International Year of Caves and Karst

A CALL TO ACTION

ALSO IN THIS ISSUE

• 18th International Symposium on Vulcanospeleology
• Innovation in Show Cave Management: The 2018 ISCA Congress
• Regulations of the France Habe Prize 2019
• Research on the 60 years of UIS history
• Cave rescue in Thailand 2018: details of the operation
• Minutes UIS Bureau Meeting 2018
• UIS Past President Andy Eavis (UK) is awarded in Malaysia

and much more ...
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Before submitting articles for the UIS Bulletin, please

CLICK HERE! Deadline for submissions for the next issue ( Nº 61-1): June 10, 2019

COVER PHOTO:
Through the International Year of Caves and Karst (IYCK), the UIS and its partners will show the world the beauty and importance of places like Puerto Rico’s Cueva Ventana, which looks over the Rio Grande de Arecibo and a spectacular mogote karst landscape. Photo by George Veni

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REMEMBER
SAVE A TREE: DO NOT PRINT IF UNNECESSARY
Editorial

FACING THE FUTURE WHILE LIVING THE PRESENT

By Efrain MERCADO (Puerto Rico)
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Speleology is more than a science, is a passion that evolves constantly in new ways, gathering forms to make the science closer to their advocates and to the overwhelming community of citizens than enjoy it. Visiting caves, exploring them, knowing their importance regarding surrounding ecosystems, the value asset they have for the water we all consume, the importance for agriculture, tourism and so many other things is a way to be aware of it. We face the future of caves and karst while living the present. Now is the moment to decide if we want to conserve the beauty, to protect and to commit to science in order to enhance the way we see caves now.

Caves and karst have been present in history. In the Taino culture of the Caribbean, the man itself comes out from a cave (Domínguez Cristóbal Carlos M., Acta Científica 21(1-3):81-83, 2007). The same happens with water, also in the Aztec culture in México. This means that the science we have passion for is related to many cultures around the world. But the real importance comes with the expansion of the science during the 1800’s. A massive block of information gathered from the subterranean world was available having a great impact to the way we think about caves and karst.

You as a citizen, a student, a caver, a scientist has the responsibility to perform as well as possible to learn, to disseminate, to protect and to conserve the natural wonders caves and karst represent worldwide. Too many communities depend on this. The more we know the more we can protect and conserve. UIS and its country members are working hard to reach everybody to disseminate in this present what could be affected in the future: caves and karst. The extraordinary idea originated by Dr. Kyung Sik Woo, former president of UIS and adopted by UIS during the 50th Anniversary in 2015 in Postojna, Slovenia, to celebrate year 2021 as the International Year of Caves and Karst (IYCK) is something, we all, must think about. Many countries and organizations have already adopted the project now. What about you, your organization and your country?

We are now facing a discussion of the future, just now, in our present. The conservation moment is now. The precise moment to decide what to protect or not is now. The future of the health of our speleological natural resources is now. The future seems distant. There are many actors and factors affecting what we have now, meaning that the future could be unpredictable if we did not do anything now. UIS and its member countries are advocated to explore, document, gather, inform, protect and conserve our caves and karst.

Read thru this issue of UIS Bulletin the efforts made, the perspectives, the people and the importance of facing the future while living the present. Be one of the heroes, be one of the futures. Be one with IYCK 2021!
The President’s Column

YOU ARE THE UIS

By Dr. George Veni (USA)
UIS President
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Increasingly, the UIS is called upon to participate and lead in international efforts that benefit speleology. For example, the last issue of the UIS Bulletin described how UIS is now involved with the United Nations (UN), assuring that caves and karst are now considered in the UN’s incredibly important Sustainable Development Goals.

In this issue are two articles on equally important activities. The report on page 6 discusses the UIS efforts to create an International Year of Caves and Karst and the report on page 10 discusses efforts to create internationally accepted standards on cave and karst research and management. Both of these projects can benefit from your help, even if you are not a scientist, and I urge you to read them both carefully. After you read them, I urge you to please help.

The karst of northern Greece is one of many areas studied by UIS-supported expeditions.

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

The purpose of the UIS, as stated in its Statutes, is to: promote fellowship between people in all countries who are interested in caves, karst, and related features and terrains... to develop all aspects of speleology (scientific, technical, cultural, sporting, social, and economic), and to promote the protection and management of the world’s speleological and karst heritage in ways conducive to sustainable development in all locations where caves or speleological activities occur.

While this purpose is easily stated, accomplishing it is a huge and constant effort that depends on all of us working together. But who is “us”? Who is the UIS?

Some think the UIS is cave scientists and managers, and yes, we have some of those. But their research and management would not be possible without the cave explorers who make the discoveries and maps which are the foundations of cave science and protection.

The UIS is writers, editors, publishers, photographers, and artists who record caves in words and images that inspire us all to make more discoveries and remind us of how important caves and karst are to study and protect. The UIS is also cave rescuers, who save us, and develop new methods and techniques to keep us safe.

