tavagnutti, Marcos Vaqueiro Rodriguez, Jan Urban, Marina Vdovets, Josef Wagner, Karel Žák.

During the reported period eight new members were added to the Commission Four members were lost due to death: Ahmad Afrasiabian (17.07.2017), John Dunkley (1.02.2018), Istvan Eszterhás (2.08.2020), and Erich Knust (6.07.2021).

Consequently, the total number of the Commission members has increased by four and is comprised of 32 members. The Commission members represent the following countries: Australia, Austria, Bulgaria, Brazil, Czech Republic, Germany, Hungary, Italy, Netherlands, New Zealand, Poland, Russia, Slovakia, Spain and the United States of America.

The Commission meeting

The last Commission meeting took place during the 17th International Congress of Speleology in Sydney, Australia on the 24th of July, 2017. Approximately ten people participated in this meeting, including George Veni, UIS Administraive Vice President, and two members of the Commission, George Szentes and John Dunkley. On behalf of the Commission President, G. Szentes presented the Commission report for the period 2013-2017, which was then discussed. The general conclusion of this discussion was that there are a lot of explorational and scientific activities occurring in pseudokarst caves and landforms. Consequently, these activities should be reflected in the Commissions endeavors. Several individuals at the meeting declared their desire to join the Commission or to work in close cooperation with the Commission.

The Commission assembly was planned to occur during the 14th International Symposium on Pseudokarst, which was to be held in Chęciny (Świętokrzyskie Mts.), Poland, in June 2020.

Due to the pandemic restrictions, this meeting was twice postponed, first to April 2021 and then to 22-26 May 2023. The 14th International Symposium on Pseudokarst will now be held in Karłów (Sudetes), Southwestern Poland.

Publications

• Pseudokarst Commission Newsletter (PCN) has been issued every one to two years, in two languages: English and German up to issue No. 29, and now only in English beginning with issue No. 30. Editors of the issues were: Jan Urban, Rudolf Pavuza and Christa Pfarr. The newsletter is distributed digitally via the internet and printed copies by mail.

During the reported period three issues were published: No. 28 (December 2018), No. 29 (December 2019) and No. 30 (March 2022). The PCN No. 28 was composed of four scientific papers, four short reports, event announcements, and two obituaries (in total 47 pages). The PCN No. 29 was composed of four scientific papers, two meeting announcements and one obituary (48 pages). The PCN No. 30 was a special issue, as it was published on the occasion of the International Year of Caves and Karst (IYCK). Therefore, it includes eleven scientific-popular papers promoting various types of pseudokarst caves in nine countries on four continents; a preface commenting on the problem of the pseudokarst caves promotion during the IYCK, one meeting announcement and three obituaries (82 pages).

• The report on the Pseudokarst Commission activity in 2015-2017 was published in the UIS Bulletin issue 59 no. 2, 2018 (pp. 79-80).

• The UIS Bulletin included obituaries (written by Commission members) of members and collaborators of the Pseudokarst Commission: **Grzegorz Klassek** (issue 61-1, 2020, pp. 26-27), **Niels Axel Mörner** (issue 62-2, 2020, pp. 46-47) and **István Eszterhás** (issue 62-2, 2020, pp. 48-49).

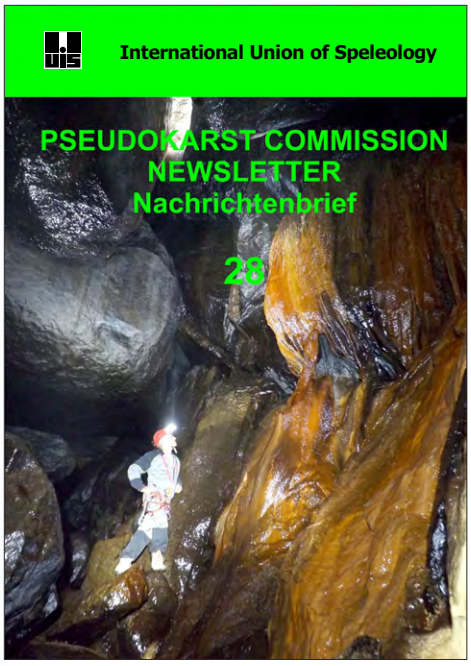
Webpage

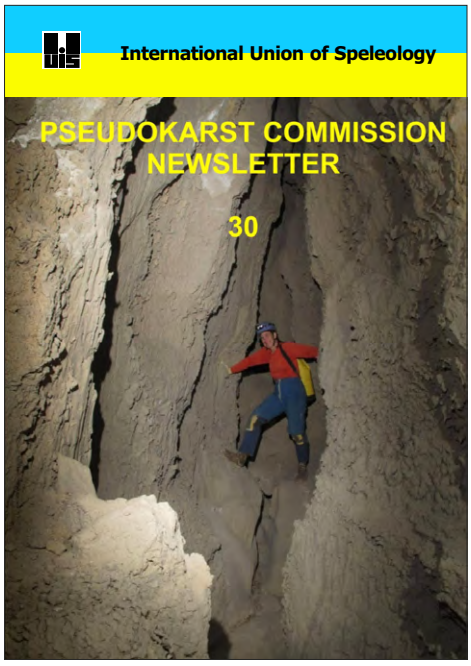
The webpage of the Pseudokarst Commission (edited by Hartmut Simmert) is now active: http://www.pseudokarst.com/. It contains documents produced by the Commission assembly and executive board, issues of the Pseudokarst Newsletters, reports and announcements concerning meetings and other events, past symposia proceedings, as well as cave pictures. Many are in PDF format. All activities providing new data and improving the informational level of the webpage are welcome.

Other activities

• Following the example of the UIS President, George Veni, the information on events related to cave and karst exploration, study and management (meeting annoucements, publications, etc.) has been efficiently distributed to the Commission members and friends. Such relations between the Commission executive board and its members make it possible to obtain contacts from other, inner-Commission affairs.

• The Polish-Czech Speleological Workshop prepared and chaired by the Honorary President of the Pseudokarst commission, Jiří Kopecký. During the workshop the President of the Pseudokarst Commission presented the objectives, activities and problems of the Pseudokarst Commission.





The three most recent Newsletters of the UIS Pseudokarst Commission: no. 28 (December 2018), no. 29 (December 2019) and no. 30 (March 2022). ***Click on the image to access the full publication.***

This excellent presentation is accessible on the website). It was resulted in the increase in numbers of the Commission members.

• The Commission members participated in preparation of the IYCK webpage, collecting photographs of pseudokarst caves.

Current and planned activities

• The crucial problem in the reported period was the organization of the Commission assembly which was planned to be held during the 14th International Symposium on Pseudokarst, an event that was twice postponed due to pandemic restrictions. The final date of this meeting is 24th of May 2023. The meeting will be held in two ways: in person and online, to facilitate participation by the greatest number of members of the Commission.

© HARTMUT SIMMERT

July 25, 2022: *Meeting of the UIS Pseudokarst Commission at the 18th International Congress of Speleology (Le Bourget-du-Lac, France).* ***Left to right*** *-* ***Standing:*** *Włodzimierz Margielewski (Poland) and Hartmut Simmert (Germany);* ***Sitting:*** *Claude Mouret (France), and Jan Urban (Poland).*

• Despite the meeting scheduling problems since the beginning of 2020 through the spring of 2022, the number of the Commission members has distinctly increased and, more importantly, the composition of the Commission has been rejuvenated. This has resulted in the increased activity of the Commission currently reflected in the preparation of the 14th International Symposium on Pseudokarst.

In the Commission Assembly, to be held during the symposium, new objectives and ways of achieving them, adequate to modern cooperation possibilities and challenges, will be discussed, and hopefully, accepted, and then implemented. The Commission's executive board election will occur, and new, young functionaries will be appointed to perform new tasks. Nevertheless, all Commission members are still requested to look for young people working on pseudokarst and ask them to be involved in the Commission's activities.

• The traditional (previously and currently occurring) activities of the Commission, is and will continue. The Pseudokarst Commission Newsletter will be issued (however the format and design can be changed). The website will be managed (proceedings of pseudokarst symposiums as PDF files will be posted, etc.) and the activity of Commission members in other media (UIS Bulletin, etc.) will be visible.

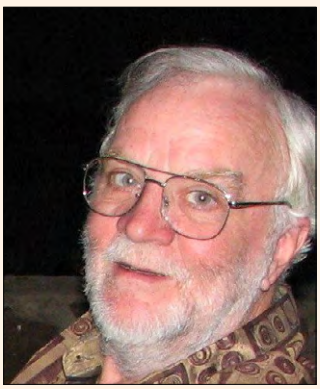
• Initial steps for the planning of the 15th International Symposium on Pseudokarst in 2025 will occur.

Kraków-Wien-Dresden 4.07.2022

PHOTO ON THE HEADER (PAGE 43):
Marginal cliff of Mt. Szczeliniec, Poland, one of the attractions of the 14th International Symposium on Pseudokarst (22-26 May 2023, Sudetes, Southwestern Poland. (Photo: J. Urban).

PSEUDOKARST COMMISSION LOSSES

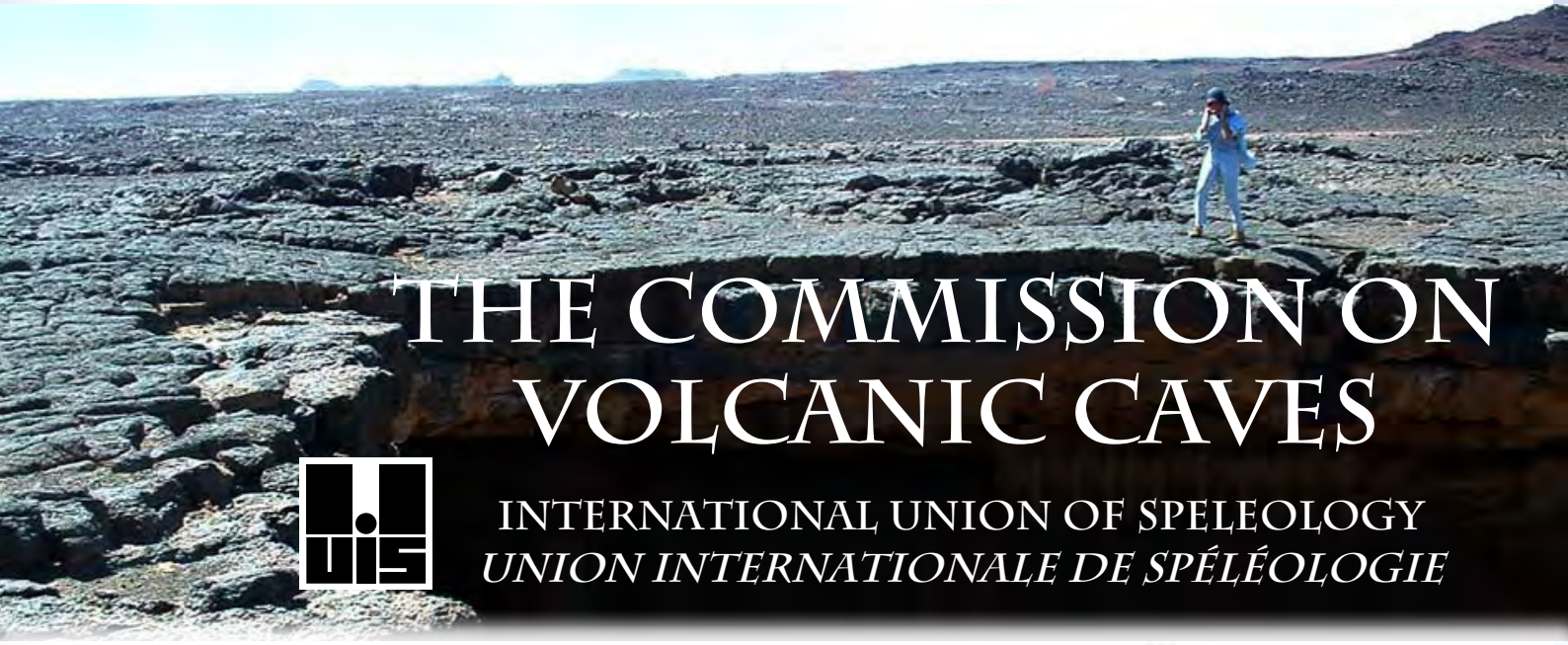
Ahmad Afrasiabian (Iran)
(1947-2017)



John Dunkley (Australia)
(1943-2018)

Istvan Eszterhaz (Hungary)
(1941-2020)

Erich Knust (Germany)
(1947-2021)



THE COMMISSION ON VOLCANIC CAVES

INTERNATIONAL UNION OF SPELEOLOGY
UNION INTERNATIONALE DE SPÉLÉOLOGIE

ACTIVITY REPORT 2017-2022

By John Brush (Australia)
President
warwillah@gmail.com

vulcAnospeleology
WWW.VULCANOSPELEOLOGY.ORG

The Commission on Volcanic Caves achieved full commission status with UIS in 1993. It evolved from an informal international group that was established in the 1970s. Its principal objective is to advance the exploration, documentation, scientific study and protection of caves and related features in volcanic rock throughout the world. The Commission currently has more than 130 members from 27 different countries.

The Commission's major activity continues to be the convening of International Symposiums on Vulcanospeleology (ISVs), which for many years have been held every 2 years, or thereabouts.

The 18th ISV was held in and around the Lava Beds National Monument in Northern California, USA, in July 2018. The principal organiser, Mary Rose, was ably supported by Bruce Rogers, who led many of the afternoon field trips; Peter Bosted, who organised the presentation sessions and coordinated production of the proceedings; and also by members of the Redwood Grotto of the NSS (National Speleological Society). The 23 presentations covered a wide range of topics including the history, geology and exploration of the local caves; microbiology; and the genesis, exploration, documentation, management and protection of volcanic caves. There were also two presentations on extra-terrestrial studies of volcanic caves.

It was a very successful symposium that attracted around 60 participants from North America, Europe, Asia and the Pacific.

The 19th ISV at Catania in Sicily (Italy) was originally scheduled for August 2020 but was postponed for 12 months because of Covid-19 restrictions. Unfortunately, Covid continued to be an issue throughout 2021 with the result that fewer than 30 participants were able to attend the August 2021 event and planned field trip activities had to be significantly curtailed.

Last minute arrangements enabled a number of members to participate on-line. Despite the difficulties, the organisers - principally Giuseppe Priolo and Roberto Conti - the Gruppo Grotte Catania, staged a successful symposium that included 27 presentations, a geological field trip on Mt Etna, excursions into a variety of caves and some very convivial social events. The symposium proceedings are currently being published.

18th ISV (Lava Beds, California, USA, July 2018)
Participants preparing for a trip to Scull Cave, Lava Beds National Monument, California.

The 20th ISV was held in the Dak Nong Province of south-central Vietnam in November 2022.

It was primarily organised by staff of Dak Nong Province and the Dak Nong UNESCO Global Geopark. In addition to the ISV, the organisers also convened a symposium to review 15 years of geopark development in Vietnam. The two symposiums ran concurrently after a joint, and very formal, opening ceremony in the impressive Provincial Conference Centre in Gia Nghia City.

During the opening ceremony there were speeches by Central and Provincial Government leaders, UNESCO and the Commission on Volcanic Caves as well as performances by local artists. Participants from both symposiums also came together for lunches and for the magnificent evening banquets where entertainment was provided by local ethnic minority groups.

The ISV sessions were held over 3 days and included more than 25 presentations, several of which were delivered online, and included 3 videos on volcanic caves in Vietnam and Iceland.

After the symposium, participants travelled to the volcanic area of the Dak Nong UNESCO Global Geopark for a 2-day field trip. Highlights were a trip into Cave P8 with its 26 m entrance pitch and to Cave C7, which at just over 1,060 m long is the longest known volcanic cave in Southeast Asia. This cave is now significantly longer, thanks to a discovery by Laurens Smets (Netherlands).

Over the past 12 months, the Commission has been involved in discussions with a number of organisations regarding possible locations for the next two ISVs. At the Commission's meeting in Vietnam on 24 November 2022, there was preliminary consideration of two proposals for hosting an ISV in 2024. A decision on the location for the ISV in 2024 will be made in 2023.

The Commission has continued to publish its e-Newsletter twice a year. Under the stewardship of the previous editor, Harry Marinakis, the newsletter grew in size, broadened its scope to cover a wider range of issues and included more full colour images. Ed Waters assumed the editorial role in 2017 and continued to improve the content and style of the newsletter. Common themes in recent issues have included exploration and documentation of volcanic caves and management and protection issues.

Unfortunately, Ed resigned in November 2022 due to other commitments and the Commission is now seeking a replacement.

The Commission thanks the former UIS President, George Veni, for his assistance in negotiating with the 18th ICS Organising Committee. From the Commission's perspective, there have been considerable communication shortcomings over the past two years, with the organisers failing to communicate, including in recent weeks, making decisions without any consultations and being unreceptive to representations.

18th ISV (Lava Beds, California, USA, July 2018)
Lava benches in Valentine Cave.

18th ISV (Lava Beds, California, USA, July 2018)
Historic inscription at Juniper Cave.

19th ISV (Catania, Sicily, Italy, August 2021)
A presentations session. In view of Covid-19 restrictions, some presentations were made online.

19th ISV (Catania, Sicily, Italy, August 2021)
Excursion to Serracozo Cave on Mt Etna.

As a result, we raise the question as to whether elements of the UIS Congresses Guidelines *[Instructions and General Recommendations for Organizers of International Congresses of Speleology]* should be critically reviewed.

In conclusion, I wish to thank all members for supporting the Commission and for their efforts in achieving positive outcomes to increase knowledge and understanding of volcanic caves and to improve their management and protection.

John Brush
President UIS Commission on Volcanic Caves
8 December 2022

19th ISV (Catania, Sicily, Italy, August 2021) ***Jan Paul Van der Pas*** *(left, Former Commission President) and* ***Roberto Conti*** *(who passed away in July 2022) on the geological excursion to Mt Etna.*

20th ISV in Vietnam: *Nam Kar Volcano, one of the excursion sites of the event.*

20th ISV in Vietnam: *UIS Commission on Volcanic Caves President,* ***John Brush*** *speaking during the opening ceremony.*

20th ISV in Vietnam: *The Formal Opening Ceremony was held in the main theatre of the impressive Provincial Conference Centre in Gia Nghia City.*

Laurens Smets *near the small opening where he discovered a new extension in Cave C7, the longest (1,060 m) known volcanic cave in southeast Asia.*

PROTECTION OF CAVE FAUNA

THE SECOND INTERNATIONAL CAVE ANIMAL OF THE YEAR: BATS

By Bärbel Vogel (Germany)
UIS Adjunct Secretary
b.w.vogel@gmx.de

Source: http://iyck2021.org/index.php/cave-animal-of-the-year/

As part of the International Year of Caves and Karst 2021 (IYCK), the UIS integrated a Cave Animal of the Year campaign. Due to the covid restrictions, many IYCK events could not be held as scheduled. Therefore, UIS decided to extend the IYCK until the end of 2022 and the International Cave Animal of the Year initiative. Bats were declared as Cave Animal of the Year 2022 with the support of the international IYCK partners, Bat Conservation International and EUROBATS.

There are some 1,400 bat species living around the world without posing the slightest threat to their human neighbours. Unfortunately, the Covid 19 pandemic caused many new misunderstandings and misinformation.

Bats have been on Earth for more than 50 million years. They are the second largest order of mammals and are widely dispersed across six continents. Many have adapted to urban environments. Globally, 40% of all bat species are listed as either threatened with imminent extinction, near threatened or data deficient by the International Union for the Conservation of Nature (IUCN). Much more needs to be done to ensure the survival of bats around the world.

UIS/IYCK: http://iyck2021.org/index.php/cave-animal-of-the-year/

NATIONAL CAMPAIGNS

AUSTRALIA: *Macroderma gigas*

Website: https://www.caveanimaloftheyear.org.au/

Macroderma gigas is named 'ghost bat'. Some say it's for the pale colour of the wing membrane and pale skin, while others link the name to the near white to pale grey colour of the fur.

The scientific name of Greek words *Macroderma gigas* refers to the large (macro) skin (derma), that is, the large bare-skinned ears of the ghost bat. While gigas (giant) refers to it being the largest species in its scientific group.

Ghost bats are endemic to Australia and were once widespread over northern Australia including the arid lands. The species' range and its population size have both diminished since its first description in 1880.

AUSTRIA, GERMANY, AND SWITZERLAND: *Rhinolophus hipposideros*

Websites:
Germany: https://hoehlentier.de/en/
Austria: https://hoehle.org/hoehlentier
Switzerland: https://cavernicola.ch/

The Lesser Horseshoe Bat *(Rhinolophus hipposideros)* was scientifically described in 1792 by the German naturalist Moriz Balthasar BORKHAUSEN. Lesser Horseshoe Bats are typical cave bats.

They prefer both summer and winter roosts in large karst areas. It is one of the smallest native bat species in D-A-CH and easily recognised by its horseshoe-shaped nose-leaf.

During hibernation, the species wraps itself completely in its wings. The Lesser Horseshoe Bat occurs in the Mediterranean region and northwards to western Ireland and western Great Britain

***Macroderma gigas**, the "ghost bat,", Australian ICAOTY 2022.*

***Rhinolophus hipposideros**, the bat chosen by Austria, Germany, and Switzerland as ICAOTY 2022.*

***Miniopterus schreibersii**: The common bent-wing bat was selected by Italian for their ICAOTY 2022.*

ITALY:

Miniopterus schreibersii

Website: https://animalidigrotta.speleo.it/

The peculiarity of the common bent-wing bat *(Miniopterus schreibersii)* is its ability to fly very fast: its wings are long and narrow, its small ears offer no resistance to the air and its shape in flight resembles that of a swallow. It reaches a speed of over 50 km/h, which is a remarkable achievement for an animal of about 15 grams!

Miniopterus schreibersii is the only European representative of the monotypic Family Miniopteridae. Its populations of central-eastern Asia and sub-Saharan Africa have been recently studied on genetic basis and now considered as distinct species.

USA: *Myotis lucifugus*

Website: https://caves.org/uncategorized/2022-cave--animal-of-the-year-little-brown-bat/

Little Brown Bats belong to the family Vespertilionidae, which is the most diverse (>400 species) and widely distributed bat family found in a variety of habitats in both tropical and temperate regions. Vespertilionid bats, often referred to as common, vesper, evening, or simple-nosed bats, are carnivorous and primarily insectivorous relying on echolocation to find and catch food on the wing.