I expect some of you are thinking “I don’t do anything so important. I just go caving with my club,” and you would be wrong. You welcome new cavers to your clubs. You teach them how to cave safely. You become their friends, delight and excite them with stories around campfires, and train them to become the cave explorers, rescuers, writers, photographers, scientists, and managers of tomorrow. You are also the UIS.

The UIS is the International Union of Speleology. What an incredibly powerful name!

International—everyone in the world!
Union—working together, and for what?
Speleology

While for many years most of us have been OK with just accepting that name, the time has come for all of us to live up to the responsibilities that name requires.
Also in this issue you will find several other reports on the activities of the UIS and its member countries. All of these efforts are the work of many and diverse people like you, coming together to support the goals of the UIS, and the UIS is working hard to support more of your activities.

Since the last UIS Bulletin, the UIS Bureau met at the EuroSpeleo Forum in Ebensee, Austria. The minutes of that meeting begin on page 52 and show how the Bureau is working to do more for speleology and to be more efficient in its work. While the UIS sponsored EuroSpeleo, we still thank the Organizing Committee for an excellent job in hosting us and especially in organizing that important conference which was attended by 691 speleologists from around the world.

The UIS Bureau is also proud to announce that we have recently sponsored the following events, which we expect will also be excellent and important to speleology:

• Casola2018 International Meeting of Caving, 1-4 November 2018, Casola Valsenio, Italy.
• 1st Meeting of Biospeleology of Minas Gerais, 2-4 November 2018, Brazil.
• International Cavers Meeting 2019, 25-28 April 2019, Urzulei, Sardinia, Italy.
• 3rd TransKarst Conference and meeting of the Asian Union of Speleology, 7-10 September 2019, Bohol, Philippines, which will include the 2019 UIS Bureau meeting.
• Maaras Expedition, Greece.

The Bureau also approved funds for equipment to assist a project of the UIS Glacier, Firn, and Ice Caves Commission.

To increase UIS efficiency as I mentioned above, the Bureau has updated the UIS Internal Regulations. The UIS General Assembly in 2017 approved the massively updated Statutes and Internal Regulations prepared by the Bureau to bring the UIS up-to-date with its legal responsibilities and to make administration of the Union simpler and clearer. That effort has proven successful. However, there were some changes proposed by the national delegates for the Internal Regulations that we did not have time to consider fully and promised to consider them by the next Bureau meeting. Most of those recommendations are now accepted and the most updated version of the Internal Regulations is now posted on the UIS website. The most notable changes are:

• Broadening the definition of Associated Speleological Organizations to include more regional organizations in the activities of the UIS; and
• Stating that the national organizations representing UIS member countries can use the UIS logo for events that follow the Code of Ethics and UIS principles. This simplifies things so the member countries no longer need permission for the logo and are encouraged to use it since they are members.

If you want to join the UIS in its efforts to explore, study, and protect caves around the world, please contact me at any time at gveni@nckri.org. There is a great deal of important work to do and the 12 members of the UIS Bureau can’t do it alone. We need and would greatly appreciate your help.

We are the UIS! Nearly 700 cavers gathered for the EuroSpeleo Forum 2018. Meetings like this are vital to the growth of speleology.
INTERNATIONAL YEAR OF CAVES AND KARST: A CALL TO ACTION

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

WHAT IS AN INTERNATIONAL YEAR?

International Years are typically organized under the auspices of the United Nations (UN) or the United Nations Education, Science, and Cultural Organization (UNESCO). Their primary purpose is to educate the public and celebrate important aspects of life, such as Indigenous Languages (2019) and Planet Earth (2008).

As the name implies, International Years are a series of events that are held around the world by international teams that include partners from non-governmental organizations, government agencies, businesses, and interested individuals. There is always at least one major event, plus many other activities that are held throughout the year in multiple countries.

One other typical thing about International Years occurs when the year is over. There is a great increase in appreciation for the year’s topic. This often appears as increases in funding, better regulations, protection of peoples and important areas, and new business opportunities, depending on the topic of the year.

WHY AN INTERNATIONAL YEAR OF CAVES AND KARST?

On 16 June 2015, Dr. Kyung Sik Woo, then President of the International Union of Speleology (UIS), made a declaration proposing 2021 as the International Year of Caves and Karst (IYCK) to be recognized by the UN and UNESCO. This declaration was supported strongly by a vote of UIS member countries.

The UIS, its member countries, organizational partners, and individual cave explorers, scientists, managers, and educators have done tremendous work over many decades to improve the world’s understanding and appreciation of caves and karst. However, despite all of our combined accomplishments, caves continue to be destroyed. Trash is still dumped underground. Karst aquifers are polluted. Many rare cave ecosystems are now endangered. Precious archaeological and paleontological materials in caves are still commonly lost and looted. And sadly, many government officials, educators, and even scientists and environmental managers do not understand caves and karst enough to prevent these tragedies, or even recognize that they are tragedies.