The Little Brown Bat is one of the most wide-ranging bats in North America and is known to roost in a plethora of locations from caves and abandoned mines to behind peeling tree bark and attics of homes.

***Myotis lucifugus**, Little Brown Bat, the ICAOTY 2022 in the USA*

Historically, thousands of Little Brown Bats were known to communally hibernate in individual caves, but populations have dramatically declined due to White-nose Syndrome (WNS).

SPELEOLOGICAL GROUPS

Villacarrillo, Spain.

Website: https://bioespeleologia.blogspot.com/2020/12/invertebrado-cavernicola-jiennense-del.html

The Speleology Group of Villacarillo organized different events to promote the protection of bats like the screening of the documentary *"Myotis capaccinii, a life at water level"* and a project: *"Bats, our friends."* This program for kids was awarded with the UIS "France Habe Prize 2021." More than a dozen talks have been held in educational centers for children of all ages to promote and conserve bats.

See at https://murcielagosamigos.blogspot.com/

OUTLOOK

Speleological federations will continue to run national campaigns for future Cave Animals of the Years. The UIS will support these efforts through its Commission on Biology, which new President is **Shirish Manchi**, from India *ediblenest@gmail.com*.

This commission will be restructured and needs biospeleologists around the globe.

Please get in touch.

UIS PRIZES 2021/22

By Nivaldo Colzato (Brazil)
Chairman of the UIS Prizes Organizing Committee
UIS Vice-President of Operations
nivaldo@karinaetiquetas.com.br

INTRODUCTION

According to the Internal Regulations of the UIS, *"Prizes are given at the International Congress of Speleology for specific accomplishments at the congress or during the period since the previous congress. Prizes may be given for outstanding books, scientific posters presented at the congress, and other contributions to speleology as determined appropriate by a Prize Committee appointed by the UIS Bureau.*

The Prize Committee will also decide the number of prizes, who will receive them, the nature of the prize (e.g. certificate, medal, funds, etc.), and other conditions as necessary per the unique materials and accomplishments present at a congress or since the previous congress.

The prizes are not competitive and not related to the cartographic, photographic, athletic, and other competitions at the congresses. More than one prize may be given for a category, and prizes will not be given if the Prize Committee does not find accomplishments worthy of the recognition."

The UIS Prizes were introduced by the Organizing Committee of the 11th International Congress of Speleology (ICS) in China (1993) and formally accepted by the UIS Bureau at the 12th ICS in Switzerland (1997). Julia James (Australia, UIS President 1993-1997) organized the prizes until the UIS annual meeting in Dalesbridge, UK, August 2016, when the UIS Bureau elected a new committee, which included collaboration with Julia. It was composed by:

- **Nivaldo Colzato *(Brazil)***
- **Jean-Pierre Bartholeyns *(Belgium)***
- **José Ayrton Labegalini *(Brazil)***

For the edition 2021/22 of the prizes (originally planned for 2021 but delayed to 2022 by the pandemic), the UIS Bureau maintained the same committee, whose first step was to expand the "UIS Prizes Regulation", a guide where people interested in participating can access all information about the process. Such a document was put into UIS format and is available on the UIS website.

PARTICIPATION

Participation in the UIS prizes is open to any person and/or association, except for the UIS Bureau members. Submission of a nomination implies acceptance of these regulations, the purpose of the UIS Prizes, and the decisions made by the judges. Nominators grant the UIS the right to use in its publications, at no cost, all photos, graphics and images that were sent as part of the nomination.

CATEGORIES

For the UIS Prizes 2021/2022, five categories were considered:

CATEGORY 1
The most significant cave discovery/exploration

Judged by a committee of international speleologists familiar with exploration throughout the world, this category could have also an Honorable Mention, if more than one nomination was outstanding enough.

The UIS Bureau reserved the right to nominate additional discoveries for this prize.

CATEGORY 2
The most significant publication about caves or karst-related topic

Scientific and/or technical publications were considered for this prize. Two subcategories are considered for this prize, as follows:

2.a – Printed Publication

2.b – Digital Publication

CATEGORY 3

The best special book

Printed or digital books that are important speleological publications but not necessarily related to scientific/technical topics were considered for this prize.

CATEGORY 4

Poster Prize

Prize for the best poster displayed at the 18th ICS, divided in two subcategories, were considered for this prize, as follows:

4.a – The Best Scientific Poster – Selected by a committee of judges at the congress.

4.b – The Best Caver's Prize Poster – Selected by a vote of the visitors to the 18th ICS poster exhibition.

Both posters could be on any cave or karst-related topic. Entries in the cave photographic and surveying competitions were ineligible for this prize. The detailed rules for nominating posters are described on the UIS Prizes Regulation.

Unfortunately, it was not possible to organize the vote for category 4b. Due to limited area, the 18th ICS organizers had to split the poster exhibition into two steps, with half of the posters displayed on Monday and Tuesday, and the other half on Thursday and Friday. Due to this situation, the vote of the visitors was canceled. On the other hand, the jury was given the freedom to simply choose the best poster according to their point of view.

CATEGORY 5

Greatest scientific achievement

Prize for the most important or significant scientific achievement in any area of cave or karst research.

PROMOTION

When categories and rules were defined, an article was published in the issue #62-1 of the UIS Bulletin encouraging for nominations. In addition, advertisement were published on page 7 of the issue #62-2. On page 12 of the issue #63-1 the advertising drew attention to the new deadline for nominations, which was April 30, 2022, due to the postponement of the 18th ICS due to the COVID-19 pandemic. The UIS website also maintained the announcement throughout the nomination period.

NOMINATIONS

A total of 16 nominations were received for different categories. After receiving each one, confirmation of receipt was sent to the authors by the Organizing Committee and the material was sent to the Judging Committee.

Besides nominations through the Internet, a copy of the printed books was mailed to the address of the French Federation of Speleology (FFS) in Lyon. Our thanks to the FFS and to Bernard Chirol who collected the books and took them to the congress venue.

The authors also agreed that the books would be exhibited during the 18th ICS and would be donated to the UIS Library in La Chaux-des-Fonds, Switzerland, after the event.

REVIEW AND JUDGING

The Judging Committee was an international team of renowned karst scientists who are also involved with the national speleological associations in their countries and have close relationships with the UIS. They took care of the long work of reviewing each nomination, applying marks, and judging them to select the winners.

The books displayed on the table for free appreciation by the general public as well as the Judging Committee.

Unlike what was done for the UIS Prizes 2017, this time the judges did most of the work prior to the congress. Such a new procedure proved very positive because this gave the judges time to compare candidates' publications more carefully, and gave them more time to enjoy the congress.

For the categories 2 and 3 (Books), the following items were considered:

- *Overview & Organization*
- *The adequacy of the images and text*
- *Graphic quality (design)*
- *Originality*
- *Content*
- *Relevance of the publication*
- *Writing quality*
- *Scientific quality*
- *Interdisciplinarity*
- *Readability for the non-specialist reader*
- *Importance for the Speleology*
- *General mark for the publication*

Each scientist received paper forms with the above 12 items where they could rate each one on a scale of 1-10, 10 being the best, as well as to write down personal comments about the publication itself.

The organizers of the 18th ICS provided a table where the books were displayed for appreciation by the general public as well as direct access of the scientists at the most appropriate time for each one. The table was located at the entrance of the main hall of the event, just beside the UIS Meeting Room.

To align the whole work of organization and judging of the UIS Prizes 2021/22, some meetings were held during the congress at the UIS Room, when all involved people could express their opinion about the general process and the scientists were able to discuss the nominations before to selecting the winners.

RECOGNITION

The main recognition delivered to the winners was the official certificate of the UIS signed by the outgoing UIS President George Veni (USA).

Besides that, they were given the book *Karst, Caves and People*, by Nadja Zupan Hajna, written especially for the International Year of Caves and Karst, and the book *Fifty Years of the UIS-1965-2015*, by José Ayrton Labegalini. Both books can be accessed on the UIS website, at http://uis-speleo.org/index.php/uis-books/.

PRESENTATION

The awards ceremony of the UIS Prizes 2021/22 was on Saturday 30 July 2022, during the Closing Banquet of the 18th ICS, in the red tent of the congress. The presentation was led by Nivaldo Colzato and George Veni, and illustrated by a sequence of slides summarizing the categories and all awarded nominations.

FINAL CONSIDERATIONS

The UIS Prizes 2021/22 Committee thanks:

- All of the authors and nominators of this issue.
- The eight scientists of the Judging Committee, for their great support, hard work, and the long time they spent to review all the books and posters carefully in order to elect the best in each category. As a tradition in the organization of the UIS Prizes, the names of the judges are not mentioned in order to preserve the confidentiality of the judgments.
- Bernard Chirol, for collecting the books at the French Federation of Speleology's office, getting them to the congress site, and providing the facilities for them to be displayed for the judges and public.
- Philipp Häuselmann, for his great attention and support, especially during the congress, and for taking care of the transportation of the books to the UIS Library in La Chaux-de-Fonds, Switzerland.

The 2025 edition of the UIS Prizes is planned to be announced in early 2024. We count on the participation of the whole international speleological community in order to highlight even more great work through the UIS Prizes, which will be awarded in Belo Horizonte, Brazil, during the Closing Banquet of the 19th International Congress of Speleology, in July 2025.

UIS PRIZES 2021/22 ORGANIZING COMMITTEE

Nivaldo Colzato (Brazil)
Chairman; UIS Vice-President of Operations
nivaldo@karinaetiquetas.com.br

Jean-Pierre Bartholeyns (Belgium)
President of the UIS Karst and Cave Protection Commission
jp.bartholeyns@gmail.com

José Ayrton Labegalini (Brazil)
UIS Past President
ja.labegalini@uol.com.br

UIS PRIZES 2021/22 — Final Results

CATEGORY 1:
The most significant cave discovery/exploration

WINNER:

NAICA
The Crystal Caves
Mexico

by:
- LA VENTA team

CATEGORY 2:
The most significant publication about caves or karst-related topic

WINNER:

Caves and Karst - Styrian Warscheneck Massif - The Weißenbach Cave Project with Cultural and Historical Considerations

Authors:
- Ernest Geyer,
- Dr. Ralf Benischke,
- Dr. Josef Hasitschka,

with other contributors

HONORABLE MENTION:

Cultures of knowledge in the subterranean: intermediaries between science and the public - A biographical lexicon

Author:
- Dr. Johannes Mattes

CATEGORY 3:
The best special book

WINNER:

Into the heart of the world
La Venta - 25 Years of Exploration

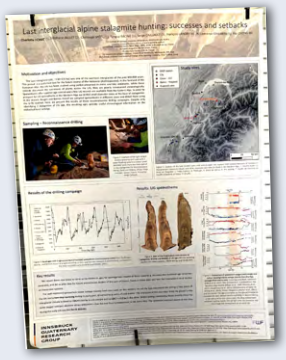
Edited by:
- Antonio De Vivo
- Francesco Sauro

CATEGORY 4:
Poster prize

WINNER:

The subpolar karst of Madre de Díos (Magallanes, Patagonia, Chile): A masterpiece of the world geoheritage

Authors:
- Fabien Hobléa, *et al.*



HONORABLE MENTION:

Last interglacial alpine stalagmite hunting: successes and setbacks

Authors:
- Charlotte Honiat, *et al.*

HONORABLE MENTION:

Complex behavior of speleothems during transformation of aragonite to calcite

Authors:
- Rebeca Martin-García, *et al.*

CATEGORY 5:
Greatest scientific achievement

WINNER:

Lava tubes on Earth, Moon and Mars: A review on their size and morphology revealed by comparative planetology

Authors:
- Francesco Sauro
- Riccardo Pozzobon
- Matteo Massironi
- Pierluigi De Berardini
- Tommaso Santagata
- Jo De Waele

IMAGES OF THE

AWARDS CEREMONY OF THE UIS PRIZES 2021/22

*Members of **LA VENTA** team with the received UIS four prizes.*

***Charlote Honiat** (in the center), awarded with an Honorable Mention in the Best Poster category.*

***Ernest Geyer**, Category 2 winner, with his recognitions.*

***George Veni** (right), outgoing UIS President, delivers a certificate and books to **Johannes Mattes**, one of the awarded authors.*

***Nivaldo Colzato** shows the final slide of the presentation: a special invitation to the 2025 edition of the UIS Prizes, which will be awarded during the 19th ICS in Brazil.*

Union Internationale de Spéléologie

France HABE Prize 2022

Prix France HABE 2022

The France HABE Prize is awarded by the Commission on Karst and Cave Protection of the International Union of Speleology (UIS).

The prize is named in memory and honour of Dr. France HABE (☆11/01/1909 - ✞12/10/1999) of Slovenia (Yugoslavia), who among his many other accomplishments served as President of the UIS Protection Department (1973-1997).

The Prize is awarded if a worthy candidate is nominated and accepted. Its purpose is to promote the protection of karst and caves for generations to come. Their natural legacy are proven sources of increasingly rich information about the history of our planet and humanity, enabling people to act more thoughtfully, efficiently, and sustainably for the future of our environment.

The Jury of the France Habe Prize is composed by two members of the Scientific Committee of the UIS Karst and Cave Protection Commission and its President. They assessed each submission following an evaluation about the presentation, compilation, photography, scientific content, and originality.

The prize is an annual amount of €300 to the best and most original contribution.

The 2022 winner was announced on July 30, 2022, during the Closing Banquet of the 18th ICS, in Le Bourget-du-Lac, France.

FRANCE HABE PRIZE 2022 WINNER

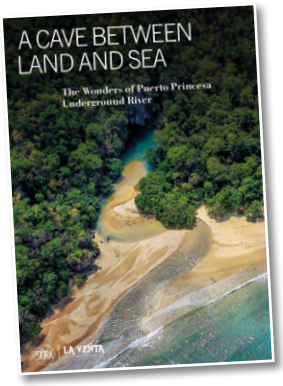
LA VENTA
ESPLORAZIONI GEOGRAFICHE

LA VENTA
Associazione Culturale Esplorazioni Geografiche (Italy)

for the project

PUERTO PRINCESA UNDERGROUND RIVER

Palawan, Philippines



Saturday 30 July 2022, at the Closing Banquet of the 18th ICS: ***Jean Pierre-Bartholeyns*** *(left), President of the UIS Cave and Karst Protection Commission, and* ***Francesco Sauro****, LA VENTA President, who received the recognitions on behalf of his team.*

CALL FOR APPLICATIONS – ISSUE 2023

The Karst and Cave Protection Commission of the UIS is pleased to announce the opening of the ***PRIX France HABE 2023***. You will find the complete regulations in French, English and Spanish on the UIS website by following this link: http://uis-speleo.org/index.php/karst-and-cave-protection-commission/

Nominations are required to be sent to the President of the UIS Karst and Cave Protection Commission no later than **May 20th 2023**. The Jury will review the nominations and send their decision to the UIS Bureau.

Feel free to disseminate widely.

Jean-Pierre Bartholeyns *(Belgium)*
President of the UIS Cave and Karst Protection Commission
jp.bartholeyns@gmail.com

ACTIVITY OF THE 18th ICS

THE CAVE TIME CAPSULE BEGINS ITS JOURNEY THROUGH TIME IN SAVOIE (ALPS, FRANCE)

By Stéphane Jaillet (France)
EDYTEM, Université Savoie Mont Blanc, CNRS
Stephane.Jaillet@univ-smb.fr

The capsule at the Reception Desk of the 18th ICS, ready to receive its historical content.

At the 18th International Congress of Speleology held in Savoie, France, from 24 to 31 July 2022, a time capsule was sealed and taken down to a depth of -200 m in the largest underground chamber of the Bauges massif. Such a project, previously unprecedented in caving, and certainly a novelty for an International Congress of Speleology, is simple yet ambitious.

Its chief aim is more than to accumulate objects and texts in a stainless-steel box. It is mostly about capturing a snapshot of the present and sending it into the future. This endeavor requires a high level of acceptability from the speleological community and should follow trends in conservation.

Organisation of the project

A working group met to discuss the project and decided to weld together a stainless-steel box of a reasonable size and place several objects inside. We chose then an hourglass design, with its diameter ranging from 20 to 30 cm and a full height of 1.4 m, yielding a total volume is 66 L, split into two easily transportable parts. The two parts were welded and sealed separately and subsequently assembled underground.

The choice of the cave was naturally very important. As the congress would be taking place in the Savoie region, we looked for a nearby cave, and eventually the Fitoja chamber (part of Prérouge karst system) was chosen, as it is an iconic underground space, which enjoys notoriety in caving circles. Moreover, this underground chamber has been accessible for several years now via the Fitoja Express pit (known as F.E.), which affords far easier way in than via the Creux de la Litorne, through which the chamber was originally discovered in 1980.

SATURDAY 30 JULY 2022: *Closing ceremony of the time capsule at the end of the week of the 18th International Congress of Speleology. Georges Veni (in yellow) gives a speech next to Stéphane Jaillet (in green).*

In addition, since the opening of the F.E. entrance, this underground chamber has been the subject of a collective consultation to ensure good conservation management because of the increased number of visitors (signposting, signage). These measures ensure that access is maintained for as many people as possible. In the Fitoja room, the capsule will be visible to all the cavers who reach the bottom of the chamber at -200 m. Last to be decided, was the duration of the project.

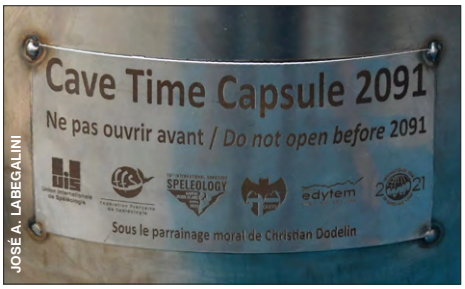
The first International Congress of Speleology (and the last one to be held in France) took place in Paris in 1953. We therefore chose a symmetrical date: 2022 - 1953 = 69 years. We therefore planned the opening of the capsule for 2091.

2091, a faraway date

To try to find out what caving will be like in 2091, we must consider what caving was like in 1953. In 1953, the Berger system had just been discovered and its exploration had reached -300 m. No cave at that time had reached the depth of 1000 m. Today 113 caves exceed this depth (with two beyond 2000 m).

Techniques have evolved considerably; caving has become more collaborative, and in some areas, it has become more sophisticated. Diving, which was in its infancy at the time, has also evolved considerably, with longer and deeper explorations. The lighting is no longer the same. The world has changed a lot and so has caving. It is very difficult to know what caving will be like in 2091, will it be like it is now? The spirit will be the same, we must hope.

Of course, a guestbook was proposed for all the attendees during the week of the congress. Everyone, in their own language, was given the opportunity to write down a few words. Everyone was able to talk about the present but also to imagine the future, which will be for our children and grandchildren in 2091.



SATURDAY 30 JULY 2022: *Stéphane Jaillet (in green) and Doumette (Christian Dodelin's wife) insert the last item into the capsule, whose plaque (above) states the deserved tribute to Christian.*

In keeping with the spirit of this project, we did not read or record the contents of this guestbook. It is intended, like all the objects placed in the capsule, for those cavers of the future who will open the capsule in 69 years.

A high level of acceptance of the project

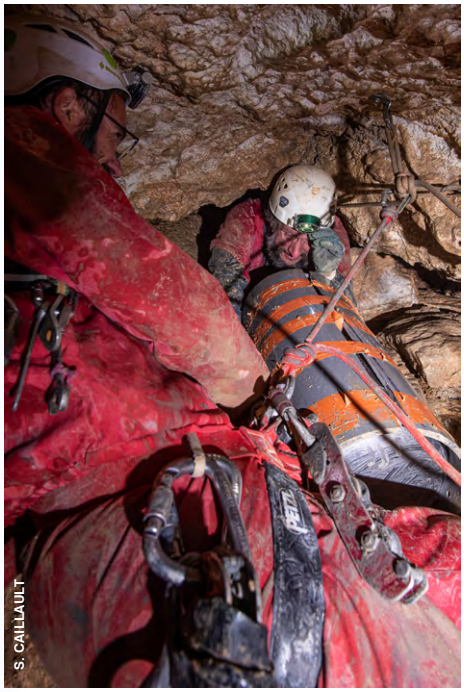
It was important for the project to achieve a high level of acceptability from the community to ensure that it would be sustainable. The choice of a capsule with a certain aesthetic and thoroughly of stainless steel, from the container itself to the anchoring system, ensuring that there will be no deleterious direct or indirect effects on the underground world: no rust, no glue drips, no physical pollution. It is placed in a visible but not ostentatious place.

The capsule is located almost at the bottom of the Fitoja chamber, hanging on a wall of the chamber at the end of the protected walkway. It has been placed in an area with no particular speleothems or aesthetic appeal, so as not to interfere with the appreciation of the beauty of the underground world or the taking of photographs.

It is therefore not hidden, but it occupies a marginal sector in this very long chamber. The second important point was to communicate correctly and gather support at every speleological level. The three original explorers of the Fitoja chamber were consulted and in fact provided a recent photo of themselves. This photo is in the capsule.

The cavers of Savoie accepted the project during the General Assembly of the departmental committee for speleology (CDS 73). The French Federation of Speleology and obviously the International Union of Speleology supported the project. This project was registered in the International Year of Caves and Karst. The Regional Natural Park of the Massif des Bauges (UNESCO World Geopark) approved this project which is part of an important geo-site.

AUGUST 2, 2022: *At the entrance of the FE (Fitoja Express) cave, the two halves of the capsule are prepared to be lowered to a depth of -200 m.*



Passage of one of the two stainless steel containers in one of the narrow passages of the Fitoja Express cave. Plastic tubes protected the stainless--steel capsule.

Installation of the time capsule on one of the walls of the Fitoja chamber. Climbing and installation was done without the use of metal anchors. The capsule and its anchor are made of stainless steel.

The time capsule is now in place in the Fitoja chamber. It begins its journey through the caves and through time. It is a modest gift from the cavers of the Present to the cavers of the Future.

Finally, we wanted to dedicate this project to the memory of a speleologist from Savoie: **Christian Dodelin**, who died in spring 2021. Respected and appreciated at a high level, as much by both the national and international departments, it was logical to place this capsule under his moral patronage.

The Time journey has begun

What is the meaning of this project? How many of us will be here when the capsule opens in 2091, 69 years from now? Likely very few. A few young cavers under the age of 20 perhaps. They will be close to 90 by then.