An IYCK is the next step to raise the level of understanding and respect for caves and karst as globally important physical, ecological, and cultural systems. A successful IYCK will lead to new caves opened for exploration, and more funds and other support for that exploration, as well as for research, management, and protection, at levels we’ve never seen before.

WHAT IS THE CURRENT STATUS?

Since Dr. Woo’s declaration, the UIS has gathered the support of most of its member countries, as well as the support of four countries, nine international organizations and 21 national organizations in 12 countries. I thank them for their joining this vital effort.

While it is clear we have broad support for the IYCK, it is also clear that we need more time. The UIS has always known that getting UN or UNESCO recognition would be difficult. It requires one of their member countries to submit the proposal created by UIS—outside organizations like UIS cannot make proposals to the UN or UNESCO. Also, for an IYCK in 2021, the proposal must be made and approved in 2019 and that does not seem likely. Therefore, UIS will continue to pursue support for 2021 but we are changing our strategy to assure success and are continuing ahead in three ways.

1) INTERNATIONAL YEAR OF CAVES AND KARST FOR 2021

The UIS has decided to conduct this important project on its own together with its partners in 2021, with or without UN or UNESCO recognition. Each UIS member country that voted to support the International Year agreed to organize events and programs in 2021 in their countries with the resources they have available. The UIS Bureau is asking everyone to begin to plan for that.
If the UN or UNESCO are not able to support us in 2021, nothing really changes for the member countries and our other partners. We can still celebrate the Year and hold our activities. In fact, in visiting with UN representatives a few months ago, they told me that if we can organize a successful International Year on our own, that would greatly increase our ability to get UN or UNESCO support in a future year (more on that below). So, in principle, nothing changes for UIS and its partners. We will hold the International Year and conduct the same events and activities.

2) INTERNATIONAL DAY

The UIS is collaborating with the International Show Caves Association to get UN or UNESCO recognition for an International Day. The exact name of the day is being determined but it would support the same goals as the IYCK, only recognized on one day that will likely be in early June.

While international years are more difficult to achieve, Spain plans to propose an International Day to UNESCO. The advantages are that the International Day will be celebrated each year on the selected day in perpetuity. Additionally, it will make it easier for the UN or UNESCO to recognize an International Year, if not in 2021, then in another year—perhaps in 2025.

3) INTERNATIONAL YEAR OF CAVES AND KARST FOR 2025

The UIS is talking to other countries about proposing 2025 or another year to the UN or UNESCO as the International Year of Caves and Karst. We are looking for our member countries and partners’ support too if this proposal is made and accepted. If you think your country may be willing to propose the International Year, and if you are willing to contact your government for UIS to get their support, please let me know!

Some of you may wonder how this affects you, and hopefully how you can help. When the UIS member countries voted on the IYCK, it was with the understanding that those countries voting to support the IYCK would also conduct IYCK activities. If you are interested in working on the IYCK, ask your UIS delegates on their status in organizing activities in your country.

If your country did not vote to support the IYCK in 2015, check with the leaders of your national organizations. Some countries did not vote, others were not members three years ago, and maybe others that were not ready to support the IYCK in 2015 may be are ready now. If not, you can still organize activities with your local clubs and regional organizations, our other partners, or with new partners you find.

As I write this report in the final days of 2018, the UIS IYCK Committee just met. We approved a structure to build the IYCK website and other social media. We are nearly finished creating an IYCK logo, and we are beginning to write materials and collect photos for the website, circulars, and other materials. We expect to have the website ready sometime in Spring 2019. We will announce it widely through the UIS Facebook page, messages to our delegates, commissions, and partners, and by messages they send.

A UIS CALL TO ACTION

As I wrote in my President’s Column, the UIS is the International Union of Speleology:

INTERNATIONAL - everyone in the world!
UNION - working together, and for what?
SPELEOLOGY

For the IYCK to succeed, I ask everyone who enjoys and cares for caves to join the UIS in creating IYCK events for your town, region, and country.

The UIS will not make your participation difficult or beyond your abilities. We recognize you represent diverse cultures, skills, and resources. Therefore, as you read the following guidance, please remember that we ask you to do what will be most successful for your culture, appropriate to your skills, and within the limits of your resources. No single group can do everything, but together we will reach people across the world.
THE IYCK WILL HAVE THREE MAJOR THEMES:

- Sharing Cave and Karst Knowledge: International Scientific Conferences and Public Exhibitions.
- Promoting the Value of World Heritage Caves and Karst.
- Sharing Cave and Karst Knowledge: Show Caves – Karst Tourism

Start thinking about the best way that your organizations can participate. Here are some examples for each theme of what your organization might be able to do.