The capsule contains nothing of monetary value. A few pins, a few engraved plaques, a pair of worn boots, simple objects and above all, spontaneous words. A Present written to be read in the Future. The meaning therefore lies not in the market value of the content but in what each person puts into it.

Each of us finds in our everyday life a thought for the future, a hope of what the caving world will be like in 2091, what the world of caves will be like at the end of this century. The capsule is now on its 69-year journey through caves and through time. Let us hope that the cavers of tomorrow will receive this modest gift from the cavers of today.

Let us hope that they will open it with indulgence, curiosity and good feeling. In any case, with the same state of mind, the same pleasure and the same instinct that we shared upon closing the capsule during the 18th International Congress of Speleology.

Acknowledgments

The project **"Cave Time Capsule 2091"** was only possible thanks to the participation of many cavers from all over the world who were willing to spare, through an object or a few words, a moment of their attention for the time capsule.

This project was supported by the International Union of Speleology, the French Federation of Speleology, the Departmental Committee of Speleology and Canyon of Savoie, the Laboratory EDYTEM (CNRS/ Univ. Savoie Mont Blanc). It was an event of the International Year of Caves and Karst and the 18th International Congress of Speleology.

The following people actively participated in the implementation and realisation of this project: Serge Caillault, Claudia Defrasne, Luc-Henri Fage, Christophe Gauchon, Fabien Hobléa, Charlotte Honiat, Stéphane Jaillet, Christophe Lansigu, Grégoire Limagne, Emmanuel Malet, Tanguy Racine, Matthieu Thomas, and Yann Tual.

A special thanks to Manu Malet for his strong involvement in the realization and design of the capsule. It was also a project placed under the moral patronage of Christian Dodelin. For their trust, thanks to Doumette, his wife, and to all the cavers of Savoie, France and the world who appreciated it.

EVENT SUPPORTED BY THE UIS

Summer School on Speleothem Science

By Petronela Ševčíková (Slovakia)
On behalf of the S4 Organizing Committee
speleothemsummerschool@gmail.com

Visit our website
www.speleothemschool.com/

Photos © Mini S4 Summer School

The Mini S4 ***(Summer School on Speleothem Science)*** workshop was hosted by the University of Innsbruck, Austria, on 15-16 July 2022. The in-person event was held in the lecture hall and commons of The Center for Chemistry and Biomedicine, with a fluid-inclusion lab tour held in the Institute of Geology.

The committee opened the event by welcoming everybody and introducing themselves. This was followed by a "lightning talk" session, during which 30 student participants had an opportunity to share their research in a 3-minute presentation.

Following the lightning talks, our lecture program for Day 1 commenced. First, local expert Dr. Yuri Dublyansky gave a lecture on the paleoclimate utility of measuring isotopic compositions of fluid inclusions trapped within speleothems.

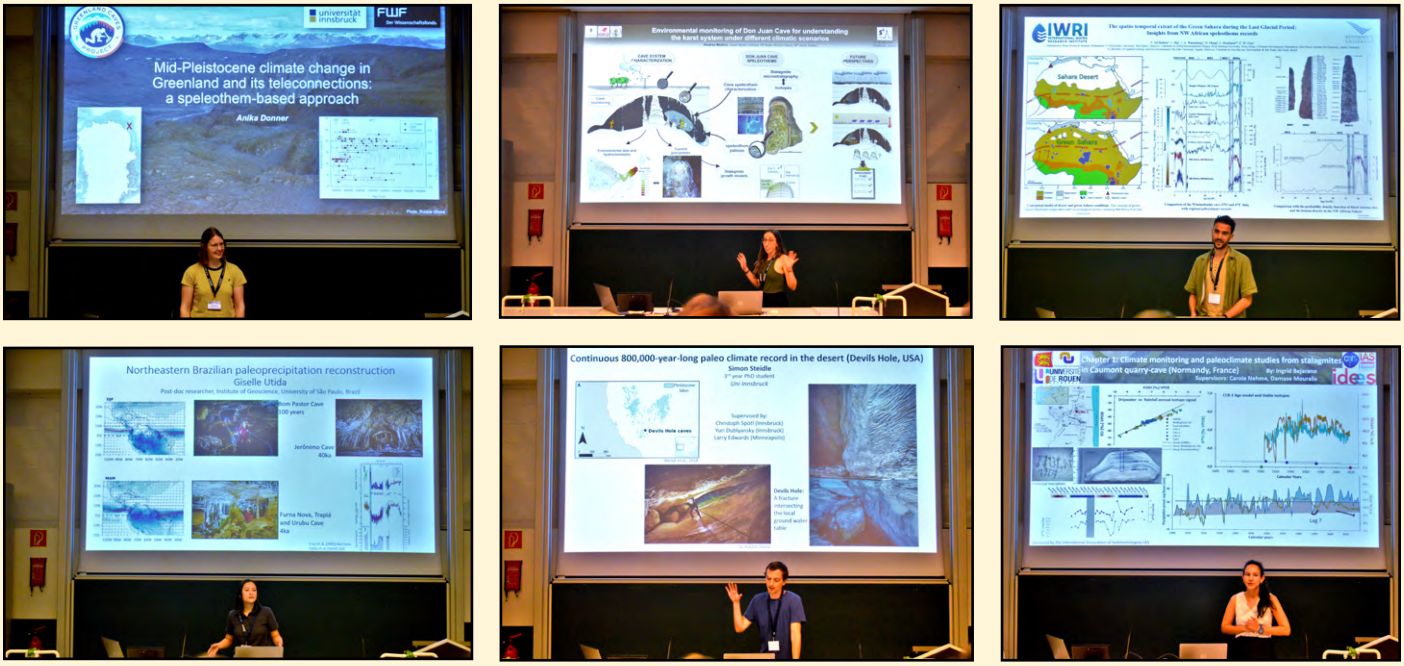
Next, Dr. Franziska Lechleitner from the University of Bern, Switzerland, presented a lecture on carbon isotopes, and at the end of the day, Honorary Associate Professor Andrea Borsato from the University of Newcastle, Australia, presented on trace elements in speleothems. These techniques collectively comprise the bulk of speleothem paleoclimatology research methods not taught in standard classrooms.

The general program of the event and the Organizing Committee after the Opening Ceremony and welcome.

After the Day 1 lecture session, the first of three groups of participants moved to the laboratories in the Geology and Paleontology department to attend the fluid-inclusion lab tour.

The lab tour consisted of thorough instructions and practical examples on the preparation of thick sections for the purpose of fluid-inclusion microthermometric analysis. Participants were also introduced to the analytical procedure for the measurement of stable isotopes in the fluid-inclusion water (Delta V + TCEA) and the newest setup for this analysis that is based on CRDS using a Picarro laser spectroscopic analyzer.

The lecture program on Day 2 of the event began with a presentation by Dr. Lisa Baldini from Teesside University, UK, on high-resolution records from speleothems. This was followed by a lecture by Prof. Russell Drysdale from the University of Melbourne, Australia, on integrating speleothem, marine, and ice-core records. Finally, Dr. Aurel Persoiu from the Romanian Academy, Institute of Speleology "Emil Racovita," Romania, presented a lecture on seasonally distinct climate reconstructions.



Students talks.

Lab tour.

Career Panel.

After the lunch break on Day 2, all participants gathered for the Career Panel session, during which four of the invited experts shared their personal career experiences and academic pathways. The session was relatively relaxed and informal; the speakers shared their ups and downs and interesting life stories that steered lengthy discussion and audience engagement. The committee then closed the program with words of thanks to the invited speakers, participants, and all the sponsors that supported the Mini S4 event and the attendance of several students. The other two groups of students then attended the fluid inclusion lab tour.

In total, 34 students from 25 different universities participated in the Mini S4 event. Three students faced difficulties that prevented them from attending the event in person, but provision was made for them to participate online through Zoom. Nine students received full or partial scholarships to support their attendance, and the total amount of funding granted was 4,350.34 Euros.

On behalf of the organizing committee, we are pleased to conclude that the event was successful and that all objectives were met. We sincerely thank the experts for participating in the event and for sharing their knowledge and expertise with yet another generation of aspiring speleothem scientists. We also thank the students for their interest and participation.

Finally, we would like to express our gratitude to all of the sponsors for their financial support, namely: Picarro awarded 700 Euros to support a student from Morocco, the Union Internationale de Spéléologie (UIS) supported five partial scholarships for students with a total amount of 1,000 Euros, and the University of Innsbruck contributed of 5,935.28 Euros to the event for various purposes, including a scholarship for a student from the Philippines, who is studying in Guam, USA.

The KR9 committee also provided extensive administrative support before and during the event, from advertising MiniS4 to advising on logistics to technical support, and we are very grateful to them for that.

Lectures.

Participants awarded scholarships.

Group photo MiniS4 2022, Innsbruck, Austria.

EVENTS AT THE UNESCO HEADQUARTERS

THE UIS AND ITS GLOBAL RECOGNITION

By Nadja Zupan Hajna (Slovenia)
UIS President
zupan@zrc-sazu.si

As UIS President, I have been to UNESCO Paris twice during late 2022. Perhaps some people think that this is an unnecessary political commitment, but if we look more closely, we see that recognizing caves and karst at such a high level as UNESCO can be beneficial for both scientists and cavers, but especially for the underground world and karst in general.

The UIS is a non-profit, non-governmental organization that promotes interaction between academic and technical speleologists of all nationalities and has 57 member countries on the six continents, involving tens of thousands of cave scientists and explorers. However, most people have never thought that caving, caves and karst are important.

Speleologists are always considered a fringe group that does caving just for fun. But karst occupies about 20 percent of the continental surface and about 700 million people depend on karst aquifers. Yet few have heard of caves and karst or understand their unique hydrogeology, benefits, and threats.

Through the International Year of Caves and Karst (IYCK) 2021/22, a global project organized by the UIS in collaboration with member countries and over 260 institutions and organizations around the world, we have sought to educate as many people as possible about the important and widespread natural resources of karst. Although awareness of the sensitivity of karst is increasing, it continues to be threatened by human activities in many parts of our planet. In fact, many of the world's unique hydrological, ecological, and culturally important cave and karst landscapes are still being damaged or threatened on a daily basis.

For the UIS, the celebration of the IYCK 2021/22, held under the patronage of the Director General of UNESCO in partnership with the Permanent Delegation of the Republic of Slovenia at the UNESCO Headquarters on September 13, 2021, was an important step towards global recognition.

Deep-time Digital Earth
IUGS Big Science Program

GROUNDWATER SUMMIT 2022
UN-Water Summit on Groundwater

With our presentation, networking with UNESCO member delegates and representatives of programs, we received at least UNESCO recognition.

Delegations also sent a message to their home countries that speleology is not just sport caving, but that there are many important explorations and documentations of the unseen underground, and that much and varied scientific research is being actively undertaken.

All this knowledge can be used at the national or regional level for water supply, environmental protection, and sustainable management of karst resources, and can lead to effective cooperation among experts, regulators, and operators to prudently plan and protect caves and their contents, as well as karst waters and landscapes.

On November 9, 2022, as President of the UIS, I was invited to participate in the Deep-time Digital EARTH (DDE) open Science Forum at UNESCO in Paris. The overarching mission of DDE is to harmonize global Earth evolution data and share global geoscience knowledge. For more information about DDE, please visit www.ddeworld.org.

November 9, 2022: *Participants of the Deep-time Digital EARTH Open Science forum at the UNESCO Headquarters in Paris.*

The forum was intended to provide a comprehensive, synthesized overview of DDE's accomplishments over three years as the first Big Science program and pilot of Open Science, recognized by the International Union of Geological Sciences, and to promote the globalization and digitization of scientific research.

In essence, the invitation to the UIS was to invite speleologists, through various geological organizations or as individual countries, to use and share major geoscience databases.

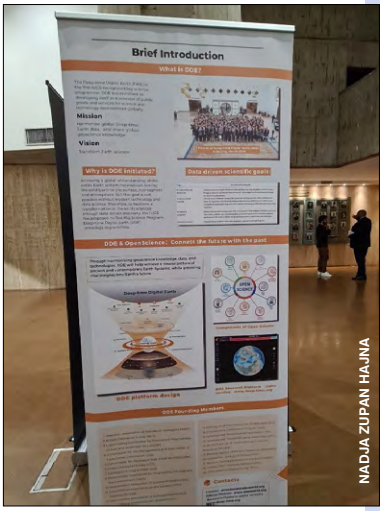
More importantly, the UIS participated in the UN-Water Summit on Groundwater 2022 at UNESCO Headquarters in Paris between December 6-8, 2022, where the UIS organized the Side Event 9 on karst aquifers. The event was registered and organized by the UIS Past President Dr. George Veni, who also wrote a special report on this event to this UIS Bulletin *(see next page)*.

The Paris summit was attended by 750 participants who were there in person, and about 3,500 others followed the event remotely via the Internet. Also present were many ministers responsible for water, and especially ambassadors and some authorized envoys for water or environmental protection who were there to represent their countries at UNESCO.

I should emphasize that this was the first United Nations Organization Summit on Groundwater organized on such a high political level in the entire history of the United Nations. The title was *Groundwater: Making the Invisible Visible*. However, it was not an event organized independently of other activities of international organizations related to water.

The Paris Summit was organized as part of the preparations for the UN General Assembly, which will meet in New York on March 22-24, 2023 and will be entirely dedicated to water. As UIS, we plan to propose a side event on the vulnerability and importance of karst aquifers, organized with the support of UN member countries and the International Association of Hydrologists (IAH).

December 6, 2022: *Audience on Karst Aquifers side event at UNESCO Headquarters.*



November 9, 2022: *Posters displayed at the Deep-time Digital EARTH DDE Open Science Forum at UNESCO in Paris.*

The UN Groundwater Summit in Paris was an extremely important event. Groundwater was finally recognized as an important resource, part of the water cycle, and a source of drinking water. Although karst aquifers represent about 10 % of the world's drinking water, it is still misunderstood as complex systems with a very special ecosystem and remain very vulnerable and can be very easily polluted and destroyed.

Regardless of the level at which we work (exploration and documentation of caves, various scientific studies, cave tourism, etc.), we are aware of what caves and underground karst mean to us, and therefore we try in every way to make them recognizable and important, thus contributing to their better protection.

However, we must also be aware that without cavers and their enthusiasm, there would be no knowledge of where the caves are, no cave science, and no basis for protecting the underground.

In this sense, the UIS will continue its efforts to encourage member countries, through their speleological organizations, to intensify the work on education and training of new cavers. This is the way to grow the speleological community and to have more karst researchers in the future.

The presence of the UIS at the UNESCO Headquarters for three times in such a short period of 15 months deserves to be celebrated, indeed. The great success achieved in these historical moments has given the UIS unprecedented global recognition, which shows that we are heading in the right direction. At the same time, it means also that there is still a lot of work to be done.

So, dear cavers, speleologists, karst scientists and cave lovers around the world, please, join us!

EVENT AT THE UNESCO HEADQUARTERS

UIS AT THE UNITED NATIONS GROUNDWATER SUMMIT

By Dr. George Veni (USA)
UIS Past President 2017-2022
gveni@nckri.org

In September 2021, the UIS celebrated the International Year of Caves and Karst at the headquarters of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in Paris, France. This was a major event for UIS, to present information about caves and karst to governmental leaders from around the world. Afterward, the UIS Bureau agreed that to continue to grow UIS influence, this event should be the start of collaborations with national and internationally influential partners, and not just a one-time celebration.

Soon afterward, I learned that the United Nations (UN) was planning its first Groundwater Summit. It would also be held at UNESCO Headquarters in December 2022. I contacted the organizers multiple times to discuss how caves and karst could be included. It would occur near the end of the extended International Year. The theme of the summit would be, *Making the Invisible Visible*. While the UN promoted this theme for political and public awareness, caves and karst aquifers are the only places where water in the ground is actually visible to people. Connecting this theme to the International Year of Caves and Karst seemed a natural partnership to me.

After some conversations, it became clear that would not happen. The Groundwater Summit would focus on higher level topics. Billions of people do not have enough water, or clean water to drink. How would those issues be solved? Where will money be found? What governmental rules and structures must be created to address these questions? Karst groundwater is important, but I agreed that those issues are bigger.

However, maybe my comments had some impact. In late May 2022, I received an invitation to organize a "side event" to the summit. This invitation wasn't just for UIS but open to all organizations, and there was little time to prepare the proposal. But we created a plan and sent our proposal. There was a long delay in getting an answer. They received more proposals than expected. To include as many as possible, they shortened the time for each side event to only one hour, but the UIS proposal was accepted!

The side events were scheduled for 6 December 2022, the day before the 7-8 December 2022 summit. The UIS side event was titled: *Karst Aquifers: the Most Prolific, Vulnerable, and Misunderstood*. It began with Dr. Aleš Bizjak, who introduced the session on behalf of the Republic of Slovenia which graciously sponsored this event.

Dr. Bizjak is an international water policy expert from Slovenia's European Union Coordination and International Affairs Office in the Ministry of the Environment and Spatial Planning. He introduced the topic of karst groundwater and its importance to Slovenia and the world, pointing out that, "About 700 million people depend on karst groundwater."

The next speaker was Dr. Nadja Zupan Hajna, UIS President and Senior Research Karst Geoscientist with the Karst Research Institute in Slovenia. Her presentation, *Karst, Caves, and People*, from her book by the same name, introduced the audience to the UIS, International Year of Caves and Karst, and then summarized the unique origin and hydrogeology of karst aquifers. She illustrated that karst is mapped to cover about 20% of the planet, but actually covers more land because that number doesn't include karstic areas covered by sediments and non-karstic rocks.

Third was Dr. Ros Fatihah Muhammad, Professor of Geology at the University of Malaya specializing in karst, and Malaysia's Delegate to the UIS. Her presentation was titled, *Challenges in Karst Aquifers: Contamination, Sustainable Use, and Dams.*

This image was used to promote the karst aquifer side event and introduce each of the speakers.

KARST AQUIFER SPEAKERS *(left to right)*: *Dr. Ros Fatihah Muhammad, Dr. Nadja Zupan Hajna, and Dr. Aleš Bizjak watching and preparing for the side event.*

THE FULL KARST AQUIFER TEAM AT THE UN GROUNDWATER SUMMIT *(left to right)*: *Dr. George Veni, Dr. Nadja Zupan Hajna, Dr. Ros Fatihah Muhammad, and Dr. Aleš Bizjak.*

She described how the cavernous openings in karst aquifers makes them the easiest to pollute, easiest to deplete of water, and most difficult to establish water development projects like dams. While she showed how some small communities get their water from underground rivers in caves, limited access and sustainable volumes also limits the use of those systems.

Lastly, I gave the presentation, *Solutions to Karst Groundwater Problems*. I explained how the complexity of karst aquifers often requires expertise to solve, but many important concepts and steps can be applied with little or no expertise to alleviate groundwater problems in karst areas. To minimize the risk of pollution, I emphasized, "All karst is vulnerable, and not just the visible karst features."

Following the presentations there was little time left for comments and questions, but we discussed and answered the following:

Q: *Discuss sustainable use and ecologic flows of groundwater.*

A: *There are various levels and definitions of sustainability. It is important to define which type of sustainability is being discussed, and to include ecological needs as part of sustainable groundwater conditions if relevant.*

Q: *Two comments from the audience was on dams in karst, including some successful dams.*

A: *While some dams claim to be successful, many still have significant leakage.*

Q: *Can karst aquifers have more storage capacity that other aquifers?*

A: *Karst is highly variable in appearance and in its aquifers. Some deep artesian systems have high storage, but others have little long-term storage, depending on local hydrogeologic conditions.*

Q: *What is the effect of climate change on karst?*

A: *It is something that needs to be monitored. Water levels dropped in the Maya area in ancient times which affected that civilization. It is important to watch.*

The purpose of the session was to introduce the UN and UNESCO audiences to karst aquifers and their unique origins, conditions, and management challenges. With only an hour, there was not time to poll the audience to see how many were already familiar with karst. We believe most didn't know much and only recognized a few people with karst expertise. We were glad to see that the room was nearly full and learned later that many more people watched online.

We received many compliments that our side event was the only event with practical, applied information. I don't know if that is accurate, but believe it shows that karst is new to many and so many saw it as more applied than other side events and the main events where the information was more familiar.

After the side events, the summit spent two days in broad discussions on groundwater policy and needs. I expected more actions and decisions, but soon realized that these exchanges served to prepare for the UN Water Conference that will be at UN Headquarters in New York City, USA, in March 2023.

We enjoyed meeting with many people, including representatives of several countries' water and environmental ministries. Inspired by the summit, the UIS is planning to propose organizing an event at the UN Water Conference, as we work to continue teaching the world about caves karst long after the International Year is over.

This was the 800th event of the International Year of Caves and Karst. You can find it recorded on the International Year website (www.iyck2021.org) or just go to https://www.youtube.com/watch?v=ot8MTN3hGBo; the karst event starts at 2:30 into the recording.

THE BRAZILIAN DELEGATION AT THE 18th ICS AND THE MOST IMPORTANT PROGRESS OF THE ORGANIZATION

By Nivaldo Colzato (Brazil)
UIS Vice President of Operatons/UIS Bulletin Editor
19th ICS Representative at the UIS
nivaldo@karinaetiquetas.com.br

https://www.speleo2025.org/

Dear cavers, speleologists, and cave lovers around the world, we would like to update you on the progress of the organization of the 19th International Congress of Speleology (ICS), which is being promoted by the UIS and the Brazilian Speleological Society (SBE). The organization responsible for this event is the SBE and the Brazilian National Center for Research and Conservation of Caves (ICMBio/CECAV). The 19th ICS will also combine the 38th Brazilian Congress of Speleology (CBE) in a single event as well as hosting the major celebration of the 60th Anniversary of the UIS.

This is our fourth announcement about the 19th ICS in the UIS Bulletin. The first one was in the issue 63-1 (June 2021), which provided official confirmation of Brazil as its host; a brief description about the long road of the Brazil's candidacy, since 2013 up to its approval by the UIS Delegates in the Extraordinary General Assembly on June 2021; the location and date; the main characteristics and culinary delights of Belo Horizonte—the host city—as well as a preliminary list of options for one-day excursions and pre- and post-congress trips.

The second article about the 19th ICS was in the issue 63-2 (December 2021), where we presented the names of the main core of the Organizing Committee, the elements that compose the official logo of the event, and some details of the Minascentro Convention Center, the venue of the congress.