SHARING CAVE AND KARST KNOWLEDGE: INTERNATIONAL SCIENTIFIC CONFERENCES AND PUBLIC EXHIBITIONS

The 18th International Congress of Speleology in Lyon, France, will be the major event for the IYCK, but any cave or karst conference can potentially be an official IYCK event too. This includes your annual conferences, sessions at other conferences, and symposia. Slovenia’s annual International Karstological School “Classical Karst” is already scheduled as an IYCK event. What about your annual workshops and courses? You can also organize special events of all types, demonstrating cave science and caving techniques, public lectures, visits to classrooms, showing cave videos, and giving interviews about the IYCK to newspapers, magazines, television, and other media. You are limited only by your imagination.

Remember, the main purpose of the IYCK is to educate the public so make sure to invite the public, non-caver scientists, land managers, politicians, and others who normally do not attend cave and karst events but would benefit from attending. And do not just invite them—give them special attention and support. Make it easy for them to attend, and also to participate in fun and interesting ways. The IYCK should educate, impress, and engage them!

PROMOTING THE VALUE OF WORLD HERITAGE CAVES AND KARST

Do you work with or are you located near a UNESCO World Heritage Site or Global Geopark that was established at least in part because of caves and karst? If so, let us know! We would love your help to tell those sites and parks about the IYCK. The UIS needs them to participate. We will reach out to them directly, but many times your personal connections may be better.

Also, maybe you don’t know what to do for the IYCK and they don’t know either, but together you can find many things to do. Maybe once a month throughout the year some people can enter the World Heritage Sites and Geoparks for free. Focus on the special cave and karst features there with education programs for adults and kids. Create public participation projects. For example, maybe some research would benefit from extra public help. The same may be true of management work from repairing a trail to cleaning trash from a cave or repairing speleothems. Remind the public that these World Heritage and Geopark sites have such high recognition because they are special, and how caves and karst add to that specialness.

SHARING CAVE AND KARST KNOWLEDGE: SHOW CAVES – KARST TOURISM

The International Show Caves Association and national show cave organizations will encourage their member show caves to do some special things for the IYCK. Like with the World Heritage sites and Geoparks, this can include free entry and many special programs. It is estimated that about 150 million tourists visit show caves each year. Show caves and cave and karst parks have the ability to reach the greatest numbers of people. We encourage them to do all that they can and for you, our members and other partners, to assist them wherever possible.

As you think about activities for the IYCK, think about partners to assist you with programs, advertising, costs, and raising funds to cover any costs. Partnership is also important in getting more people involved, educated, and interested in caves and karst. If you have ideas and support for how the UIS can better promote and conduct the IYCK, we welcome partnering more closely with you. If your country or national or international organization is not listed as supporting the IYCK and wants to join us, please let me know.

We ask you to watch for the IYCK website and social media, which will be the primary locations for information on the IYCK, and how to participate and show its importance to the world. We will post news
at these locations and encourage you to share your news and activities.

We are also in a delicate period. With this message we are asking that you begin thinking about what you can do to support the IYCK and begin some basic plans, but we ask you to not reach out to the public at this time. Because our message will reach across the world, our message and its appearance with the logo needs to be clear and consistent. Once the website is posted, you will have access to the logo and information to reach people in your communities and countries in a way where we send a unified message to the world.

**IN SUMMARY:**

1) Get involved! This is a once-in-a-lifetime chance to greatly improve understanding and appreciation of caves worldwide.

2) Begin thinking about activities you can do in your community, region, and country to support the IYCK.

3) Begin reaching out to potential partners for assistance. They do not need to be from the caving community!

4) Wait until the IYCK website is posted for access to the logo and other information before reaching out to the public.

5) Begin planning now! It will be 2021 faster than you think.

6) Please contact me (gveni@nckri.org) or other members of the UIS Bureau at any time if you need assistance or have questions.

With your help, together we will educate the world through the International Year and International Day about our precious caves and karst areas. Together, we can save the world’s caves and karst for the future.

**UIS COUNTRIES CURRENTLY SUPPORTING THE IYCK**

| Australia       | Austria       | Belgium      |
| Brazil         | Bulgaria      | China        |
| Costa Rica     | Croatia       | Czech Republic |
| France         | Germany       | Honduras     |
| Hungary        | Iran          | Israel       |
| Italy          | Japan         | Korea        |
| Kyrgyzstan     | Lebanon       | Lithuania    |
| Mexico         | Puerto Rico   | Romania      |
| Serbia         | Slovenia      | South Africa |
| Switzerland    | The Netherlands | Ukraine    |
| United Kingdom | United States |             |

**CURRENT SUPPORTERS OF THE INTERNATIONAL YEAR OF CAVES AND KARST**

**Supporting Countries:**

- Belgium
- Croatia
- Hungary
- Slovenia

**International Organizational Partners:**

- Bat Conservation International
- European Cave Protection Commission
- European Speleological Federation
- Fauna and Flora International
- International Association of Hydrogeologists, Karst Commission
- International Council for Science
- International Show Caves Association
- International Union of Geological Societies
- World Heritage Program of the International Union for the Conservation of Nature