The third article, therefore, should be on issue 64-1 (June 2022). However, as we were on the eve of the 18th ICS and the international speleological community focused in France, we decided not to publish the updated status of the organization of the event. On the other hand, one article about country delegations at the UIS congresses reported on the special situation of Brazil, whose delegation, for the first time in the UIS history, went to an ICS, neither to defend its proposal for the organization of the next ICS, nor to compete with another country. The purpose was to present the state of the art of the event's organization, which was already under its responsibility. In this article, the author José Ayrton Labegalini, UIS Past President, briefly advanced details of the preparation of the Brazilian Delegation to go to France to perform the best possible promotion of the event.

So, dear reader, this is our third article about the 19th ICS, in which we want to update you on the latest news about the event. First, of course, let us return to July 2022 to the 18th ICS, in Le Bourget-du-lac, France.

The 19th ICS in the 18th ICS: Participation of the Brazilian Delegation

As already described, for the first time in the UIS history a country delegation, in this case the Brazilian one, could attend an ICS already with the passport of official organizer of the next issue.

Whilst this time we did not have to convince the delegates to vote for our proposal, there was a responsibility to convince not only the delegates but all participants of the 18th ICS that the Brazilian proposal for the 19th ICS was robust and attractive, so they would decide to come to Brazil in 2025 as well as to encourage other people in their country to join us. After all, we look forward to welcoming as many foreign delegations as possible.

In this regard, considering the importance of providing an exciting promotion of the 19th ICS in France, the largest Brazilian Delegation in the UIS congress—more than 30 people, excluding the SpeleoBrazil 2001, in Brasilia—landed in France taking a series of promotional materials to deliver to the participants of the 18th ICS at our two stands, which were kindly provided by the Organizing Committee. Besides the leaflets, gifts, banners, flags, and stickers that were given away, the Brazilian team, most of the time dressed in the t-shirt specially produced by the SBE for this occasion, worked also to offer those present from more than 50 countries the well-known welcome friendship, and hospitality of the Brazilian people.

Aiming to exchange organizational experience, members of the Brazilian team were welcomed by Yves Contet, Yannick Decker, and Christophe Gauchon—the main members of the organizing committee of the 18th ICS—for a special meeting. During a nice and friendly conversation at the UIS room, we heard, for instance, their experience of the long preparation work of the organization, its major difficulties and challenges, since the unexpected change of location from Lyon to Le Bourget-du-Lac and later, the one-year postponement of the event due to the COVID-19 pandemic. Our special thanks to them for their kindness in providing us with valuable information that we will certainly take into account in our own organization.

In the same regard, we also had a long talking to George Veni, UIS outgoing President, who led the organization of many speleological events in the USA, especially the 15th ICS in 2009 (Kerville, Texas). During a tour through the main facilities of the Savoie Technolac University—the venue of the 18th ICS—George also provided us with valuable information on how to organize an excellent UIS congress.

In addition to these two meetings, the 19th ICS organizers were given opportunities to promote the event at the UIS Bureau Meetings and General Assembly.

Step by step, day by day, efforts were made to contact as many people as possible to provide them with information about the event itself, the many options of places to visit in Brazil, and also to share our will and enthusiasm in doing our best for them to enjoy their stay in Brazil in 2025.

Special meetings in France with the 18th ICS organizers (left photo) and with George Veni, UIS outgoing President (photo on the right, seated wearing black t-shirt), offered Brazilians important knowledge from those who have organized an UIS congress.

The 19th ICS stand, where people could take promotional materials about the 19th ICS as well as be aware of the event itself, and the many options of places to visit in Brazil as well.

Among the set of special promotional material that we took to France, a 4:10 minute video about the 19th ICS was showed during the closing banquet, where the audience could appreciate some images and brief information about our speleology and karst science, the Brazilian speleological heritage, and the potential still to be discovered. You can watch the video at https://youtu.be/59UBnOuEpzU.

At the same banquet, the Chairman of the 19th ICS Organizing Committee, Allan Calux, conveyed to those present a message of thanks for the support and affection received during the eight days of the event in France, and invited all to join us in Brazil in 2025. He also emphasized the close bond of friendship and the realization of speleological projects (mainly in cave rescue) between Brazilians and the French. He also highlighted that three French nationals were among the founders of the Brazilian Speleological Society in 1969, and that they were also its three first Presidents: Michel Le Bret, Pierre Martin, and Guy-Christian Collet.

From France to Brasil: *Allan Calux (left), Chairman of the 19th ICS, receives the UIS Flag from Yves Contet, Chairman of the 18th ICS.*

The day after the banquet, as part of one of the last acts of the UIS Congresses, we gathered for the lowering of the UIS flag. In an emotional ceremony, while the UIS Anthem was played, the UIS flag was lowered, folded, and then handed over by Yves Contet, the Chairman of the 18th ICS Organizing Committee, to Allan Calux, Chairman of the 19th ICS, transferring it to him and his team the responsibility of its custody. The next hoisting ceremony is scheduled for July 20, 2025, at the opening ceremony of the 19th ICS, in Belo Horizonte, Brazil.

We want to thank the 18th ICS Organizers and participants for the great affection and attention we received during the eight days of the event. Great enthusiasm was apparent in everyone's desire to come to Brazil in 2025. For many who attended the 13th ICS in Brasilia (SpeleoBrazil 2001), the success of that event is still in their mind, which increases confidence that the 2025 event will also be memorable.

Such a positive atmosphere brings us more responsibility but also much more enthusiasm on doing our best to provide the international speleological community with a pleasant experience in 2025 in our Brazilian land.

Posters and leaflets were among the set of promotional materials distributed during the 18th ICS.

The 19th ICS Organizing Committee at the 18th ICS: *Left to right: Nivaldo Colzato, Roberto Cassimiro, Allan Calux, Jocy Cruz, Paulo Arenas, José Ayrton Labegalini, Camilla Eboli e Cláudia Pessoa.*

Part of the Brazilian Delegation at the 18th ICS: *Among us is George Veni, the outgoing UIS President (fourth, from left to right, standing and wearing a black t-shirt).*

Advances in the second half of 2022

The participation of the Brazilian delegation in France, in addition to being rewarding and enriching, served to reinforce our understanding and our vision of the UIS congresses. It is indeed a complex and largescale event, which demands a lot of effort and also professionalism in its organization and delivery.

We understand how fundamental and indispensable the participation of volunteer speleologists is, as they bring in their "luggage" the essence of speleology, knowledge of the subject as well as the pleasant atmosphere and companionship that we are all used to.

On the other hand, when you receive in your country people of more than 50 different nationalities coming from the five continents, it is also necessary to count on professional services so that visitors find in the organization of the event, in addition to the receptive and friendly atmosphere, the facilities and amenities that allow them to have the wider enjoyable and profitable participation possible. Whenever one needs some guidance or help, for instance, the organization must be able to respond promptly and appropriately.

Some members of the 19th ICS Organizing Committee (OC) have been participating in many UIS congresses. Others were also involved in the organization of the 13th issue, in 2001, in Brazil. Still others had, and have, direct participation on the organization of some Brazilian Congress of Speleology.

Combining the diverse learnings of these people with the collective experience acquired in the 18th ICS will help provide the best possible attendance and structure for the participants of the 19th ICS, the Brazilian Delegation arrived back in Brazil with the knowledge of being on the right track regarding the management model that we had already planned for the event in Brazil.

The first point to be considered is the recognition that the congress is being organized by the Brazilian Speleological Society (SBE) and the National Center for Research and Conservation of Caves (ICMBio/CECAV), but is, above all, a UIS event aimed at the international speleological community.

As such, it is expected that the following requirements are met:

- Present the state of the art of world speleology.

- Draw the attention of the lay public and local, regional, international and even global authorities to the importance of caves and karst and the need for their preservation.

- Promoting caves and karst as a possible source of income and local development for communities inserted in these environments.

- Facilitate and encourage participation in the congress by young people, students and other interested parties with limited income.

- Strengthen the SBE and the UIS as truly representative institutions of national and international speleology.

- Promote the integration of the speleological community as a whole.

- Celebrate the 60th anniversary of the UIS.

With regard to the organization model, it is agreed that we will do our best to follow the UIS document "Instructions and General Recommendations for Organizers of an ICS" because it brings, step by step, the recipe for a successful ICS. In order to achieve all the goals that are set out in this document and make the 19th ICS a special, well-organized event that will bring good memories to the participants, the Organizing Committee count on important support and sponsorship that will guarantee, above all, the financing of the main structure that will be set up at the Minascentro Convention Center in Belo Horizonte, the venue of the event.

In this regard, we are pleased to announce that a considerable part of the amount projected for the congress is already guaranteed. With this budget available to cover the main expenses, the OC was able to proceed with several items that were pending and are now in the finalization phase, such as:

- *Website update* www.speleo2025.org
- *Elaboration of the Visual Identity Guide of the Congress*
- *Elaboration of the Communication and Marketing Plan*

Regarding the facilities offered by the Minascentro, during the second half of 2022 new visits were carried out to the venue for a detailed study of the rooms available, open areas, auditoriums as well, ensuring their better use for the various activities of the event, such as social, scientific, cultural, meetings, competitions, expositions, and parties.

On these trips to Belo Horizonte, we were also able to make contact with government bodies, including the Departments of Culture and Tourism of Belo Horizonte and the State of Minas Gerais, which resulted in the interest of both in participating in the event as sponsors.

Several hotels and restaurants located in the vicinity of Minascentro were also visited to establish partnerships to guarantee congress participants the lowest possible price on accommodation and food.

In addition to the guaranteed budget, the OC has advanced some contacts with a list of private companies interested in sponsorship quotas, which are divided in Diamond, Gold, Silver, Bronze, and "Collaborator." Our main goal, as already mentioned, is to raise the highest amount of money possible to provide the lowest cost of participation to the congress participants.

It is also worth mentioning that the excursions and their coordinators have identified 20 itineraries for pre- and post- and another 14 for Wednesday tours *(see special article next page)*.

The regular meetings, most of which are virtual, have been very fruitful. The friendship and affinity amongst OC members facilitate understanding and the expected fluidity in decisions and execution of distributed tasks.

Coming back to the topic "professionalism", the hiring process for a company specialized in international events, which we consider essential for an event of this magnitude, is in its final process.

In summary, these were the main recommendations in the organization of the 19th ICS during the second half of 2022. The OC considers it was a positive period, full of work and important advances. Whilst we acknowledge that the organization has not reached the most critical stage, we are satisfied with the progress and the good results achieved so far.

Plans for 2023

These are some of the plans for 2023 at the time this Bulletin is published, we are just two and a half years away from the Opening Ceremony of the 19th ICS. From now on, new challenges will arise as the OC will be joined by new members, the subcommittees will come into action and the detailed plan of activities will be implemented.

For the first half of 2023, in addition to the organization's required sequence, two points will receive special attention:

- FIRST CIRCULAR

According to the UIS guide for ICSs, the first circular of the event must be distributed 2 years before the opening. This will be done, for sure, and its content will also be in the next issue of the Bulletin, scheduled to be published in the first week of July 2023.

- UIS BUREAU ANNUAL MEETING

Following the UIS tradition of visiting the host country of its next congress two years before, the 19th OC will be pleased to receive the UIS Bureau between 26 July – 02 August 2023.

The officers will land first in Curitiba, capital of the State of Paraná, in the southern region of Brazil, where the UIS will have a special participation in the 37th Brazilian Congress of Speleology (CBE). Among the scheduled programs, there will be a round table which theme is Advances and Trends in International Speleology. The UIS President Nadja Zupan Hajna is the special guest, and simultaneous translation will be provided for such activity to facilitate the participation of the whole Bureau Members and general public.

For the UIS Bureau annual meeting and other institutional activities of the UIS, a special room at the venue of the 37th CBE is already reserved for the occasion. Several visits and field activities are also planned for the UIS Officers, so that they can make the most of their stay in the city.

After the CBE, the Executive Committee of the UIS will fly to Belo Horizonte—the 19th ICS host city—to check the facilities of Minascentro, the main attractions of the city and its surroundings, and complete their assessment of the progress already made of the organization of the event.

Conclusion

Dear reader, with the update reported above you will see we are fulfilling our commitment and making steady progress towards a successful 19th ICS. The UIS itself and the international speleological community can see from this report how our work has been evolving and therefore, feel confident in joining us in July 2025. The next issue of the UIS Bulletin, scheduled for early July 2023, will provide further news.

Remember that YOU are the protagonist of the 19th ICS. Therefore, suggestions are always welcome at any time. For this, please, visit www.speleo2025.org. In addition to being up to date with the news, you can write to us by using the website.

Our best and warm speleo wishes!

UIS CONGRESSES

THE ICSs AND THE PRE- AND POST-CONGRESS EXCURSIONS

History, evolution, and the main options for 2025 in Brazil

By José Ayrton Labegalini (Brazil)
UIS Past President
19th ICS President
ja.labegalini2@gmail.com

It is now traditional for congresses related to topics on the natural world, particularly earth sciences, be they at national or international level, to have organized pre- and post-congress excursions, or even excursions taking place during the main congress, so that the participants can become more familiar with the environment of the host region. If this is a reality for most congresses, it is also true for the International Congresses of Speleology (ICS), held under the auspices of the UIS.

Three ICS were organized before the founding of the UIS in 1965, in which technical visits were organized to learn more about the karst and caves of the region. It is reported that in the activities of the 1st ICS (France 1953) two post-congress excursions were organized, while in the activities of the 2nd ICS (Italy 1958) six excursions took place during the event. Only at the 3rd ICS (Austria 1961), and for the first time, pre- and post-congress excursions where introduced, in addition to excursions during congress activities.

At the 4th ICS, when the UIS was founded (Yugoslavia 1965), three options of pre-congress programs were arranged, as well as two alternatives for one-day visits during the event (on Wednesday), and a post-congress program with only one tour option. Since then, all ICS have organized excursions, and after the 5th issue (Germany 1969), when the first version of the document Instructions and General Recommendations for organizers of ICSs was approved, congress organizers began to comply with these UIS guidelines. The guidlines recommended that pre- and post-congress programs, respectively, should be held before and after the main event without any overlapping activities during the days when presentations were taking place.

Considering that the ICS has an average duration of one week, it was almost consensual to always use Wednesday as the exclusive day for one day trips. Most ICS complied with this non-impositive rule until the 14th ICS (Greece 2005), when the first update of the Instructions and General Recommendations for Organizers of an ICS was presented, and this confirmed Wednesday as the day when there would be no activities or presentation of papers at the main venue. Wednesday would be exclusively dedicated to the one-day trips. This UIS document was discussed at that congress but was only accepted after some corrections and then adopted at the 2006 UIS Annual Bureau Meeting in Beirut, Lebanon.

In the planning of each ICS, its Organizing Committee will make available a certain number of pre- and post-congress excursions, as well as numerous tours for Wednesday. Depending on the interest of congress participants, as well as the logistics of each itinerary, some pre- and/or post-congress trips may be cancelled and some Wednesday excursions may be doubled or even tripled, depending on the numbers of participants.

Following UIS traditions until 2005 and its determination after that date, the 19th ICS will also offer a good number of alternatives where participants will get to know the karst, the caves, and the environs of several Brazilian States (twelve out of the twenty-six) by attending pre- and/or post-congress trips, as well as enjoying the social and cultural attractions in Belo Horizonte City and its surrounding area, on Wednesday excursions.

The 19th ICS program will include nineteen pre- and/or post-congress trips. Each pre-congress trip will start in a designated city in the region to be visited, but all programs will end in Belo Horizonte on July 26th 2025, the day before the official opening of the main event. Likewise, all post-congress trips will start in Belo Horizonte on September 3rd—the day after the official closing of the congress—and each one will end in a city in the visited region.

As of the date of publication of this UIS-Bulletin, fourteen excursions are scheduled for Wednesday, some of them in Belo Horizonte itself, others in the immediate vicinity, and some which will involve up to 120 km of bus travel.

Complete information of each pre-, post- or Wednesday itinerary will be released by January 2024

(or earlier), but to quench the thirst of those interested in the Brazilian karst and caves or just in the 19th ICS week, we hereby present the contemplated places for excursions and visits.

First, it is worth mentioning that it was hard to select the locations. As you know, Brazil has the fifth largest land area on the planet, behind only Russia, Canada, USA, and China, respectively. Its rich karst, therefore, extends over several lithologies along its more than 8 million square km, including limestone, sandstone, quartzite, granite, and ferruginous rocks, many of them still harbor a rich archaeological and paleontological heritage.

Knowing that the more than 23,000 caves registered in our territory represent only 10 to 15% of our real potential, the Brazilian karst is indeed a paradise yet to be explored.

In this sense, the list you will see here is intended to cover at least some of the main Brazilian attractions in different regions of the country. This way, the participant will have the opportunity to get to know not only the karst and the caves themselves, but also the climate, the biodiversity and local culture in our six different biomes: Caatinga, Serrado, Atlantic Rainforest, Amazon Rainforest, Pampa, and Pantanal.

While taking part of an excursion, you will be also aware of the Brazilian activities and ongoing scientific program in geology, biology, paleontology, archeology, as well as speleo tourism.

Just below is the list of pre- and/or post-congress trips followed by the list of one-day excursions on Wednesday. They are followed by photos taken at random, just to wet the apetite of those who are still undecided about coming to Brazil in 2025.

19th INTERNATIONAL CONGRESS OF SPELEOLOGY
60 years of the UIS
20-27 JULY 2025 - BELO HORIZONTE - MINAS GERAIS - BRAZIL

LIST OF PLACES FOR PRE- AND/OR POST-CONGRESS TRIPS

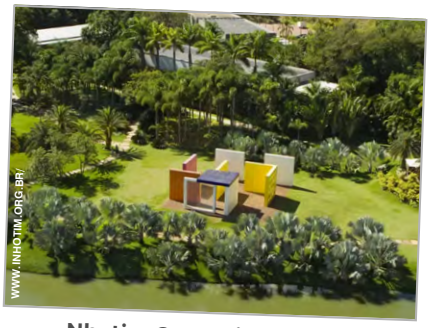
01 - The canyons of Aparados da Serra and the paleotocas (RS and SC)
02 - Touristic management of the caves in the South of Brazil (SC, PR, and SP)
03 - Speleological tourism in the Ribeira Valley (SP)
04 - Sandstones of the Ponta Grossa region (PR)
05 - Historic Cities, Lagoa Santa carste, and Show Caves of Minas Gerais
06 - Serra da Capivara National Park (PI)
07 - Speleology and Archeology in the Peruaçu River Valley (MG)
08 - Bodoquena mountain range and the Pantanal (MS)
09 - Cave diving in Bonito and trip to Pantanal (MS)
10 - Terra Ronca Complex and caves of Goiás (GO)
11 - Karst and caves of the Chapada Diamantina (BA)
12 - Diving in the Chapada Diamantina caves (BA)
13 - Caves in quartzite in Ibitipoca (MG)
14 - The National Forest and the caves in ferruginous rocks in Carajás (PA)
15 - Sandstone caves, Igapós and Igarapés of the Amazon (AM)
16 - Chapada de Ibiapaba, Sete Cidades, and the beaches of Jericoacoara (CE e PI)
17 - Springs of the Rio Vermelho (Environmental Protection Area) in Mambai (GO)
18 - Caves in the South of Chapada Diamantina (BA)
19 - The Longest caves of Central-North of Bahia (BA)

19th INTERNATIONAL CONGRESS OF SPELEOLOGY
20-27 JULY 2025 - BELO HORIZONTE - MINAS GERAIS - BRAZIL

LIST OF ATTRACTIONS FOR ONE-DAY EXCURSIONS

01 - City tour in Belo Horizonte
02 - Liberty Square and the Museum of Mineralogy (and others) in BH
03 - Architectural complex of Pampulha and the complex of the Mineirão Stadium in BH
04 - Trip through the outlying Curral Mountain Range and a visit to the Park of Mangabeiras in BH
05 - Caves in the ferruginous rock of the Quadrilátero Ferrífero *(40 km)*
06 - Caves of Lapinha (a show cave) and of the Sumidouro Lagoon in Lagoa Santa *(40 km)*
07 - Caves of the Sumidouro Lagoon and of Lapinha (a show cave) in Lagoa Santa *(40 km)*
08 - Nhotim, the largest open-air museum in the world, in Brumadinho *(60 km)*
09 - The open-air sculptures of the twelve apostles by Aleijadinho in Congonhas *(80 km)*
10 - The art and culture of the baroque period in Ouro Preto *(100 km)*
11 - City tour in Ouro Preto (World Cultural Heritage site of UNESCO) with its museums and the Mine of Chico Rei *(100 km)*
12 - Gold mine of Passagem in Mariana *(120 km)*
13 - Show caves of Rei do Mato in Sete Lagoas and of Maquiné in Cordisburgo *(120 km)*
14 - Show caves of Maquiné in Cordisburgo and of Rei do Mato in Sete Lagoas *(120 km)*

SOME OPTIONS FOR ONE-DAY EXCURSIONS



Nhotim Open Air Museum
(Brumadinho)

Rei do Mato Show Cave
(Sete Lagoas)

Mine of Chico Rei *(Ouro Preto)*

Mineirão Stadium Complex
(Belo Horizonte)

Sculptures of Aleijadinho
(Congonhas)

SOME OPTIONS FOR PRE- AND/OR POST-CONGRESS TRIPS

Ubajara Show Cave *(Ceará)*

Chapada Diamantina *(Bahia)*

Lago Azul Cave *(Mato Grosso do Sul)*

Serra da Capivara *(Piauí)*

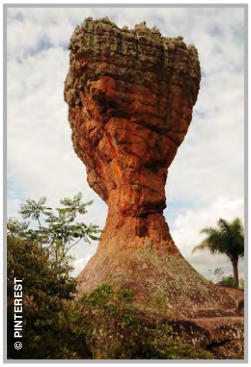
Cave of Brejões *(Bahia)*

Canyon of Itaimbezinho *(Rio Grande do Sul)*

Pedra do Segredo *(Santa Catarina)*

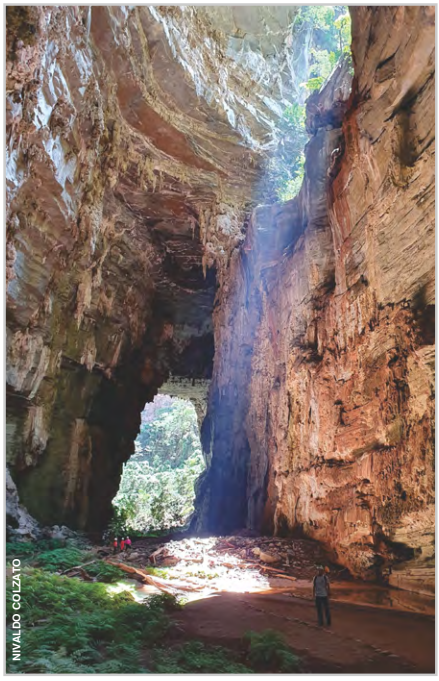
Mangabeira Show Cave *(Bahia)*

Bom Jesus da Lapa Cathedral *(Bahia)*



Sandstone in Ponta Grossa *(Paraná)*

SOME OPTIONS FOR PRE- AND/OR POST-CONGRESS TRIPS



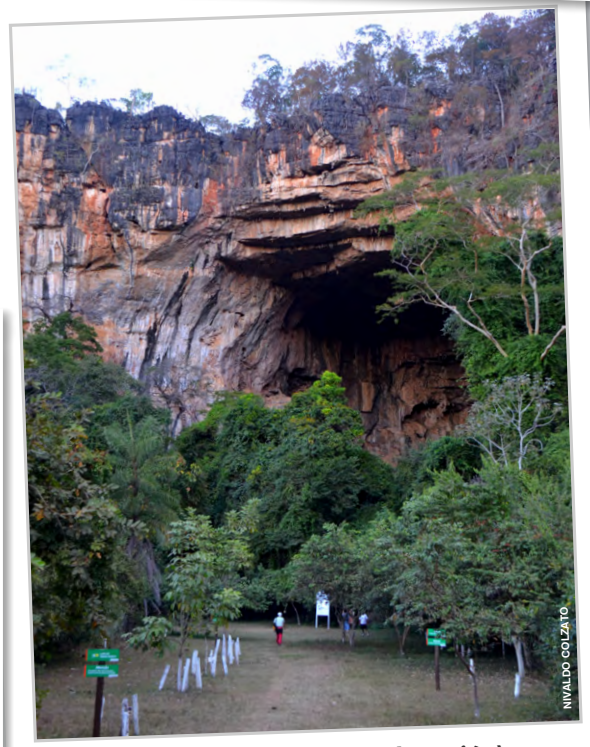
Janelão Cave / Peruaçu Valley *(Minas Gerais)*

Peruaçu Valey *(Minas Gerais)*

Exokarst of Peruaçu Valley *(Minas Gerais)*

Sandstone caves *(Amazon)*

Cave of Água Suja *(São Paulo)*



Terra Ronca State Park *(Goiás)*

Indigenous Village *(Amazon)*

Union Internationale de Spéléologie
www.uis-speleo.org

MINUTES
UIS ANNUAL BUREAU MEETING

18th International Congress of Speleology
July 23-31, 2022 - Savoie Technolac, Le Bourget-du-Lac, France

By Fadi H. NADER (Secretary General) - secretary@uis-speleo.org

SESSION 1

Saturday July 23rd, 2022

10:30 to 17:00 pm (local time)
(before UIS General Assembly)

ATTENDANCE

President: *George VENI*
Vice-President of Administration: *Zdeněk MOTYČKA*
Vice-President of Operations: *Efrain MERCADO*
Secretary General: *Fadi H. NADER*
Treasurer: *Nadja ZUPAN HAJNA*
Adjunct Secretaries:
Bernard CHIROL
Nivaldo COLZATO
Mladen GARAŠIĆ
Gyula HEGEDÜS
Bärbel VOGEL
Honorary Member & Past-Presidents:
Andy EAVIS
José Ayrton LABEGALINI
Guests:
Jean-Pierre BARTHOLEYNS
Didier BORG
David GILIESON
Bureau Members not in attendance:
Tim MOULDS
Satoshi GOTO

1) Opening speech of the UIS President / Approval of Agenda

George VENI thanked all participants for coming to Savoie (Technolac). He informed them about the absence of Tim MOULDS and Satoshi GOTO and their inability to attend this annual UIS Bureau meeting at the 18th International Congress of Speleology (ICS) in Technolac (Savoie), France. George VENI also informed the Bureau that Mladen GARASIC has been appointed an honorary member of NSS and congratulate him. He reviewed the general schedule of the activities of the UIS Bureau planned throughout the congress week.

DECISION 1: The Agenda of the Meetings during the Congress were then approved by the present Bureau members.

2) Approval of Minutes from Regular Bureau Meeting of 2021 (Andilly, France)

Efrain MERCADO proposed a motion to accept the minutes of the previous Bureau meeting (2021, Andilly – France), that was seconded by Nadja ZUPAN HAJNA and Zdeněk MOTYČKA, and approved by all present Bureau members. The minutes were approved by the Bureau.

Together with the minutes, the list of decisions/actions was reviewed and updated with no remaining pending actions.

DECISION 2: The revised minutes of the 2021 annual meeting were approved by the UIS Bureau.

3) 18th ICS outstanding issues

The meetings of the commissions were not included in the congress program and need to be announced. Gyula HEGEDUS together with Bernard CHIROL will take care of this outstanding issue and communicate the meeting times and places in the ICS daily newsletter (Gazette du Lac) and post the information near the ICS registration area.

A printer and WIFI Internet connection are needed for the UIS room ASAP. Bernard will take care of this matter (later, an ICS volunteer was designated to print all needed files by the UIS through the use of a USB Flash disk, and individual internet usernames and passwords were distributed).

The UIS flag is to be lowered after the closure of the end of the second session of the General Assembly on Sunday 31st of July at around 1pm.

A prize podium and proper seating of the UIS Bureau should be organized for Banquet (with screen) – Bernard will relay this information to the ICS organizers.

Gyula HEGEDUS will inform the organizers and through them the attendees that the General Assembly Session 1, on 24/07, will finish at around 4 pm and not 12 (noon) as listed in the ICS program.

4) 19th ICS Report (Nivaldo Colzato)

Nivaldo COLZATO informed the Bureau members about the status of the organization of the upcoming 19th ICS that will take place in 2025 in Belo Horizonte (Minas Gerais, Brazil):

- Organizing Committee members defined
- Venue is already rented with signed contract
- Excursion sites are 90% defined
- Official congress website will be launched at the 18th ICS congress in France

- Budget will be completed in the coming months
- Many Brazilians came to France and the Brazilian stand/booth will distribute posters, stickers, multi-media and promotional items for the 19th ICS
- News about the 19th ICS will be published after the end of the 18th ICS in the UIS Bulletin
- Next UIS Bureau meeting (2023) will be proposed to be in Brazil to show Bureau members the progress in preparation and take their comments and suggestions.

Zdeněk MOTYČKA proposed to provide the Brazilians with the contact lists of the 16th ICS Brno (2013) and confirmed that he gives his support.

Fadi NADER suggested to the Brazilian organizers present at the 18th ICS meet the French organizers and get all info possible (particularly participants list) before the end of the congress.

George VENI suggested they watch, for example, the registration desk, and see how volunteers and organizers do the job and learn from them (especially those who are going to do the same jobs in Brazil).

5) Review of Finances (Nadja ZUPAN HAJNA)

a. Request for payment (1225 € to David Gillieson, chief editor of our new publication, *Guidelines for Caves and Karst Protection***)**

George VENI gave an explanation about the reason for the non-expected payment to cover the expenses for editing of the Guidelines for Caves and Karst Protection. David GILLIESON sent an additional invoice (of 1225 €) after he decided to pay the expenses without asking the UIS Bureau.

John GUNN further explained the situation. Also, as previously agree, 150 copies were printed (50 for the Bureau) with some extra ones. The remaining copies will be distributed at the Commission/session meeting by John Gunn.

Nadja ZUPAN HAJNA suggests that we distribute copies to UIS Delegates and Commission leaders and one to the IUCN representative.

Bureau members agreed to pay 600 € to David GILLIESON since we they were not informed in advance. The Treasurer of the UIS will make the payment.

b. Member Countries late on dues

Algeria has not paid since 2014 (they promised to pay at the 2017 ICS in Sydney, but could not get a visa, and it appears they are not come to this ICS in France.

Mongolia has not paid for 4 years.

Russia's dues were not discussed, since activities with Russia are frozen due to the war.

The Bureau decided unanimously to keep Algeria and Mongolia as members until next UIS Bureau meeting, when a final decision will be made.

c. Amendment of Internal Regulations (Clause 6) by adding one more category for Member Countries

The UIS agreed and prepared the following amendment to be proposed to UIS General Assembly for voting:

Proposed Amendment of Internal regulation - Clause #6

The annual fees each Member Country must pay to the UIS are determined by the country's membership category, which are:

a. Category A: the Member Country has 2,000 speleologists or more in the national organization or organizations that represent the country to the UIS;

b. Category B: the Member Country has at least 1,000 but fewer than 2,000 speleologists in the national organization or organizations that represent the country to the UIS;

c. Category C: the Member Country has at least 500 but fewer than 1,000 speleologists in the national organization or organizations that represent the country to the UIS;

d. Category D: the Member Country has at least 100 but fewer than 500 speleologists in the national organization or organizations that represent the country to the UIS;

e. Category E: the Member Country has less than 100 speleologists in the national organization or organizations that represent the country to the UIS.

The UIS Bureau will propose the annual fees and list them in the UIS Bulletin and website after approval by the General Assembly. The annual fees for:

- Category A stay at 480 €
- Category B stay at 360 €
- Category C stay at 240 €
- Category D will be 120 €
- Category E will be 60 €

d. Treasurer Report (Nadja Zupan Hajna)

A complete report covering the period since 2017 until 2022, prepared by Nadja ZUPAN HAJNA is attached. Below is the summary table.

Problems with PayPal account since 2017 (there are 901.98 € left on that account). In 2022, arrangements were initiated with hope to bring back the money. That work is in progress.

Reported problems with payment of dues from member countries – UIS Bureau decisions:

- Algeria has a long debt with promise to pay at 18th Congress: see point above.
- Cuba: Bureau decision of non-payment 2018-2021 (to 18th Congress); but in 2022 Birmingham Grotto (USA) donated Cuban contributions to UIS for 7.5 years
- Argentina (2022) asked for 50% discount on debt due to financial problems (Efrain MERCADO proposed to make this payment);
- Indonesia (2022), request deferred payment; payment plan will be reported at the end of 2022 – UIS Bureau agreed (17/6/2022);
- Lebanon: Bureau decision on non-payment 2018-2021 (to 18th Congress);
- Venezuela: Bureau decision on non-payment 2018-2021 (to 18th Congress); Nadja ZUPAN HAJNA proposed non-payment for Ukraine starting in 2022, until the war ends and normality returns. UIS Bureau unanimously agreed on this proposal.

• The UIS Bureau agreed unanimously to contribute 500 € to the AFK (Association Française de Karstologie) who organized fund-raising to cover the expenses of seven Ukrainians to travel to France and attend the 18th ICS. Nadja ZUPAN HAJNA will make the payment to AFK via Philippe AUDRA.

UIS Financial report 2017-2022 (until June 30)

Account 2017	USD
From 2016	**15.211,71**
Income 2017	35.219,34
Expenses 2017	-238,95
Balance	34.980,39
Excel record	50191,26
Bank 31.12.2017	**50.191,26**

Account 2017	EUR
From 2016	9.253,76
Income 2017	31.549,57
Expenses 2017	-3.202,58
Balance	28.346,99
Excel record	37.600,75
Bank 31.12.2017	**37.600,75**

Account 2018	USD
From 2017	**50191,26**
Income 2018	564,11
Expenses 2018	-35.000,00
Balance	-34.435,89
Excel record	15755,37
Bank 31.12.2018	**15.755,37**

Account 2018	EUR
From 2017	37.600,75
Income 2018	4.910,00
Expenses 2018	-24.655,10
Balance	-19.745,10
Excel record	17.855,65
Bank 31.12.2018	**17.855,65**

Account 2019	USD
From 2018	15.755,37
Income 2019	35.160,11
Expenses 2019	-2303,4
Balance	32.856,71
Excel record	48.612,08
Bank 31.12.2019	**48.612,08**

Account 2019	EUR
From 2018	17.855,65
Income 2019	27.980,05
Expenses 2019	-8.671,13
Balance	19.308,92
Excel record	37.164,57
Bank 31.12.2019	**37.164,57**

Account 2020	USD
From 2019	48612,08
Income 2020	4,88
Expenses 2020	-91,95
Balance	-87,07
Excel record	48.525,01
Bank 31.12.2020	**48.525,01**

Account 2020	EUR
From 2019	37.164,57
Income 2020	7.692,14
Expenses 2020	-6.757,69
Balance	934,45
Excel record	38.099,02
Bank 31.12.2020	**38.099,02**

Account 2021	USD
From 2020	**48525,01**
Income 2021	2425,26
Expenses 2021	-68,19
Balance	2357,07
Excel record	50.882,08
Bank 31.12.2021	**50.882,08**

Account 2021	EUR
From 2020	38.099,02
Income 2021	9.028,49
Expenses 2021	-9.690,54
Balance	-662,05
Excel record	37.436,97
Bank 31.12.2021	**37.436,97**

Account 2021	USD
From 2021	50.882,08
Income 2021	0,25
Expenses 2021	0
Balance	0,25
Excel record	50.882,33
Bank 30.6.2022	**50.882,33**

Account 2022	EUR
From 2021	37.436,97
Income 2022 (6)	6.743,00
Expenses 2022 (6)	-6.637,04
Balance	105,96
Excel record	37.542,93
Bank 30.6.2022	**37.542,93**

Refer to the Treasurer's full report on page 13 of this Issue.

e. Funding Commissions (Zdeněk MOTYČKA)

In 2018, the UIS Bureau decided to budget 2,000 euros annually to support the UIS Commissions from 2018 until the next ICS.

For 2018 Bureau received requests from 4 Commissions and approved 1,550 EUR

For 2019 Bureau received requests from 3 Commissions and approved 1,000 EUR

For 2020 Bureau received requests from 3 Commissions and approved 1,000 EUR

For 2021 Bureau received requests from 3 Commissions and approved 1,000 EUR

For 2022 (until June 30) Bureau received requests from 1 Commission and approved 2,000 EUR

In total, between 2018–2022 the UIS Bureau supported UISommissions with total amount of 6,550 EUR.

f. Funding Expeditions and Projects (Zdeněk MOTYČKA)

2018, UIS Bureau agreed to budget 3,000 euros annual to support speleological expeditions and events from 2018 until the next ICS.

For 2018 Bureau received 3 requests and supported 2 projects in total with 3,000 EUR

For 2019 Bureau received 3 requests and supported 3 projects in total with 2,000 EUR

For 2020 Bureau received no requests because of COVID 19 pandemic

For 2021 Bureau received 2 requests and supported 2 projects in total with 2,250 EUR

For 2022 (till June 30) Bureau received 2 requests and supported 2 projects in total with 1,900 EUR

In total, between 2018=2022 the UIS Bureau supported 9 projects and paid 9,150 EUR.

6) UIS Commissions (Zdeněk MOTYČKA)

Zdeněk MOTYČKA summarized the status of each commission, as well as the UIS Bulletin and the Archives. The list of commissions are presented below (commissions in green reported activities between the 17th and 18th ICSs.

- Commission on Archaeology and Palaeontology in Caves
- **Commission on Artificial Cavities**
- Commission on Arts and Letters
- Commission on Biology
- **Commission on Bibliography**
- **Commission on Cave Diving**
- Commission on Cave Mineralogy
- Commission on Cave Rescue
- Commission on Glacier, Firn, and Ice Caves
- Commission on Education
- **Commission on History of Speleology**
- **Commission on Informatics**
- Commission on Karst Hydrogeology and Speleogenesis
- **Commission on Long, Deep and Large Caves**
- **Commission on Materials and Techniques**
- **Commission on Physical Chemistry and Hydrogeology of Karst**
- **Commission on Protection of Caves and Karst**
- **Commission on Pseudokarst**
- Commission on Speleotherapy
- **Commission on Volcanic Caves**

A discussion followed on the importance of organizing meetings for commissions during the 18th ICS and re-activate some of the commissions from whom we did not receive any report (see above Item #3).

Nivaldo COLZATO also presented his report on the UIS Bulletin progress and the Bulletin numbers of 2022. Refer to the complete report on the UIS Bulletin and activities of Adjunct Secretary Nivaldo COLZATO (attached as a separate document).

Zdeněk MOTYČKA also presented his joint report with Pavel BOSÁK on the progress of work on the UIS Archives in Postojna, Slovenia. All is going well and according to plan so far.

Efrain MERCADO reported on the UIS website and social media accounts with the support document of Jasmina RIJAVEC report (submitted to George Veni).

- The UIS Bureau agreed unanimously to recognize Jasmina RIJAVEC for her dedication and hard work (a Certificate of Appreciation will be given to her at this ICS). Nadja also proposed to take to her gifts that will be brought by UIS Bureau members.

- Fadi NADER reminded everyone that the new Treasurer should replace him on the Melbourne IT account as soon as possible after election.

6) International Year of Caves and Karst 2021/22 updates

George VENI presented the updates regarding the International Year of Caves and Karst (IYCK 2021) stressing that this initiative will remain until the end of 2022 and won't be closed by the 18th ICS. The following themes were discussed by present members of the Bureau:

- UIS activities
- International activities (over 680 events for IYCK)
- ICS related events (e.g., Speleo-truck event for IYCK, John GUNN session on the Guidelines, Speleomedia – a video from all our partners produced by Anja HAJNA and 2 min video of Uwe on the meeting at UNESCO.
- UNESCO Groundwater Summit is schedule for 7 December 2022 and 90-minute side events are planned for the day before. George submitted a UIS/IYCK side event proposal. The selected side events were supposed to be announced on 20 July 2022 but a message was sent that because of many proposals the selection is delayed. If the UIS event is selected, participants will be Z. MOTYČKA,, Ros Fatihah MUHAMMAD (from Malaysia), F. NADER, G. VENI, and N. ZUPAN HAJNA.

Refer to the complete report on IYCK project by Nadja ZUPAN HAJNA (a separate document attached to these minutes and which will be published with the minutes in the next UIS Bulletin).

8) UIS Prizes (Nivaldo Colzato)

Nivaldo COLZATO presented the status of the UIS Prizes for the 18th ICS. He described the 16 nominations. He confirmed that the same procedures will be followed as the ones that were followed in Australia in 2017 (17th ICS).

9) Requests for UIS Membership

Representatives of five (5) countries approached UIS with requests to become Member Countries. These are:

- **ARMENIA:** still no official letter to date. If the delegation shows up and presents an official request, the country will be proposed to General Assembly.
- **INDIA:** Letter received – will be presented for vote at General Assembly Session 1
- **LIBYA:** Letter received – will be presented for vote at General Assembly Session 1
- **MALAYSIA:** Letter received – will be presented for vote at General Assembly Session 1
- **MOROCCO:** Letter received – will be presented for vote at General Assembly Session 1

By paying at least the first year's dues, any approved Member Country may have the right to vote at the General Assembly.

10) Proposals by Delegates, Member Countries, and others

Efrain MERCADO discussed the status of the proposed law to protect caves that is supported by UIS. It has not been yet signed by the President of Colombia. Efrain MERCADO will organize further steps for international pressure for the president's signature.

Bureau discussion on the submitted applications (to date) for positions at the UIS Bureau (2022–2023):

Nadja Zupan Hajna (Pr), Zdeněk MOTYČKA, (VP), Nivaldo Colzato (VP), Johannes Mattes (G. Secretary), Mladen Garasic (Treasurer), Bärbel Vogel (Adj. Sec.), Gyula Hegedus (Adj. Sec.), Bernard Chirol (Adj. Sec.), Yavor Shopov (Adj. Sec.), Mario Parise (Adj. Sec.), Issam Bou Jaoude (Adj. Sec.), Pat Seiser (Adj. Sec.), Jean-Pierre Bartholeyns (Adj. Sec.).

11) Finalizing the UIS General Assembly Agenda

Group work to prepare presentations, paperwork, copies, etc. for the General Assembly (Session 1).

12) Review and update agenda for second Bureau meeting

The proposed agenda will be amended if needed by the new elected Bureau – the existing agenda is a basis.

13) Any other business

A presentation by UIS-WikiCaves sub-commission (Didier Borg) was given in preparation for a proposed project to be submitted to UNESCO.

After the presentation of Didier Borg, the present members decided to schedule another meeting with him and a few UIS Bureau Members to discuss further the proposal and to add it to the agenda of the next UIS Bureau meeting.

14) Closing

The first session of the annual UIS Bureau Meeting for the year 2022 ended at 17h00 (local time).

UIS Annual Bureau Meeting 2022 - First Session - July 23

Last meeting of the UIS Bureau 2017-2021

18th International Congress of Speleology - Le Bourget-du-Lac, Savoie Technolac, France

Union Internationale de Spéléologie
www.uis-speleo.org

MINUTES
UIS ANNUAL BUREAU MEETING

18th International Congress of Speleology
July 23-31, 2022 - Savoie Technolac, Le Bourget-du-Lac, France

By Johannes MATTES (Secretary General) - secretary@uis-speleo.org

SESSION 2

Sunday July 31rt, 2022
9:00 am to 1:00 pm (local time)
(after UIS General Assembly)

ATTENDANCE

President: *Nadja ZUPAN HAJNA*
Vice-President of Administration: *Zdeněk MOTYČKA*
Vice-President of Operations: *Nivaldo COLZATO*
Secretary General: *Johannes MATTES*
Treasurer: *Mladen GARAŠIĆ*
Adjunct Secretaries:
Bärbel VOGEL
Gerard CHAMPION
Jose-Maria CALAFORRA
Marc MENTENS
Mario PARISE
Patricia SEISER
Nathalia Vanessa UASAPUD ENRÍQUEZ
Honorary Member & Past-Presidents:
Andy EAVIS
José Ayrton LABEGALINI
George VENI
Guests:
Jean-Pierre BARTHOLYINS
Fadi NADER
Satoshi Goto

1) Welcoming New Bureau members

The new UIS President Nadja ZUPAN HAJNA opened the meeting and welcomed the new Bureau members. She drew attention to the short mandate of the Bureau, lasting only until 2025, and recommended the new Bureau members to study the UIS Statutes and Internal Regulations. The Bureau members should not work as national representatives but as officers of the global society. She thanked the Past General Secretary Fadi NADER, who had to leave, then asked the new Bureau members to introduce themselves briefly.