**National Organizational Partners:**

- Belgium (Belgium Union of Speleology, Flemish Belgium Speleological Federation, Walloon Commission for the Study and Protection of Underground Sites)
- Brazil (Brazilian Speleological Society, National Council of the Atlantic Forest Biosphere Reserve)
- China (International Research Center on Karst)
- France (French Federation of Speleology, Geoparks Group of France)
- Germany (German Speleological Federation)
- Italy (Italian Speleological Society)
- Japan (Speleological Society of Japan)
- Kyrgyzstan (Foundation for the Protection and Exploration of Caves)
- Myanmar (Myanmar Cave Documentation Project)
- Slovenia (Karst Research Institute ZRC SAZU, Slovenian Speleological Association)
- Ukraine (Institute of Geological Sciences of the National Academy of Sciences of Ukraine, Ukrainian Speleological Association)
- USA (American Geosciences Institute, National Cave and Karst Research Institute, National Caves Association, National Speleological Society)
THE INTERNATIONAL STANDARDIZATION OF KARST RESEARCH AND MANAGEMENT

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

BEGINNINGS

Have you ever been on a caving expedition and discovered that other members of the team use different survey methods? In situations like these, everyone agrees to common standards so they can work together well and to easily understand and use each other’s results.

Standards for cave exploration, survey, rescue, research, and management are different around the world. For the most part, this hasn’t been much of a problem. We all find ways to collaborate. Also, as communication increases around the world through e-mail, the Internet, and greater numbers of international expeditions, we are increasingly using similar techniques.

The International Organization for Standardization (ISO) brings together experts to share knowledge and develop and publish standard methods on nearly everything that affects modern life: food production, manufacturing, engineering, construction, research, etc. While the ISO standards are created as voluntary, many countries and industries make them mandatory.

In February 2018, the Chinese representatives to ISO proposed the creation of a Technical Committee on Karst with the goal of:

**Standardization in the field of karst terminology, sustainable development of karst resources, environmental protection and management of karst environment, as well as investigation and assessment (including modeling methods and mapping of karst systems).**

While this may have seemed like a good idea at first, after many expert cavers and karst scientists around the world explored the details of the proposal, concerns and objections developed. The UIS took the lead in evaluating the ISO proposal and in the end wrote a letter with the International Show Caves Association (ISCA) recommending against the proposed committee. Our major concerns were:

1) Some of the standards they propose already exist formally, such as the show cave guidelines that were created by ISCA and UIS. There is no need to develop new guidelines. Also, standard karst terminology is well established; it has been published for decades in international geological dictionaries and text book glossaries.

2) Clarification was needed on several proposal goals. For example, the “mapping of karst systems” could be anything from geologically mapping the physical extent of karst areas, to hydrologic boundaries of karst aquifers, biological boundaries of karst ecosystems, and/or mapping the size, shape, and contents of caves.

3) The proposal was too ambitious. Many different subcommittees with distinct specialties would be needed to fulfill the proposal. The proposal needed more focus for a better chance that the committee could be successful.

ISO is organized in a manner similar to UIS. National standardization organizations from each country represent those countries to ISO. Other organizations, like UIS, have no formal voice in ISO. UIS and ISCA sent our letter to the ISO national organizations, both directly and through our national delegates. I thank them for their efforts. Where we reached those organizations in time, nearly all of them voted against the proposal with the hope that it could be improved. But in the end the proposal was approved by ISO.

CURRENT SITUATION AND HOW YOU CAN HELP

In November 2018, I visited our good friends in China who wrote the proposal for the ISO Technical Committee on Karst. They knew of my concerns and understood that UIS is not against them, but was hoping to improve the proposal and work of the committee.
As I write these words, the first meeting of the committee is tentatively planned for April 2019 in Guilin, China. While the Chinese organizers have asked for advice and assistance in planning for the meeting from UIS and the Karst Commission of the International Association of Hydrogeologists, involvement in the committee requires working through an ISO member country’s national organization.

There are two forms of involvement: membership through participating countries and observing countries. Both type of members can meet and discuss things as a committee, but only members of participating countries can vote. The UIS is working to find karst experts from the participating and observing countries, which currently are:

**Participating Members:**
- Austria
- Canada
- China
- Lithuania
- Portugal
- Russian Federation

**Observing Members:**
- Argentina
- Australia
- Bulgaria
- Czech Republic
- Finland
- France
- Germany
- Hungary
- India
- Indonesia
- Iran
- Italy
- Japan
- Latvia
- New Zealand
- Norway
- Poland
- Serbia
- Spain
- Tanzania
- Thailand
- United States

Because the UIS cannot be involved directly, UIS member countries need to get involved with their national ISO organizations to make sure that their best karst experts are present at the committee meetings. The experts will serve two roles:

1) They will do their best to make the standards the best possible because many countries will accept whatever ISO decides.

2) They will also serve to notify their countries if they disagree strongly with the standards to prevent them from being accepted. We hope for excellent standards from the committee, but if not, then the national organizations can vote “no,” and the standards created by the committee could be rejected.