2) Operations and responsibilities of the members of the UIS Bureau

a. Review job responsibilities following the Internal Regulations

Nadja ZUPAN HAJNA drew attention to the UIS Internal Regulations, where the responsibilities and powers of all UIS officers are clearly defined.

b. UIS Website, Social Media + Informatics Commission

The person in charge of the UIS website and Facebook site is Jasmina RIJAVEC (jasmina_rijavec@yahoo.com). Announcements for events during the International Year of Karst and Caves should be sent directly to Jasmina Rijavec by the UIS national delegates and presidents of the commissions.

c. UIS Bulletin: News

Vice-President of Operations Nivaldo COLZATO announced that all reports received for the General Assembly will be published in the UIS Bulletin. He reminded everyone that commission reports are not personal activity reports. Questions about the UIS website should go through Nivaldo COLZATO, while Secretary General Johannes MATTES is responsible for updating the list of member countries and national delegates.

d. Follow-up of Commissions

The Vice-President of Administration Zdeněk MOTYČKA briefly reported on the management and functioning of the commissions.

DECISION 3: UIS Bureau decided to keep the annual global budget cap for commissions financial support at 2,000 Euros, as it was before.

DECISION 4: UIS Bureau decided to increase the amount of money awarded for the France Habe Prize from 250 to 300 euros. At the same time, the award should be enriched by in-kind donations (i.e. equipment) from possible sponsors.

ACTION 1: Jean-Pierre BARTHOLEYNS, President of the Karst and Cave Protection Commission, will be looking for sponsors before next UIS Bureau Meeting.

As the Treasurer Mladen GARAŠIĆ had to leave, the meeting was briefly interrupted by a group photo of the new UIS Bureau.

e. National Delegates, Organizations and Regional Bodies

The list of national delegates and contact information of national organizations must be updated on the website. This applies in particular to the six member countries Armenia, Cyprus, India, Libya, Malaysia and Morocco, which joined the UIS in earlier in the day during the General Assembly.

ACTION 2: Johannes MATTES will contact all national delegates (including the new members) and will update the information on UIS delegates, member countries and their organizations on the UIS website before the next UIS Bureau meeting.

f. Identifying projects/responsibilities for Adjunct Secretaries (e.g. Fund raising, recruiting new member countries, involvement with commissions, advisory, publicity)

According to the UIS Internal Regulations, each Adjunct Secretary should accept responsibility for at least one project, activity, or goal for their term of office that is important or significantly beneficial to the UIS. Ideas will be discussed at the UIS Bureau's next Zoom meeting in October.

ACTION 3: The Adjunct Secretaries will develop ideas for one project/goal for their term of office before the next UIS Bureau meeting.

3) Advisory Committee:

According to the UIS Bulletin 59(2), the UIS Advisory Committee (2017) includes Andy EAVIS (UK), Pavel BOSAK (CZ), José-Ayrton LABEGALINI (BR), Kyung Sik WOO (KO), Friedrich OEDL (AU), Paul WILLIAMS (NZ).

ACTION 4: Andy EAVIS will contact Paul Williams to ask if he agrees to continue his service as an Advisory Committee member before the next Bureau Meeting.

ACTION 5: Johannes MATTES will update the list of the Advisory Committee members on the UIS website before the next Bureau Meeting.

4) Running Projects:

DECISION 5: UIS Bureau decided to keep the annual global budget cap for financial support of symposia and expeditions at 3,000 Euros, as it was before.

ACTION 6: Zdeněk MOTYČKA will write a call for the next deadline (30th of November).

Nadja ZUPAN HAJNA proposed that UIS waive the membership fees of some countries that are in a difficult situation due to war or the global economic conditions.

DECISION 6: UIS Bureau decided to waive the membership fee of Lebanon, Ukraine and Venezuela until the 19th ICS (2025) in Brazil (60 euros per year for each of them).

DECISION 7: UIS Bureau decided to waive the membership fees of Indonesia and Mongolia for two years and Malaysia for one year (60 euros per year for each of them).

Kyrgyzstan dues need to be paid by the end of 2023 or it will lose its membership in the UIS. Algeria has lost its membership.

a. 19th ICS

Nivaldo COLZATO briefly reported on preparations for the 19th International Congress of Speleology, to be held from 20-27 July 2025 in Belo Horizonte (Brazil).

b. International ban on the trade of cave materials, speleothems, bones etc.

The UIS will submit a proposal for an international ban on the trade of cave materials, speleothems, bones etc. to UNESCO next September. Bärbel VOGEL, George VENI and Patricia SEISER are working on that task.

c. Sixty Years of the UIS 1965-2025 (book project by J.-A. Labegallini)

Past President J. A. LABEGALLINI requested financial support for his book project Sixty Years of the UIS.

DECISION 8: UIS Bureau decided to discuss this issue when more detailed plans about the publication are available (publication as a digital version or in print; revised book edition or supplementary booklet).

The UIS still has numerous copies of the book Fifty Years of the UIS (2015) in storage.

5) Future meetings and events of interest

Zdeněk MOTYČKA invited everyone to a conference planned in mid-September 2023 in Sloup in the Moravian Karst. It will be held on the occasion of the 300th anniversary of the first descent into the famous Macocha Abyss by the monk Lazarus from Brno and will include lectures on both its natural scientific and historical aspects.

Adjunct Secretary Bärbel VOGEL reported about the possibility to nominate experts for the Global Environment Outlook of the UN Environment Programme. The deadline for nominations is already August 1.

On behalf of UIS, Past President George VENI applied for ECOSOC (Economic and Social Council) accreditation at the United Nations in 2020.

6) UIS Bureau 2023 meeting (Location – Belo Horizonte – checking 19th ICS organization)

DECISION 9: The UIS Bureau agreed to have the next Bureau meeting at the Brazilian Congress of Speleology in Curitiba from the 26th to the 29th of July 2023 and then travel to Belo Horizonte to inspect the facilities for the 19th ICS.

An invitation has been received from Borneo for the 2024 Bureau Meeting.

7) Any other business

George VENI proposed that UIS create a mailing list to better reach cavers. Nadja ZUPAN HAJNA pointed out that forwarding information sent out by the UIS should be the responsibility of the UIS delegates.

8) Closing Session (President)

The next meeting of the UIS Bureau will be held before October 28 via Zoom. Nadja ZUPAN HAJNA closed the meeting and thanked all participants for their attention and their contributions.

UIS Annual Bureau Meeting 2022 - Second Session - July 23

First meeting of the new UIS Bureau 2022-2025

18th International Congress of Speleology - Le Bourget-du-Lac, Savoie Technolac, France

Fadi Nader *(Lebanon) during his last Bureau meeting as UIS Secretary General. After serving the UIS for 21 years, he was thanked for his invaluable contribution to the union and global speleology.*

Union Internationale de Spéléologie
www.uis-speleo.org

MINUTES
UIS GENERAL ASSEMBLY

18th International Congress of Speleology
July 23-31, 2022 - Le Bourget-du-Lac, Savoie Technolac, France

By Fadi H. NADER (Secretary General) - secretary@uis-speleo.org

FIRST SESSION

Sunday July 24th, 2022
10:39 am to 16:25 pm (local time)

The First Session of the UIS General Assembly of the 18th International Congress of Speleology started at 10:39 on Sunday July 24th, 2022. It took place in the Amphitheatre Vanoise at Technolac campus of Savoie-Mont Blanc University in FRANCE.

Dr. George VENI welcomed the participants to the General Assembly of the 18th International Congress of Speleology. He briefly reminded the Assembly about the procedures to be followed during the two sessions of General Assembly at the ICS. Dr. Veni introduced each member of the (2017–2022) UIS Bureau present and explained that two Adjunct Secretaries, Tim MOULDS and Satoshi GOTO, were absent for health reasons. Soon after, he declared the General Assembly open and invited Yves CONTET (head of the 18th ICS Organizing Committee) to address the Assembly. Mr. CONTET welcomed the delegates of the member countries and other attendees.

Dr. VENI asked the participants to observe a moment of silence for all cavers and scientists who contributed to the UIS and left the international community in between congresses, among them: **Alain Mangin** (France); **Giovanni Badino** (Italy); **Gordon William Kirk MacGregor** (Canada); **Jeanne Marie Gurnee** (USA); **John Robert Holsinger** (USA); **Rane Curl** (USA) ; **Grzegorz Klassek** (Poland); **Trifon Daaliev** (Bulgaria); **Anthony Hitchcock** (South Africa); **Nils-Axel Mörner** (Sweden); **István Eszterhás** (Hungary); **Jean Nicod** (France); **Christian Dodelin** (France); **Adolfo Eraso Romero** (Spain); **Peter Ernest Spargo** (South Africa); **Robby Ko King Tjoen** (Indonesia); **Avirmed Erdenedalai** (Mongolia); **Herbert W. Franke** (Germany), and **Joël Fontenelle** (Belgium).

Thirty (32) of the 52 UIS member countries were registered at the first session of the General Assembly, out of which twenty-eight (28) had voting rights according to UIS Statutes: Argentina, Australia, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Canada, Costa Rica, Croatia, Cuba, Czech Republic, France, Germany, Greece*, Hungary, Italy, Japan, Lebanon, Luxembourg, the Netherlands, Philippines, Poland, Portugal*, Puerto Rico, Romania*, Russian Federation*, Serbia, Slovenia, Switzerland, Ukraine, United Kingdom, United States of America *(*designs non-voting member countries).*

The General Assembly elected unanimously two financial auditors (**Friedhart KNOLLE**, Germany; and **Mario PARISE**, Italy); and two general auditors principally for counting votes (**Arjan VAN WAARDENBURG**, The Netherlands; and **Andy EAVIS**, UK)

The convened General Assembly unanimously approved the minutes of the last sessions of the General Assembly that took place at the 17th ICS in Sydney, Australia, in July 2017. The General Assembly also approved the proposed agenda for the 2022 sessions.

The President of the UIS, Dr. George VENI, presented the major updates regarding the UIS covering the UIS Bulletin, UIS support for international expeditions and the International Year of Caves and Karst (IYCK 2021) which he explained will continue until the end of 2022.

Dr. VENI emphasized that the UIS succeeded in gathering 262 partner organizations worldwide for the IYCK initiative with a historic celebration event at UNESCO Headquarters in Paris (13 September 2021).

He highlighted the published book by Dr. Nadja ZUPAN HAJNA (Slovenia) for the IYCK, and the Guidelines for Caves and Karst Protection, jointly published by UIS with International Union for Conservation of Nature (IUCN).

The Secretary General of the UIS, Dr. Fadi NADER, presented his report illustrating the major achievements of the Union and its Bureau since the 17th ICS. He also briefly introduced the major achievements recorded by the international speleological community. He especially highlighted progress in terms of supporting international expeditions, the UIS Bulletin, website, and social media as well as the IYCK.

Dr. Nadja ZUPAN HAJNA, UIS Treasurer, presented the financial status of the Union, which can be summarized by a healthy input/output and healthy financial status (UIS accounts on the 30th of June, 2022, consisted of 37,542.93 Euros and 50,882.33 USD).

All (President, Secretary General, and Treasurer) reports will be published in the UIS Bulletin (Vol. 64-2).

Representatives of following UIS Commissions presented verbal reports and information about their activities for the period of 2017-2022: Artificial Cavities (Mario Parise); Bibliography (Philipp Haeuselmann); Informatics (Philipp Haeuselmann); Physical Chemistry and Hydrogeology of Karst (Yavor Shopov); Karst and Cave Protection (Jean-Pierre Bartholeyns); Pseudokarst (Jan Urban); Volcanic Caves (Gregg Middleton); Glacier, Firn, and Ice Caves (Bulat

Mavlyudov); History (Bernard Chirol); Largest, Longest and Deepest Caves (Andy Eavis); Biology (Barbel Vogel). Some submitted their reports and arranged for UIS Vice President of Administration Mr. Zdeněk MOTYČKA to read them.

Nivaldo COLZATO and Zdeněk MOTYČKA presented briefly their reports concerning respectively the UIS Bulletin and UIS Archives.

A lunch break was proposed and approved.

A short but comprehensive presentation of the status of the preparation and future planning of the approved candidate country, Brazil, to organize the 19th International Congress of Speleology (2025) was delivered by Nivaldo COLZATO. The lack of suitable audio equipment in the hall did not allow the projection of the movie prepared by the 19th ICS organizers (it was projected in the week at the closing Banquet). All information about the 19th ICS is provided on the congress website that was launched during the 18th ICS in France (https://speleo2025.org/)

The Secretary General Dr. Fadi NADER introduced official requests from India, Malaysia, Libya and Morocco to join the UIS. Representatives of India and Malaysia were invited to introduce their requests, while the requests of Libya and Morocco were delivered through recorded video presentations (none of their representatives could travel to France due to visa issues). Then voting took place approving the four new member countries with 27 Yes-votes.

Proposals and motions from the UIS Bureau and the floor were heard. First, the UIS Bureau proposed to amend the Internal Regulations (Clause #6) pertaining to member country categories and fees (the UIS Delegates were given a separate paper with the amended text), which stated:

Proposed Amendment of Internal regulation - Clause #6

The annual fees each Member Country must pay to the UIS are determined by the country's membership category, which are:

a. Category A: the Member Country has 2,000 speleologists or more in the national organization or organizations that represent the country to the UIS;

b. Category B: the Member Country has at least 1,000 but fewer than 2,000 speleologists in the national organization or organizations that represent the country to the UIS;

c. Category C: the Member Country has at least 500 but fewer than 1,000 speleologists in the national organization or organizations that represent the country to the UIS;

d. Category D: the Member Country has at least 100 but fewer than 500 speleologists in the national organization or organizations that represent the country to the UIS;

e. Category E: the Member Country has less than 100 speleologists in the national organization or organizations that represent the country to the UIS.

The UIS Bureau will propose the annual fees and list them in the UIS Bulletin and website after approval by the General Assembly.

The annual fees for:

- Category A stays 480 €
- Category B stays 360 €
- Category C stays 240 €
- Category D will be 120 €
- Category E will be 60 €

The proposal for this amendment was then voted and approved by all 28 present voting delegates (the number of voting delegates changed as some arrived late and others had to leave early).

Other motions from the floor were heard:

Dr. Philipp HÄUSELMANN (Switzerland) asked the General Assembly to recognize René Scherrer for his 70 years of dedication to speleology (René is now 89 years old). The General Assembly approved.

Bärbel VOGEL (Germany) thanked the Delegates for their support with the International Cave Animal of the Year initiative and proposed a motion concerning the need to publish an annual report on the status of caves and karst worldwide.

Ferdinando DIDONNA (Costa Rica) proposed the UIS to have a contact/liaison officer at/for UNESCO.

Both, VOGEL and DIDONNA agreed to better develop their motions during the week and present them again during the second session of the General Assembly for voting.

Dr. Miha ČEKADA (Slovenia) asked the Assembly to recognize the work and dedication to speleology of Andrej Mihevc. The General Assembly approved.

Efrain MERCADO (Puerto Rico) addressed the General Assembly concerning the call to action for the proposed Colombia Speleological heritage law, asking the delegates to follow up on this subject and continue to support the initiative until the Colombian presidents signs the law.

Dr. Jelena ĆALIĆ (Serbia) asked the UIS Bureau if they had any comments or replies on the reactions made by individuals and national caving communities concerning the published UIS Bureau Statement on the Ukrainian war, which voiced misgivings on the reasons for UIS became involved in geopolitical conflicts and wars. The UIS Bureau confirmed it was not aware of the letters mentioned.

Zdeněk MOTYČKA (Czech Republic), explained the context of the UIS Statement, including its proposal for the UIS General Assembly to *"suspend Russia from membership of the UIS until Ukraine's sovereignty and internationally recognized borders, including Crimea, are restored and that the Russian language be excluded as an official UIS language."*

The Ukrainian Delegate then, read an emotional speech and asked the General Assembly to vote on suspending Russia from UIS and exclude the Russian language following the terms proposed by UIS Bureau. A long discussion and debate followed by delegates in favor and others opposed to the motion. A final consensus was made to split the motion in two. First to vote in suspending Russia and then on excluding the Russian language.

The first motion proposed for voting stated: *"The UIS General Assembly suspends Russia from membership of the UIS until Ukraine's sovereignty and internationally recognized borders, including Crimea are restored."*

Results: YES (13 votes), NO (9 votes), ABSTAIN (4 votes).

The motion was thus approved and passed.

The second motion proposed for voting stated: *"The UIS General Assembly excludes the Russian language as an official UIS language."*

Results: YES (7), NO (10), ABSTAIN (9)

The motion was thus not approved and did not pass.

A final request/motion was proposed by José-Ayrton LABEGALINI (Brazil) asking the delegates to support the World Heritage Nomination of the Peruaçu Valley in Brazil.

Dr. George VENI thanked again all the participants and closed the first session of the General Assembly of the 18th ICS, at around 16:25 on Sunday July 24th, 2022.

UIS General Assembly 2022 - First Session - July 24

Amphitheatre Vanoise at Technolac Campus of Savoie-Mont Blanc University

18th International Congress of Speleology - Le Bourget-du-Lac, France

Union Internationale de Spéléologie
www.uis-speleo.org

MINUTES
UIS GENERAL ASSEMBLY

18th International Congress of Speleology
July 23-31, 2022 - Le Bourget-du-Lac, Savoie Technolac, France

By Fadi H. NADER (Secretary General) - secretary@uis-speleo.org

SECOND SESSION

Sunday July 31st, 2022
10:00 am to 13:05 pm (local time)

At the zopening, a total of 39 member countries with voting rights were registered: Argentina, Austria, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Canada, Colombia, Costa Rica, Croatia, Cuba, Czech Republic, France, Germany, Hungary, India, Indonesia, Israel, Italy, Japan, Lebanon, Luxembourg, Malaysia, Mexico, the Netherlands, Norway, Philippines, Poland, Puerto Rico, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, United States of America, Venezuela.

The UIS President declared the second session of the General Assembly open, at around 10:00. Dr. Fadi NADER (Secretary General) asked the General Assembly to add two items on the Agenda:

First, representatives of Armenia and Cyprus who had met the requirement to be proposed as new member countries of the UIS were invited to address the General Assembly with their requests. Both countries were approved unanimously with 39 yes votes. Henceforth the number of voting delegates at this session became 41.

Then, the motions proposed but not finalized by Bärbel VOGEL and Ferdinando DIDONNA were recalled. For voting.

Bärbel VOGEL (Germany)'s motion: *"The UIS Bureau publishes a Karst Report on every ICS on the status of caves and karst and that UIS Member countries will provide data."*

Results: YES (35), ABSTAIN (6) – the motion was approved and passed.

Ferdinando Didonna (Costa Rica) withdrew his motion.

The representatives of the UIS Commissions were then invited to present their planned future activities for the period 2022-2025:

- **Artificial Cavities** – *Mario Parise*
- **Biology** – *Bärbel Vogel*
- **Bibliography** – *Philipp Häuselmann*
- **Cave Diving** – *Rodrigo Seveno*
- **Cave Rescue** – *Gyula Hegedus*
- **History** – *Bernard Chirol and Friedhart Knolle*
- **Informatics** – *Philipp Häuselmann*
- **Materials and Techniques** – *Monica Ponce*
- **Physical Chemistry and Hydrogeology of Karst** - *Yavor Shopov*
- **Karst and Cave Protection** – *Jean-Pierre Bartholeyns*
- **Pseudokarst** – *Jan Urban*
- **Volcanic Caves** – *Gregg Middleton*
- **Glacier, Firn, and Ice Caves** – *Bulat Mavlyudov*
- **Largest, Longest and Deepest Caves** – *Andy Eavis*

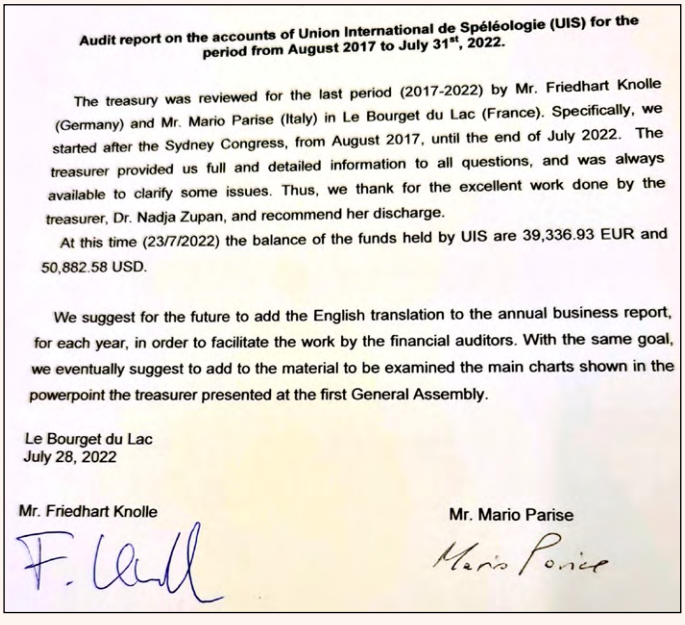
All reports were approved and the commissions authorized to continue with 41 Yes-votes. Dr. George VENI noted that normally separate voting would occur for each commission, but since most commissions could not meet or had too few participants at the meetings to conduct meaningful business because the ICS had not publicized the meeting locations and times, all the commissions were approved in one vote so they could better organize and plan their activities during the next three years before the 19th ICS.

Andy Eavis reported on the behalf of the Advisory Committee confirming that proposals, motions and decisions are all in order according to UIS Statutes and Internal Regulations.

Dr. Mario PARISE (Italy) and Dr. Friedhart KNOLLE (Germany) – acting financial auditors – after examining the books and relevant documents provided by the Treasurer, Dr. Nadja ZUPAN HAJNA (Slovenia), presented the audit report and recommendations *(image below)*. The report will be published separately *(see page 13 of this Bulletin)*.

Recommendations:

- Translation Slovenian annual reports to English
- Add the PPT document of final presentation of the Treasurer to the audited materials.



Audit report on the accounts of Union International de Spéléologie (UIS) for the period from August 2017 to July 31st, 2022.

The treasury was reviewed for the last period (2017-2022) by Mr. Friedhart Knolle (Germany) and Mr. Mario Parise (Italy) in Le Bourget du Lac (France). Specifically, we started after the Sydney Congress, from August 2017, until the end of July 2022. The treasurer provided us full and detailed information to all questions, and was always available to clarify some issues. Thus, we thank for the excellent work done by the treasurer, Dr. Nadja Zupan, and recommend her discharge.

At this time (23/7/2022) the balance of the funds held by UIS are 39,336.93 EUR and 50,882.58 USD.

We suggest for the future to add the English translation to the annual business report, for each year, in order to facilitate the work by the financial auditors. With the same goal, we eventually suggest to add to the material to be examined the main charts shown in the powerpoint the treasurer presented at the first General Assembly.

Le Bourget du Lac
July 28, 2022

Mr. Friedhart Knolle

Mr. Mario Parise

At this time the balance of the funds held by the UIS are 50,882.88 USD and 39,336.93 Euros.

UIS President, Dr. George Veni, addressed the Assembly and thanked the members of his Bureau. He distributed Certificates of Appreciation to all of them, with one to Yves CONTET on behalf of the ICS organizers for their work on the 18th ICS.

The election of the new UIS Bureau member was introduced by Dr. Fadi NADER who explained the procedure following the UIS Statutes. In the meantime, the voting delegate for Australia had also joined the General Assembly. Henceforth the number of voting delegates at this session became 42.

Dr. Fadi Nader introduced the candidates:

UIS President
Nadja ZUPAN HAJNA (Slovenia)
UIS Vice President of Administration
Zdeněk MOTYČKA (Czech Republic)
UIS Vice President of Operations
Nivaldo COLZATO (Brazil)
UIS Secretary General
Johannes MATTES (Austria)
UIS Treasurer
Mladen GARAŠIC (Croatia)
UIS Adjunct Secretaries
Bärbel VOGEL (Germany)
Bernard CHIROL (France)
Gerard CAMPION (UK)
Gyula HEGEDUS (Hungary)
Issam BOU JAOUDE (Lebanon)
Jean-Pierre BARTHOLEYNS (Belgium)
Johnsy CARRION-CABRERA (Puerto Rico)
José-Maria CALAFORRA (Spain)
Marc MENTENS (Philippines)
Mario PARISE (Italy)
Nathalia UASAPUD (Colombia)
Omar CALVA (Mexico)
Patricia SEISER (USA)
Satoshi GOTO (Japan)
Yavor SHOPOV (Bulgaria)

The candidates were then individually invited to introduce themselves in front of the General Assembly before the election took place.

The new UIS President, **Dr. Nadja ZUPAN HAJNA**, was elected in the first round obtaining 40 votes (2 abstentions). **Mr. Zdeněk MOTYČKA** was elected UIS Vice President of Administration with 40 votes (2 abstentions). **Mr. Nivaldo COLZATO** was elected UIS Vice President of Operations with 42 votes. **Dr. Johannes MATTES** was elected Secretary General with 41 votes (1 abstention). **Dr. Mladen GARAŠIĆ** was elected UIS Treasurer with 40 votes (2 abstentions).

The UIS Adjunct Secretaries were elected in two rounds. Five (5) Adjunct Secretaries were elected from the first round: **Dr. José Maria CALAFORRA** (Spain); **Marc MENTENS** (Philippines); **Dr. Mario PARISE** (Italy); **Dr. Nathalia UASAPUD** (Colombia); **Dr. Patricia SEISER** (USA). The two (2) remaining seats for Adjunct Secretaries were filled after the second round of elections by **Bärbel VOGEL** (Germany) and **Gerard CAMPION** (UK).

The statement of the newly elected UIS President was presented by Dr. Nadja ZUPAN HAJNA, following the elections. She thanked the audience and expressed her will to move forward with the new UIS Bureau and work hard for the Union. She thanked the members of the past Bureau.

Roberto ROJO (Mexico) asked the UIS General Assembly to help in protecting the karst of the Quintana Roo, Yucatan, from a railroad project.

Arrigo CIGNA made an emotional farewell considering that this would be his last attendance to the UIS congresses and General Assemblies.

Dr. Philipp HÄUSELMANN informed that the Swiss Speleological Federation will work on preparing a motion in the future to make the UIS apolitical and for all cavers of the world.

Finally, the UIS Past-President in a short conclusive speech highlighting the historical achievement of the UIS General Assembly by electing four (4) women to stand on the next UIS Bureau. He then declared the Assembly General of the 18th ICS, as closed at 13:05. He invited everybody to join around the UIS Flag to complete the closing ceremony with giving the UIS Flag to the 19th ICS organizers.

UIS General Assembly 2022 - Second Session - July 31

Amphitheatre Vanoise at Technolac Campus of Savoie-Mont Blanc University

18th International Congress of Speleology - Le Bourget-du-Lac, France

Arrigo CIGNA *(Italy), UIS Past President, during his emotional farewell, considering that this would be his last attendance to the UIS congresses and General Assemblies.*

MINUTES UIS BUREAU VIRTUAL MEETING

October 27, 2022

Union Internationale de Spéléologie
www.uis-speleo.org

By Johannes MATTES (Secretary General) - secretary@uis-speleo.org

Minutes & List of Actions/Decisions compiled by Gerard CAMPION (Adjunct Secretary)

ATTENDANCE

President: *Nadja ZUPAN HAJNA*
Vice-President of Administration: *Zdeněk MOTYČKA*
Vice-President of Operations: *Nivaldo COLZATO*
Secretary General: *Johannes MATTES*
Treasurer: *Mladen GARAŠIĆ*
Adjunct Secretaries:
Bärbel VOGEL
Gerard CAMPION
Jose-Maria CALAFORRA
Marc MENTENS
Mario PARISE
Patricia SEISER
Nathalia Vanessa UASAPUD ENRÍQUEZ
Past-Presidents:
Andy EAVIS (attended for items 1 & 2 only)
George VENI
Guests: *John GUNN (attended for items 1 & 2 only)*

1) Opening Session - President welcoming introduction/Approval of Agenda. *(N. Zupan Hajna)*

The UIS President opened the meeting by welcoming bureau members commenting that it was good to see everybody since the last meeting in July at the ICS. The agenda was formally approved.

2) White Paper on Responsible Speleology, International Association for Promoting Geoethics (IAPG). *(N. Zupan Hajna, J. Gunn)*

J. Gunn suggested that a statement should be released by the UIS and supported by other influential speleological bodies demonstrating strong disapproval of the contents of this White Paper. He added that it was poorly written and structured, superficial, over generalized and in places factually incorrect.

He felt the document would do nothing to advance the cause of responsible speleology and to the contrary only confuse some people or agencies who think it may have been produced by responsible, well-informed speleologists acting on behalf of the wider community.

G. Veni updated the bureau on the history of this document and how the IAPG had contacted him last year. Despite G. Veni's offer to work in unison with the IAPG, they preferred to provide their own independent version of 'responsible speleology.'

Bureau members in general voiced their concern about this paper agreeing that the speleological community already have a code of ethics reference, UIS-IUCN Guidelines for Cave & Karst Protection. JM. Calaforra & M. Parise said they would be happy to collaborate with J. Gunn on a statement.

B. Vogel recounted how she also had been contacted by the task group leader in the past on other protection/conservation matters that had led to a negative response. M. Praise suggested that a copy of the statement once completed, should be posted on the UIS website.

Following these new revelations G. Campion suggested B. Vogel could take the statement back to the European Cave Protection Commission (ECPC) for consideration/agreement.

DECISION 1: UIS Bureau agreed a statement should be released.

ACTION 1: G. Veni to send his comments on the previous draft paper to J. Gunn

ACTION 2: J. Gunn to revise the statement following discussions in this meeting and circulate to bureau members.

ACTION 3: J. Gunn to contact International Show Caves Association (ISCA) and the IUCN WCPA Geoheritage Specialist Group to obtain their view/agreement to also be signatories to the statement.

ACTION 4: B. Vogel to seek the approval of the ECPC re the statement.

3) Review Action Items and Decisions of previous UIS Bureau Meeting (2022) – Decisions to be made on follow up un-accomplished actions.

a. J. Mattes reported that he had completed the task of updating the UIS website re delegate information, member countries and their organizations/affiliations. Proceedings and books also updated on website.

N. Colzato suggested that posts could be improved and made more colorful by adding photos and he reported that the short narratives introducing the new bureau members individually were to be included in the next bulletin.

b. Cave-inspired music database (request by Fadi Nader/David Brison). J. Mattes explained that a request to the UIS had been made to store/archive this private collection somewhere. Various ideas were discussed. Z. MOTYČKA,a suggested the collection could be adopted by the Art Commission. www.caveinspiredmusic.com

ACTION 5: Z.Motycka to approach Art Commission to seek their approval.

a. On-going call for speleological event support.

Z. Motycka had already launched a new call and J. Mattes will collate requests as he receives them and consult bureau members project by project.

b. Members of the Advisory Committee.

J. Mattes confirmed names of the Advisory Committee who have agreed to serve for the period 2022–2025 as follows: Pavel BOSÁK, Andrew EAVIS, José Ayrton LABEGALINI, Friedrich OEDL, Paul W. WILLIAMS, Kyung Sik WOO.

4) UIS Bureau internal functioning

a. Collaboration between Secretary General and Adjunct Secretaries.

J. Mattes stated that the responsibilities of General Secretary

included many tasks and to make his job more effective asked adjunct secretaries for support with tasks like minute recording etc.

DECISION 2: Adjunct secretaries will assist General Secretary in various administrative tasks.

b. Reporting of Adjunct Secretaries on their individual projects/goals.

i. José-Maria Calaforra stated how he would like to continue his interest in cave and karst protection working with other members of the bureau who also had expertise in this area. He had also developed positive relationships with ISCA on protection issues and wanted to foster these relations even further.

ii. Gerard Campion was interested in the relationship between the regional bodies and the UIS and how these could be improved. He was involved in the Speleo Medit project and wanted more countries to consider membership of UIS and regional bodies, eg. Malta. He offered to help bolster struggling commissions. N. Zupan Hajna said this would require working with Z. Motycka on engaging commissions more effectively.

iii. Marc Mentens wants to continue his work in the education and training of cavers who might not otherwise get a chance to become involved in speleology. His ideas include getting expeditions who visit under-developed countries to leave behind safe and tested equipment that could be used by local people to develop caving skills. He would like to develop a charter to this end. Universities could be approached to provide sponsorship opportunities. He asked about UIS providing funding. Z. MOTYČKA, said expeditions could apply through normal process. M. Garasic made reference to the success of Euro Speleo Projects (ESP) in the European Federation of Speleology (FSE) to support groups.

iv. Mario Parise wanted to offer his experience in cave and karst protection work to the UIS working collaboratively with M. Parise, J. M. Calaforra and B. Vogel. He has been involved in helping countries develop Geo-Parks and wanted to spread the message of the UIS. He could help stimulate struggling commissions and try and persaude young people to develop commissions in areas they were interested in. Z. Motycka commented on how difficult it was sometimes to get any response from commission leads. N. Colzato said it would be good to improve the quality of commission reports by including images.

v. Patricia Seiser raised the issue of making the speleological community more aware of commissions and how to get students involved. She felt the UIS policy and procedures around organising congresses might need reviewing, commenting on the confusing signage in Savoie. Currently working with G. Veni and B. Vogel on a international ban on the trade of speleothems, artefacts etc that will be submitted to UNESCO. Interested in the concept of wilderness and caves as a long term project.

vi. Nathalia Vanessa Uasapud Enríquez raised the issue of language usage in the UIS, there are many spanish speakers for example who will not speak English. Working with/alongside Quarry and Mining companies is important and in the process not alienating them, more a question of educating them. N. Colzato pointed out that UIS have guidelines that G. Veni is busy getting translated into many languages. N. Colzato will put these into a UIS template.

vii. Bärbel Vogel is involved in many working groups and enthusiastic about promoting the cave animal of the year theme. A colleague from India at the ICS agreed to preside over a new biology commission but to date no individuals have volunteered to join. Important work is required on GEO7 10,000 words document. The United Nations Environment Programme (UNEP) is working towards the 7th Global Environmental Outlook (GEO7). Ferdinando Didonna attended the first meeting but more volunteers/help is needed. https://www.unep.org/global-environment-outlook/geo-7/geo-7-process

To conclude this section, it was stated that a report from the 18th ICS organisers has not yet been received.

DECISION 3: UIS Bureau to request report from 18th ICS organisers.

ACTION 6: J. Mattes to draft an official letter to ICS organisers to be signed by N. Zupan Hajna.

5) UIS Relationships with Regional Organization and Countries.

a. Member country: Mongolia.

New contact required.

ACTION 7: G.Veni to send to J. Mattes details of possible contacts in countries near Mongolia who might be able to assist.

b. Membership request: Singapore

(N. Zupan Hajna, G. Veni)

DECISION 4: Singapore needs to submit an official request.

ACTION 8: J. Mattes to contact Singapore delegate.

c.Request of the "Confederación de Espeleología y Cañones (CEC)" *(Spain)* *(J. Mattes)*

DECISION 5: Bureau agreed no action was needed as this was a domestic issue for Spain to solve regarding representation to the UIS.

6) Information on endangered karst features on UIS website and establishment of ad-hoc working-group. *(N. Zupan Hajna)*

(This item was dealt with before item 4 but for simplicity it is listed here chronologically).

N. Zupan Hajna presented the idea of a list of endangered karst and cave features on the UIS website and a working group to address this issue, since B. Vogel had made a motion on the reports of national delegates on destroyed caves a at the GAM in Savoie. It would be designed to appraise the status of karst worldwide. It would start with a list of endangered features from each delegate.

A questionnaire would be produced for delegates to get them involved. Presidents of appropriate commissions would also be involved (eg. Commission on Protection of Caves and Karst) as well as presidents and chairpersons, regional bodies and of other relevant groups.

N. Colzato could announce this in the new Bulletin.

DECISION 6: Bureau agreed to unanimously support this idea.

ACTION 9: B. Vogel to lead on this group with assistance from J. M. Calaforra, M. Parise, N. V. Uasapud Enriquez, initially.

7) Closing of the International Year of Karst and Caves (IYCK). *(Z. Motyčka)*

Around 800 reports on events have been posted. The IYCK website will expire. The legacy of IYCK will be;

1) The establishment of a working group/commission for endangered karst features as stated in item 6.

2) The transfer of the treasury in Slovenia to Croatia member now that M. Garasic has been elected at UIS treasurer.

3) Support from the Slovenian National Commission for UNESCO, to launch a project for UNESCO Caves and Karst Day. Verbal support also came from the Canadian National Commission. N. Zupan Hajna will lobby several ministries of the interior to get the Slovenian government to support the project, since Slovenia is a "classic karst area"; this could have many positive effects for the country. When the process begins with Slovenia, the call for support will be extended to other UNESCO National Commissions.

ACTION 10: In January 2023, G. Veni will begin writing a report summarizing the results of the IYCK for publication in the International Journal of Speleology.

ACTION 11: N. Zupan Hajna will continue to seek support for UNESCO Day of Caves and Karst on September 13.

8) Attendance to future speleology events *(N. Zupan Hajna, G. Veni)*

UNESCO groundwater summit side event **"Karst Aquifers"** sponsored by Republic of Slovenia is scheduled for 6th December. It will be of 60 minutes duration and there will be four speakers, A. Bizjak (Republic of Slovenia representative), N. Zupan Hajna, G. Veni and Ros Fatihah Muhammad from Malaysia.

A Question and Answer session will follow. There is still time to register if individuals want to attend.

9) Venue and date of the next UIS Bureau Meeting in Brazil *(N. Colzato)*

N. Colzato thanked the bureau for allowing Brazil to host the ICS. He has sent a draft program that can be modified to suit UIS attendees. To help reduce costs for the organisers only the executive board will visit Belo Horizonte. The Bureau will arrive and stay in Curitiba.

J. Mattes asked if bureau meetings could be half day in duration rather than a full day.

N. Zupan Hajna said this may be possible depending upon the size of the business agenda.

DECISION 7: UIS Bureau decided to support the draft program but acknowledge that there will be some modifications as arrangements continue to evolve.

10) Any other business

B. Vogel reported on the ESA Zoom meeting, where the space agency provides financial support to non-governmental organizations, so the collaboration will be important. The European Environment Agency has no data on caves. She also reminded the members of the 4th International Planetary Conference in Lanzarote in May 2023, which UIS supported.

J. M. Calaforra participates in the conference.

N. Zupan Hajna participates in the organization of the conference as President of the UIS and as a member of the ESA PC Topical Team.

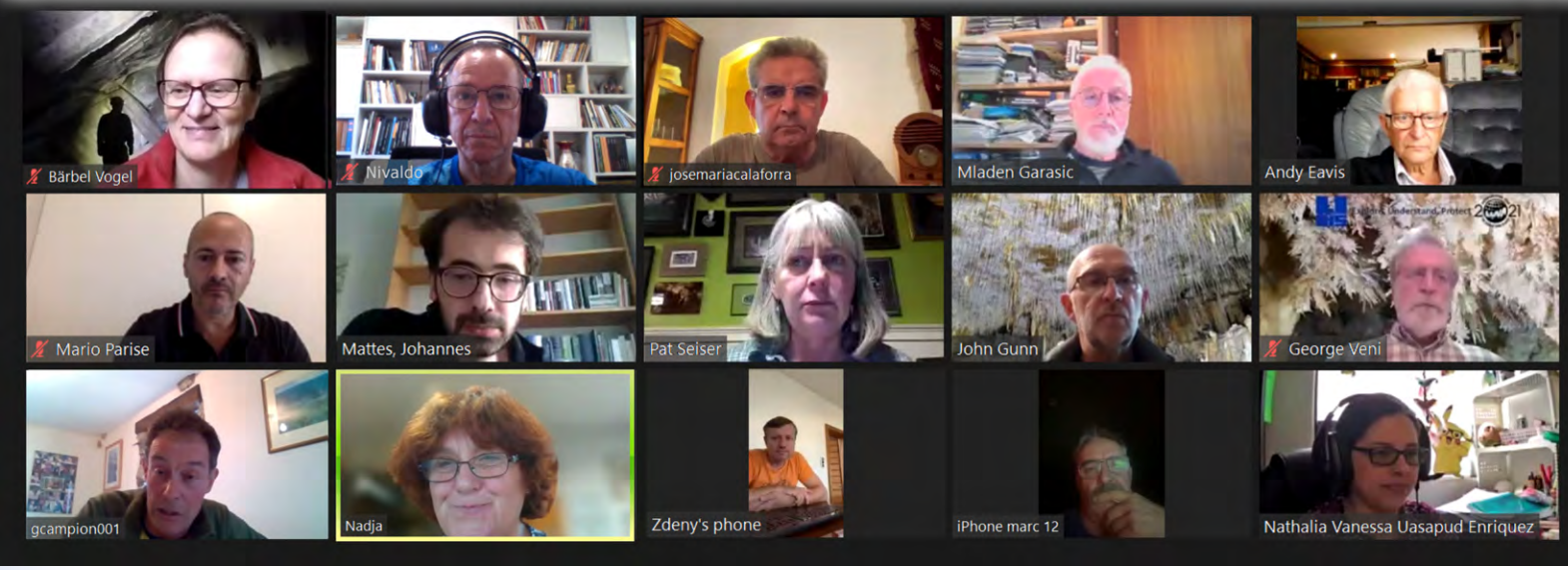
ACTION 12: J. M. Calaforra to work with B. Vogel on ideas for UIS to get support.

11) Closing Session *(President)*

N. Zupan Hajna closed the meeting and thanked all participants for their attendance and contributions.

12) Date and time of next meeting to be decided.

PARTICIPANTS OF THE UIS BUREAU VIRTUAL MEETING – OCTOBER 27, 2022



IN MEMORIAM

PINDI SETIAWAN

Pioneer of rock art in Indonesia

Indonesia, 24.11.1965 / 09.09.2022

by Jean-Pierre Bartholeyns (Belgium)
President of the UIS Cave and Karst Protection Commission
jp.bartholeyns@gmail.com

Dr. Pindi Setiawan, Founder and Former Advisory Board of the Indonesian Speleological Society (ISS), President of the Federation of Indonesian Speleological Activities (FINSPAC) (2017-2022) and Indonesian Delegate to the UIS left us on the morning of September 9, 2022 due to heart failure at the age of 57.

Pindi Setiawan was a researcher and visual communication expert from the Bandung Institute of Technology (ITB). He was known as the lecturer who discovered the world's oldest cave paintings of human handprints in Lubang Jeriji Saleh Cave in Sangkulirang-Mangkalihat Karst Region - East Kalimatan - Borneo - Indonesia. It is dated at 40,000 years!

Dr. Ir. Pindi Setiawan distinguished himself by the discovery of very old cave paintings in several sites. It's this reason which earned him his nickname of the inventor of 40,000-year-old rock images. In recognition of his groundbreaking research, he and his team received the Achmad Bakrie Prize in August 2022

It all started in 1994 with the discovery of numerous rock paintings in Goa Tewet. With the discovery of four additional sites in 1995, his research marked a real turning point because he sincerely believed that his discoveries were proof that there was a missing "culture" in the history of human civilization. He had remained relatively discreet until then about his work and his discoveries. Pindi talked about it to young politicians and potential regional leaders. While several asked him if the limestone in the region was exploitable, only one told him that he wanted to protect the area. It was then that he became aware of the desirability of and interest in limestone regions by cement manufacturers and the threat of quarrying that he was going to face.

While helping local residents identify and map the prehistoric relics of Sangkulirang, Pindi Setiawan began to exercise caution in publicly conveying information about the Sangkulirang-Mangkalihat karst region and especially the sites that held prehistoric relics. Indeed, it was feared that if such information was widely known, the area would be completely destroyed by extractive activities before conservation measures were taken.

Dr. Pindi Setiawan (right) *on his election in July 2017 as the new President with Dr. Robby Ko King Tjoen († 20/06/2022), the founding president of the Federation of Indonesian Speleological Activities/Indonesian Speleological Society.*

Although a dedicated researcher, Setiawan Pindi has also shown a combative will and developed various strategies to achieve his goals: how can we preserve these unique millennial treasures for as long as possible and protect them from the possibilities of extraction that can occur in this karst area?

Since then, the Provincial Government of East Kalimantan has taken the preservation of the sites very seriously and have established a development plan for the Sangkulirang-Mangkalihat region. This is associated with Dr. Ir. Setiawan, a specialist in creative culture and development of eco-tourism in Indonesia and the discoverer of the cave paintings that led to the eco-tourism efforts. These cave paintings are now the attraction of Goa (cave) Tewet and other Sangkulirang-Mangkalihat Karst sites in Borneo.