Flow from this small karst spring is measured by a weir and other equipment. These are considered standard methods in many areas, but are they the best? Can they be improved? Answering questions like these is one of the tasks for the new ISO Technical Committee on Karst.

If you are from one of the above countries and want a cave or karst expert from your country to be involved in the Technical Committee on Karst, please coordinate first with your UIS national delegate to make sure you are working together with others in your country (go to [http://www.uis-speleo.org/](http://www.uis-speleo.org/), select “Contacts” and then select “Delegates”). Next, contact the ISO member organization in your country, listed at [https://www.iso.org/members.html](https://www.iso.org/members.html), and talk to them about how to include your karst expert on the committee. If your country is not listed above, contact your national ISO organization and encourage their involvement.

Remember, that standards for karst research and management are not necessarily a bad thing. Many parts of the world do not have karst experts and would benefit from good standards to help them. The important thing is if standards are developed, they must be good. At this time the committee organizers do not know who will serve on the committee, which makes it critical that the committee is made up of the world’s best karst experts to assure they produce the best standards possible.

For more information about the Technical Committee on Karst and to see if your country has become a participating or observing member since I wrote this report, visit [https://www.iso.org/committee/7099518.html](https://www.iso.org/committee/7099518.html). If you will be participating in the committee or have questions about the UIS activities involving the committee, please contact me at gveni@nckri.org. Thank you.
REPORT OF ACTIVITIES 2018

HISTORY OF SPELEOLOGY COMMISSION

By Bernard Chirol (France)
President - UIS History of Speleology Commission
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Around the world, cavers and speleologists are working in order to exhume the reports about the presence and the activities of humanity in caves.

The different meetings are good occasions to share these knowledges and to weave a good relationship between the colleagues. They are scientists trying as possible to transmit the best informations.

Here follow their reports but many others are to come during the next months.

Stephen Craven from South Africa
- Some thoughts about Adam Sedgwick (1785 – 1873).
  - An Apartheid Absurdity: Racial Segregation at Cango Cave.

Jasminsko Mulaomerovic from Bosnia Herzegovina
1. In Bosnia and Herzegovina, we had an international conference ALCADI in June, which has a history of the research of the karst during the Austro-Hungarian Empire.
2. The cave list (about 720 caves) in the southeastern part of Bosnia and Herzegovina, which was created in 1885, is completed, and it will hopefully come out next year as a book.
3. The investigation of the correspondence between E.A. Martel and J. Cvijic continued.

Arrigo Cigna from Italy
My main activity was the organization and follow up of the 3rd International Symposium of Speleology held last year in Varenna, Como Lake. Just few weeks ago the proceedings were available.

Vlado Božić from Croatia

SPELEOLOGICAL ACTIVITIES IN 2018
SHORT STATISTICAL REPORT

CAVES:
- Vila Rebar (Zagreb) - mapping an underground structure
- Veternica cave (Zagreb) - visit with young members (speleological course)
- Mandelaja pit (Oštarije) - visit with young members (speleological course), to - 70 m
- Tunnel Vidova gora (island Brač) - 8,6 km tunnel with many caverns, searching of caverns
- Crnopac (Velebit) - Dušmana peć cave, Tračerica pit, photographing
- St. Nedjelja cave (island Hvar) - Cave with ruins of a monastery, mapping, I slept in the cave
- Dachstein ice cave (Austria) - tourist visit
- Eisriesenvelt ice cave (Austria) - tourist visit
- Velebiška pit (Medvednica) - training to - 35 m
- Braćeve caves (Rakovica) - Photographing remains of a defence wall in the cave

EDUCATION AND ASSOCIATION:
- Exams for the vocation “speleologist” or caver (Zagreb) - as instructor
- Speleological course (Zagreb) - as lecturer and instructor
- Lectures: Short history of speleology in Croatia
and Cultural activities and art in speleology in Croatia (Eebesse) - Austria, EuroSpeleo Forum

- Fossiljada - annual association of old (fossil) cavers
- Workshop about speleophotography (Karlovac) - as pupil
- Meeting of speleologists of Croatia (Ogulin) - with two lectures: 150 godina speleološke fotografije u Hrvatskoj (150 years of the speleophotographs in Croatia) and Umjetnost u speleologiji u Hrvatskoj (Art in speleology in Croatia)
- Workshop about documentation in speleology - partly as pupil and partly as lecturer

**PUBLICATIONS PUBLISHED IN 2018:**

- Vrtlina - golema špilja velebitskog Podgorja (Vrtlina - The huge cave of the Velebit Podgorje). Senjski zbornik (The anthology of Senj), Senj, No 44, for 2017, p. 35-46
- Vladimir Redenšek – Izabrani članci (Vladimir Redenšek - chosen articles). Hrvatski planinar, Zagreb, br. 3, str. 143-144
- Kojina jama – meni najljepša (Kojina pit - to me the most beautiful). Cipelcug, Zagreb, HPD Željezničar, god 1, br. 1, str. 84-87
- Vladimir Redenšek: Izabrani članci (Vladimir Redenšek - chosen articles). Cipelcug, Zagreb, HPD Željezničar, god. 1, br. 1, str. 92-93
- HPD - Začetnik hrvatskog speleološkog katastra (Croatian mountaineering association - beginning of the Croatian speleological cadastre). Hrvatski planinar, Zagreb, br. 11, str. 486-490
- A history of speleology in Croatia. For the book about Proteus, but not accepted (too long)
- History of speleology in Croatia. For the book about Proteus
- Water problem on the island Brač (Croatia) - For Hrvatski planinar
- Old description of the Cetina Spring Cave (Croatia) - For Hrvatski planinar

In 2018 I became the Honorary Member of the Speleological Department of the Mountaineering club “Željezničar”.

**Johannes Mattes from Austria**

Most of my time, I worked on the organization of the Eurospeleo Forum in Ebensee and on my Biographical Lexicon of Speleology, which will come out in print in the first half of 2019. In addition, please find enclosed the list of my publications and oral presentations that were held or printed in 2018.

**PUBLICATIONS (2018):**

- J. Mattes, Wissenschaftspolitische Grenzverhandlungen. Zur Gründung der Lehrkanzel für Höhlenkunde an der Universität Wien (1929). In: J. Feichtinger,


ORAL PRESENTATIONS IN 2018 ON SPELEOLOGY/GEOLOGY/GEOGRAPHY:

• “Between Nature and Culture – Concepts of Knowledge and Space in Historical Cave Maps (1500-1900),” STS Lecture Series, York University, Toronto (3/2018)


• “Sciences de la Terre et culture du souterrain urbain à Vienne (1850-1930),” Ecole des Hautes Etudes, Paris (4/2018)


• “Doing Science, Creating boundaries - Discourses on Space and Identity in the Correspondence of the Geoscientist Jovan Cvijić,” 2nd International Congress of the Association of Borderland Studies, Vienna (7/2018)


• “Between handbooks & journals: speleology as a metadiscipline.” Eurospeleo Forum in Ebensee (8/2018)

• “Biographical Lexicon on speleology,” Working Group on History of Science, Department of History, University of Vienna, Vienna (10/2018)


• “Look Like an Earth Scientist - Thoughts on scientific self-depiction on the example of a photo album dedicated to Eduard Suess,” Conference of the International Commission on the History of Geosciences, Mexico City (11/2018)


HEGEDUS, Gyula from Hungary

Hungarian Speleological Society, H-1025 Budapest, Pusztaszeri u 35., Hungary
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SPELEOHISTORY OF HUNGARY
KEYWORDS
Hungarian, cave, karst, historical, organization

ABSTRACT

Hungary is 93.000 square km and 1.5 % of it is karst. Currently there are 4130 caves in the cave cadaster. 138 caves are longer than 200 meters and 37 caves are longer than 1 km and 97 caves are deeper than 50 meters. Some of them are known since prehistorical ages and were used for different purposes as living place, sacred site, refuge and later as show cave, cure cave, cave bath etc. First writing of a cave was in a Benedictine abbey founding letter in 1037 A.D.

First historical work with scientific aspect dated back in the year 1535. First speleological organization was established as the Speleological Committee within the framework of Hungarian Geological Society in 1910 and in 1926 Hungarian Cave Research Society became an autonomic organization. Current national speleological organization is Hungarian Speleological Society (HSS) since 1958.

It has approximately 400 members at the end of 2017. HSS had and has three different publications as the Barlangkutatas (Cave research) which was yearbook and now Karszt es Barlang (Karst and Cave) twice in a year and HSS Informations on two months basis. We have countable international activities both in organizational and research field.
CAVE AND KARST FOUNDATION

ABSTRACT
Karst and Cave Foundation was founded after political and economical transition in 1991 by Hungarian Speleological Society (HSS). The purposes of the Foundation are to help scientific research works and documentations, education, popularization activity of speleology and provide financial support for organizations and individuals. The support may be refundable and non-refundable. It is an NGO and independent of politics. The Foundation is directed by a five people Board, which is elected by General Assembly of HSS on four year basis. The Board makes its decisions independently, but reports annually for GA of HSS. The founding money was 10.000 EUR and the current stock of money is over 33.000 EUR. The Foundation received 314 applications and approved 178 for non-refundable support during past 25 years. They received altogether more than 39.000 EUR financial support. There were 13 applications for refundable aid and 5 were approved. The presentation presents the work of the Board, priorities during decision making and the results behind the numbers.

Franck Pearson from Great-Britain
(recently PhD in December 2018-congratulations to him)

Here are the history talks I have given on caves over the last couple of years (I’ve given many others on contemporary exploration):
• ‘Subliminal: Subterranean Sublime’ at the Anticipatory Materialisms Conference at Lancaster University. Paper given on the eighteenth century aesthetic concept of the sublime in relation to caves.
• ‘Cave Science: The Inception Horizon. Early Origins of Cave Science in the UK’ at 2017 BCRA Hidden Earth Conference.