Dr. Ir. Pindi Setiawan therefore deserves the highest honors for having been able to protect, in spite of all other interests, this area of historical importance to humanity. As a member of the Sangkulirang Karst Commission of the Indonesian Ministry of Education and Culture for World Heritage, he worked to ensure that these sites were classified as such.

Dr. Ir. Setiawan has also played an important role with the Provincial Government of East Kalimantan in the development of tourism in the karst region of Sangkulirang-Mangkalihat whose very exotic natural conditions are conducive to the organization of nature-oriented special interest trips.

For his dedication to research, he and his team received the Ahmad Bakrie Prize in August 2022.

PINDI SETIAWAN © HTTPS://WWW.SCI.NEWS/

LUBANG JERIJI SALÉH, A LIMESTONE CAVE IN EAST KALIMANTAN, INDONESIAN BORNEO: *A rock painting of a wild bovid dated to at least 40,000 years ago was discovered and studied by Pindi Setiawan.*

© PINDI SETIAWAN © HTTPS://WWW.SATUMEJANEWS.ID/

Pindi Setiawan researching a cave paintings in Borneo.

© HTTPS://WWW.BRADSHAWFOUNDATION.COM/

LIMESTONE MOUNTAINS IN EAST KALIMANTAN, BORNEO: *The Indonesian region where millennial cave paintings were found and researched by Pindi Setiawan.*

PINDI SETIAWAN © HTTPS://THEWIRE.IN/

MULBERRY-COLOURED HAND STENCILS AT LIANG TÉWÉT IN EAST KALIMANTAN, INDONESIA: *Some hand stencils have internal decorations and are interlinked by tree-like motifs.*

IN MEMORIAM

YAVOR SHOPOV

Bulgaria, 1962-2022

by Bulgarian Federation of Speleology
https://speleo-bg.org/en/news-en/bg-news/
bfs @ speleo-bg.org

A sad day for Bulgarian speleology

On November 11, 2022, on the way to the National Forum of Speleology (Dryanovo, Bulgaria, November 11-13), of which he was the main organizer, in a car accident, we lost the speleologist, scientist, researcher, and friend Associate Professor Dr. Yavor Shopov.

Yavor was active caver since 1980, when he finished caving course in "Iskar" Speleo club, Sofia, Bulgaria. Then he was active member of the club from 1981 to 1988. Yavor founded and led the University Section of Speleology at Sofia University St. "Kliment Ohridski". He was an organizer and speaker at numerous international and national scientific forums on speleology, and author of valuable scientific publications.

Some of his many achievements and responsibilities during the years included:

- *Chairman of the Bulgarian Federation of Speleology from 2017 to 2022,*
- *President of the Commission on Physical Chemistry and Hydrogeology of Karst of the International Union of Speleology since 1993;*
- *Head of University Centre for Space Research and Technologies of Sofia University, Bulgaria;*
- *He had a Ph.D. in astrophysics and stellar physics. His main fields of research were related to applied and fundamental research in space science and solar-terrestrial physics, design and development of optical and spectral equipment for photographic observations and photometry in different regions of the spectrum for a payload of satellites, UAV's or ROV's;*
- *He worked on development of effective techniques and equipment for remote location of caves on the Moon and Mars for their human exploration and potential inhabiting;*
- *He was the leader of the International Program on "Remote Location of Caves" (RCL) of International Union of Speleology (UIS);*
- *In 2012, the National Geographic Channel made a documentary movie about some of his scientific research;*
- *He was a Bulgarian representative in the Space Surveillance and Tracking (SST) Expert Group of the European Commission.*
- *He has published more than 100 papers in reputed journals and has been serving as an editorial board member of repute.*

We have lost an ever-seeking mind that saw the world through the eyes of a knowledgeable researcher.

Sincerely grieving!
Bulgarian Federation of Speleology

May 2017: *Yavor talking at the 3rd International Conference and Exhibition on Satellite & Space Missions, Barcelona, Spain.*

UIS PRESIDENT'S MESSAGE

Dear Bulgarian Speleologists,

I am deeply saddened by the passing of Yavor Shopov. He was a great person, caver, and cave scientist. The first time we met was in 1991 in Canada at McMaster University, where he was working on using laser beams to detect seasonal cycles in speleothems. And the last time we met was at the 18th International Congress of Speleology in France where he presented his scientific work and work within the UIS Commission on Physical Chemistry and Hydrogeology of the Karst, of which he was an enthusiastic leader for a long time, as well he also made an offer to serve in the UIS Bureau.

Please accept my deepest condolences also on behalf of the International Union of Speleology. My deepest sympathy goes to his family and friends at this difficult time.

Sincerely,

Nadja Zupan Hajna
UIS President

Calendar of Events 2023 2024

If you are interested in any of the following events, contact them directly to learn if they are still planned as announced below

17th Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impacts of Karst
27-31 March 2023 *(Tampa, Florida, USA)*
http://www.sinkholeconference.com/

Speleophotocontest 2023
29-30 April, 1st May 2023 *(Vicopisano PI, Italy)*
https:/speleofotocontest.com

4th International Planetary Caves Conference
4-7 May 2023 *(Haria Municipality, Lanzarote, Spain)*
https://www.hou.usra.edu/meetings/4thcaves2023/

Clay Minerals Society Conference: Karst Trip and Session
20-25 May 2023 *(Austin, Texas, USA)*
https://cvent.utexas.edu/event/b8822615-d0e8-4730-89e4-2ef519cbeb5b/summary

14th International Symposium on Pseudokarst
24-27 May 2023 *(Sudetes, Poland)*
https://14pseudokarst.wonders4you.com/

US National Speleological Society Convention
26-30 June 2023 *(Elkins, West Virginia, USA)*
https://nss2023.caves.org

37th Brazilian Congress of Speleology / UIS Bureau Annual Meeting
26-29 July 2023 *(Curitiba, Brazil)*
https://www.cavernas.org.br/37-congresso-brasileiro-de-espeleologia/

5th International Meeting of Cavers in the Moravian Karst - *2nd Specialized Conference*
On the occasion of the 300th anniversary of the first descent of man into the Macocha Abyss, and 45th anniversary of the Czech Speleological Society foundation
September 20-24 2023 *(Sloup, Moravian Karst)*
z.motycka@mediform.cz

Geological Society of America Convention
15-18 October 2023 *(Pittsburgh, Pennsylvania, USA)*
https://community.geosociety.org/gsa2023/home

3rd International Congress of Karst, Speleology and Enhancement of Natural Heritage
2-5 November 2023 *(Rabat, Morocco)*
https://speleorabat23.sciencesconf.org/

9th US Geological Survey Karst Interest Group Workshop
22-24 October 2024 *(Nashville, Tennessee, USA)*
https:/www.usgs.gov/kig-workshop

19th International Congress of Speleology
20-27 July 2025 *(Belo Horizonte, Minas Gerais, Brazil)*
https:/www.speleo2025.org

UIS BUREAU 2022/2025

President
Nadja ZUPAN HAJNA *(Slovenia)*
Vice-President of Administration
Zdeněk MOTYČKA *(Czech Republic)*
Vice-President of Operations
Nivaldo COLZATO *(Brazil)*
Secretary General
Johannes MATTES *(Austria)*
Treasurer
Mladen GARAŠIĆ *(Croatia)*
Adjunct Secretaries
José María CALAFORRA *(Spain)*
Gerard CAMPION *(UK)*
Marc MENTENS *(Belgium)*
Mario PARISE *(Italy)*
Patricia SEISER *(USA)*
Nathalia Vanessa UASAPUD ENRÍQUEZ *(Colombia)*
Bärbel VOGEL *(Germany)*

UIS Past-Presidents
Arrigo A. CIGNA *(Italy) - 1973-1981*
Derek C. FORD *(Canada) - 1986-1989*
Paolo FORTI *(Italy) - 1993-1997*
Julia Mary JAMES *(Australia) - 1997-2001*
José Ayrton LABEGALINI *(Brazil) - 2001-2005*
Andrew EAVIS *(United Kingdom) - 2005-2013*
Kyung Sik WOO *(Republic of Korea) - 2013-2017*
George VENI *(USA) - 2017-2022*

UIS BUREAU 2022/2025 in Le Bourget-du-Lac, France, on July 31, 2022.

LEFT TO RIGHT: **José María CALAFORRA** *(Adjunct Secretary/Spain);* **Patricia SEISER** *(Adjunct Secretary/USA);* **Mario PARISE** *(Adjunct Secretary/Italy);* **Johannes MATTES** *(Secretary General/Austria);* **Mladen GARAŠIĆ** *(Treasurer/Croatia);* **Gerard CHAMPION** *(Adjunct Secretary/UK);* **Zdeněk MOTYČKA** *(Vice-President of Administration/Czech Republic);* **Nadja ZUPAN HAJNA** *(President/Slovenia);* **Bärbel VOGEL** *(Adjunct Secretary/Germany);* **Nivaldo COLZATO** *(Vice-President of Operations/Brazil);* **Nathalia Vanessa UASAPUD ENRÍQUEZ** *(Adjunct Secretary/Colombia), and* **Marc MENTENS** *(Adjunct Secretary/Philippines)*

UIS COMMISSIONS and WORKING GROUPS

Union Internationale de Spéléologie

Commissions and Working Groups are where UIS actual speleological work is done. Anyone who wants to contribute is encouraged to collaborate in the work of a commission under the coordination of its president directly.
Their contact details are linked to the person's name. Commission Presidents who have web pages describing their own commission are encouraged to email the UIS Website Manager to have their information linked to this document.

• Archeology and Paleontology in Caves Commission

Commission pour l'archéologie et la paléontologie dans les grottes

Web: https://faculty.jsd.claremont.edu/dmcfarlane/UIS/
President: Donald McFARLANE *(USA)* - dmcfarlane@keckscl.claremont.edu
Vice President: Natalie UOMINI *(UK)* - traduck@gmail.com

• Artificial Cavities Commission

Commission des cavités artificielles

Web: https://www.artificialcavities.wordpress.com
President: Mario PARISE *(Italy)* - m.parise@ba.irpi.cnr.it

• Arts and Letters Commission

Commission des arts et des lettres

President: Taraneh KHALEGHI *(Austria)* - tk.khaleghi@hotmail.com

• Bibliography Commission

Commission de bibliographie

Web: https://wiki.grottocenter.org/wiki/GrottoCenter:Fr/bbs
President: Patrick DERIAZ *(Switzerland)* - patrick@ssslib.ch
Secretary: Frédéric URIEN *(France)* - president@wikicaves.org

• Biology Commission

Commission de biologie

President: Shirish MANCHI *(India)* - ediblenest@gmail.com

• Cave Diving Commission

Commission de la plongée souterraine

Web: https://cdcuis.wordpress.com/
President: Rodrigo SEVERO *(Brazil)* - rsev@pm.me
Vice-President: Philippe BRUNET *(France)* - ph.brunet@free.fr
Secretary: Uroš AKSAMOVIĆ *(Serbia)* - ypow@sob.rs

• Cave Mineralogy Commission

Commission pour la minéralogie dans les grottes

Web: https://caveminerals.rc.usf.edu/about
President: Bogdan P. ONAC *(USA/Romania)* - bonac@usf.edu

• Cave Rescue Commission

Commission de spéléo-secours

President: Gyula HEGEDŰS *(Hungary)* - hegedusgyula@t-online.hu

• Education Commission

Commission de l'enseignement spéléologique

President: András HEGEDŰS *(France)* - hegedusposta@gmail.com

• Glacier, Firn, and Ice Caves Commission

Contact information will be published soon.

UIS COMMISSIONS and WORKING GROUPS

• History of Speleology Commission

Commission d'histoire de la spéléologie

President: Bernard CHIROL *(France)* - bearchirol@orange.fr
Vice-President: Friedhart KNOLLE *(Germany)* - fknolle@t-online.de

• Informatics Commission

Commission pour l'informatique

Web: https://www.uisic.uis-speleo.org/
President: vacant - apply here *(see also page 40 of this Bulletin)*
Vice-President: Mike LAKE (*Australia)* - Mike.Lake@uts.edu.au
Past-President 1986-2022*:* Peter MATTHEWS *(Australia)* - matthews@melbpc.org.au

Sub-Commissions & Projects:

SUB-COMM: DATA EXCHANGE
Web: https://www.uisic.uis-speleo.org/exchange
Leader: Peter MATTHEWS *(Australia)*

SUB-COMM: KARSTLINK (LINKED DATA)
Web: https://www.uisic.uis-speleo.org/exchange/karstlink/index-en.html
Leader: Eric MADELAINE *(France)*

SUB-COMM: KARST DATA INTERCHANGE
Web: https://www.uisic.uis-speleo.org/exchange/kdi
Leader: Mike LAKE *(Australia)*

Project: UIS Data Sharing Guidelines.
Forum: https://www.uisic.uis-speleo.org/forum/viewforum.php?f=8
Leader: Jill ROWLING, Australia

SUB-COMM: MULTI-LINGUAL DICTIONARY
Web: https://www.uisic.uis-speleo.org/lexintro.html
Leader: Mladen GARAŠIĆ *(Croatia)*

Project: Cave & Karst Glossary
Web: https://www.uisic.uis-speleo.org/lexgloss.html
Leader: Peter MATTHEWS *(Australia)*

SUB-COMM: PUBLICATIONS EXCHANGE
Web: https://www.uisic.uis-speleo.org/publexch
Leader: Michele SIVELLI *(Italy)*

SUB-COMM: SURVEY AND MAPPING
Web: https://www.uisic.uis-speleo.org/wgsurmap.html
Leader: Philipp HÄUSELMANN *(Switzerland)*

Project: Mapping Symbols For Artificial Cavities
Web: https://www.uisic.uis-speleo.org/wgsurmap.html#artificial
Leader: Philipp HÄUSELMANN *(Switzerland)*

Project: T-LiDAR Cave Scanning
Web: https://www.uisic.uis-speleo.org/wgsurmap-lidar.html
Leader: Donald McFARLANE *(USA)*

SUB-COMM: UIS-WIKICAVES (GLOBAL CAVE & KARST DATA)
Web: https://www.uisic.uis-speleo.org/wikicaves
Web: https://docs.google.com/forms/d/1b7i340PNk5dQnAs-FLZalYUvAGIsrmD6YnNDkX1YI10/viewform
Leader: Didier BORG *(France)*

Project: GrottoCenter Protection Updates
Forum: https://www.uisic.uis-speleo.org/forum/viewforum.php?f=10
Leader: Didier BORG, France.

UIS COMMISSIONS and WORKING GROUPS

• Karst and Cave Protection Commission

Commission pour protection du karst et des grottes

Web: https://uis-speleo.org/index.php/karst-and-cave-protection-commission/
President: Jean-Pierre BARTHOLEYNS *(Belgium)* - *jp.bartholeyns@gmail.com*

• Karst Hydrogeology and Speleogenesis Commission

Commission pour l'hydrogéologie du karst et spéléogenie

Contact information will be published soon

• Long, Deep and Large Caves Commission

Commission des grandes cavités

Contact information will be published soon

• Materials and Techniques Commission

Commission de matériel et techniques

President: Mónica PONCE *(Mexico)* - *mpmexcaving@gmail.com*
Vice-President: Antonio LLUFRIU (UK) - *tonilluf@gmail.com*
Secretary: Dino MENDY (Argentina) - *dino_mendy@yahoo.com.ar*
Cuba Coordinator: Haydée GONZÁLEZ - *haydeegonzalez633@gmail.com*

• Physical Chemistry and Hydrogeology of Karst Commission

Commission de la physico-chimie et de l'hydrogéologie du karst

Contact information will be published soon

• Pseudokarst Commission

Commission du "Pseudokarst"

Web: https://www.pseudokarst.com/
President: Jan URBAN *(Poland)* - *urban@iop.krakow.pl*
Vice-President: Rudolf PAVUZA *(Austria)* - *rudolf.pavuza@nhm-vien.ac.at*
Secretary: Hartmut SIMMERT *(Germany)* - *hartmut.simmert@t-online.de*
1. Honorary President: Jiří KOPECKÝ *(Czech Republic)* - *kopecky@atlas.cz*

• Speleotherapy Commission

Commission de spéléothérapie

Contact information will be published soon
Web: https://www.speleotherapycommission.webgarden.com/
Honorary President: Svetozar DLUHOLUCKY *(Slovakia)*
President: Iuri SIMIONCA *(Romania)* - *simionca_iuri@yahoo.com*
Vice President: Svetozar DLUHOLUCKY *(Slovakia)* - *Past President*
Vice President: Ivan S. LEMKO *(Ukraine)*
For the complete list of members, please, refer to
http://uis-speleo.org/index.php/uis-commissions-and-working-groups/

• Volcanic Caves Commission

Commission des grottes volcaniques

Web: https://www.vulcanospeleology.org/
President: John BRUSH *(Australia)* - *JohnBrush@Bigpond.com*
Vice-President: Gregory MIDDLETON *(Australia)* - *ozspeleo@iinet.net.au*
Newsletter Editor: Ed WATERS *(United Kingdom)* - *speleoed@outlook.com*
Membership Officer: Paul ROWE *(New Zealand)* - *armchair.caver.nz@gmail.com*

Union Internationale de Spéléologie
www.uis-speleo.org

LIST OF MEMBER COUNTRIES

as reported by the UIS Treasurer

57 Members in December 2022

NEW MEMBER COUNTRIES

Approved by the UIS General Assembly at the 18th International Congress of Speleology SAVOIE TECHNOLAC, LE BOURGET-DU-LAC, FRANCE, JULY 23-31, 2022

Armenia, Cyprus, India, Libya*, Malaysia, and Morocco*, welcome to the UIS Family.

Argentina (2022)
Armenia (2023)
Australia (2024)
Austria (2022)
Belgium (2022)
Bosnia and Herzegovina (2022)
Brazil (2022)
Bulgaria (2022)
Canada (2022)
China (2021)
Colombia (2021)
Costa Rica (2022)
Croatia (2022)
Cuba (2024 and half for 2025)
Cyprus (2022)
Czech Republic (2022)
France (2021)
Germany (2022)
Greece (2021)
Hungary (2022)
India (2022)
Indonesia (2022)
Italy (2022)
Japan (2021)
Lebanon (2025)
UIS Bureau decision: no debt, not paying until next ICS (2025)
Lithuania (2021)
Luxembourg (2022)
Malaysia (2022)
Mexico (2022 and half for 2023)
Netherlands (2022)
Norway (2022)
Philippines (2022)
Poland (2022)
Portugal (2025)
Puerto Rico (2022)
Romania (2022)
Serbia (2025)
Slovakia (2022)
Slovenia (2022)
South Africa (2022)
South Korea (2023)
Spain (2023)
Sweden (2022)
Switzerland (2022)
Ukraine (2025)
UIS Bureau decision: due to war, not paying until next ICS (2025)
USA (2022)
Venezuela (2025)
UIS Bureau decision: no debt, not paying until next ICS (2025)
Vietnam (2022)

UIS MEMBERS WITH DEBTS FOR 2020 OR MORE (LAST PAYMENT)

Iran IR (2020)
Israel (2020)
Kyrgyzstan (2018)
***Libya** (first fee still to be payd)
Mongolia (2019)
UIS Bureau decision: UIS donation of 2 years membership dues
***Morocco** (first fee still to be payd)
New Zealand (2020)
Turkey (2020)
United Kingdom (2020)

Please indicate WHO is paying for your country - especially if there are two or more speleological associations in your country. The UIS Bureau can't select the payer for your country and we don't return money!!!

If you have a new treasurer or responsible person for payments, please send the new name and e-mail address to garasic.mladen@gmail.com.

We do not know who to contact in some countries or we do not have their proper address.

UPDATE your status now!

CONTACT UIS

UNION INTERNATIONALE DE SPÉLÉOLOGIE
www.uis-speleo.org
Titov trg 2, 6230 Postona, Slovenia

If there are any irregularities, or if you have not found your country in this list, please, ask the UIS Treasurer

FINANCE

ANNUAL CONTRIBUTIONS

By Mladen GARAŠIĆ (Croatia), *UIS Treasurerry* - garasic.mladen@gmail.com

Prof. Dr. Mladen GARAŠIĆ (Croatia), UIS Treasurer.

© KARST RESEARCH INSTITUTE - ZRC-SAZU

Headquarters of the Karst Research Institute in Postojna, Slovenia, where the offices of the UIS are located. In the detail, the bronze plaque with the emblem of the UIS affixed below the name of the institute.

The UIS General Assembly at the 18th International Congress of Speleology *(Le Bourget-du-Lac, France, on July 31, 2022)* approved the new amended fee categories of member countries, which are based on the number of speleologists in the national organization or organizations that represent the country to the UIS.

The new annual contributions from 2023 are as follows:

Category A: 2,000 speleologists or more ..... 480 Euros
Category B: at least 1,000 but fewer than 2,000 ..... 360 Euros
Category C: at least 500 but fewer than 1,000 ..... 240 Euros
Category D: at least 100 but fewer than 500 ..... 120 Euros
Category E: less than 100 ..... 60 Euros

If the fees are not paid for more than five years, the Member Country will lose its membership in the UIS.

The UIS Bureau may reduce or waive the fee of a Member Country if the Member Country makes a written request describing the reasons why it is having difficulties making its payments and how long those difficulties are expected to continue. All fee payments and related communications are conducted between the UIS Treasurer and the Member Countries.

UIS BANK ACCOUNT

Account name
Mednarodna speleološka zveza-UIS
Titov trg 2
6230 Postojna - Slovenia

Account Nº
IBAN SI56 1010 0003 7861 520

SWIFT Code: BAKOSI2X

Bank *(name and address)*
Intesa Sanpaolo Bank d.d.
Traška 2 - 6230 Postojna - Slovenia

Accepted Currencies:
EUR (Euros)

STATE OF UIS BANK ACCOUNT ON DECEMBER 23, 2022

EUR - Account balance = 36,952.44
USD - Account balance = 51,127.35

EDITOR'S DISCLOSURE

Before submitting articles, please, refer to the

Guide for Submitting and Publishing Articles in the UIS Bulletin

CLICK HERE TO DOWNLOAD THE FILE

UIS Bulletin, nor its editors are responsible for:

- misspellings
- wrongly written names
- incorrect articles
- typographical mistakes

Every effort possible has been made to keep all articles as close to the original version. In some cases, the editors review the structure in order to present the article in a clear and consistent manner and obvious errors are corrected if found.
We appreciate your understanding.

Should you have any question or comments, please send them to:

uisbulletin@uis-speleo.org

UIS BULLETIN

Union Internationale
de Spéléologie