Paper given on the eighteenth century chemists and their understanding of limestone solution.
• ‘Mountains and Rivers: 50 Years of Cave Exploration
At the beginning candles and torches were sufficient, but already in 1870 a fixed gaslight was installed. Due to the strong soot, the gas lighting was changed in 1890 into an electric lighting with its own generation of electricity. Further modernisations continued constantly. To reduce the lampenflora, the change to a modern LED lighting system was started in 2009 and finished in 2015.

Stephan Kempe revised the inscription history of many caves. Within the area of the former Holy Roman Empire of the German Nation (dissolved in 1806) some of the better-known ones are Einhornhöhle and Baumannshöhle (Harz Mountains, Germany), Drachenhöhle (Mixnitz, Austria), Sloup Cavern (Czech Republic), Postojnska jama (Adelsberger Grotte), Predjamski jama, and Vilenica jama (Slovenia).

Volpi and Schaffenrath published inscriptions from Imenski rov, the old passage in Postojnska jama (Slovenia). The oldest date given is 1213, taken to be the oldest dated cave inscription known. However, we have not been able to locate it, in spite of a detailed survey and documentation of all of the ca. 400 inscriptions in the passage.

The newly discovered text by Rumpf (1816) suggests that it was not located in the old passage but in front of it and that the site today is obliterated by show-cave construction. The main doubt, however, against the old age of the date is that it was written in Arabic numerals. These are stylistically identical – or at least very similar to – the numerals that were used in the inscriptions dating from the 16th and 17th century in the cave and throughout that time period.

During the 13th century all dates were exclusively written in Roman numerals, no date is known from the early 13th century written in Arabic numerals. Thus, we must conclude (and that applies to at least three more dates from Postojnska jama) that the date was either misread or even faked. Therefore, the inscription of Pfarrer Otto from Bruck an der Mur of 1387 in the Drachenhöhle at Mixnitz (Austria) must now be considered the oldest dated cave inscription within the defined area. It is written in Roman numerals: MCCCLXXXVII.

Over the whole period up to 2019, Michael K. Brust and several coauthors worked on the history of the Schlotten mine caves on the south-eastern flank of the Harz Mts. (Saxony-Anhalt, Germany). The historical copper shale mine excavations have cut into numerous large caves in gypsum and anhydrite known as ‘Schlotten’. The word is derived from the Early New High German meaning internal hollow formations allowing the drainage of water and already finds mention in 16th century literature. However, these quite spectacular gypsum caves have never aroused the interest of the wider public. Discovered through mining, they have always been only accessible via pit shafts and galleries and invariably considered to be part of the mine. But in a scientific sense they are deep phreatic and hypogene caves in a parent rock of anhydrite or gypsum, in their natural state filled with water and without an entrance.

They are unique geological outcrops in Zechstein (Upper Permian), large karst caves of rare character and particular beauty as well as cultural witnesses to historical mining. The miners used the ‘Schlotten’ for a long period of time to drain water from the mines (until the 18th century) and for economical reasons also to store unwanted spoil (until the 19th century). As the mine workings reached deeper levels, subsidence and flooding became more common and the intensity of the karst dissolution process increased. Problems of catastrophic proportions due to mine flooding were encountered in 1892 near Eisleben and in 1988 near Sangerhausen (both in Germany). The hydrological problems that confronted the copper shale mine excavations in the south-eastern Harz region are of geogenic origin.

The exploitable seams, which on average slope between 3° and 8°, are covered with a between 4 and 7 meter thick layer of limestone (‘Zechstein’) with the characteristics of a karst aquifer. Above this a 60 m thick layer of anhydrite or gypsum is found, in which the ‘Schlotten’ are formed, notably on geological faults. The relevance of the ‘Schlotten’ as a natural phenomenon was first appreciated in depth by Johann Carl Freiesleben (1774-1846). He described them scientifically in 1809 and campaigned emphatically for their preservation.

With regard to this, the ‘Wimmelburger Schlotten’ near Eisleben were surveyed and geologically mapped by Anton Erdmann (1782 - 1848). The plan and side elevation of the cave survey were reproduced in copperplate and are considered to be the oldest published depiction of a gypsum cave in Germany. From the mid 1970’s the ‘Schlotten’ became a subject of speleological research for a short period of time.

The abandoned projects have only recently been re-established. Two of the ‘Schlotten’ are accessible via the Mining Museum Wettelrode: the ‘Segen-Gottes-Schlote’ and the ‘Elisabethschächter Schlote’ near Sangerhausen. The ‘Wimmelburger Schlotten’ near Eisleben are the largest gypsum caves in Germany and to a certain extent accessible

**Nivaldo Colzato**  
from Brazil

A work of digitization of the first 38 issues of the UIS Bulletin which are not yet available on the UIS website is ongoing. These issues (from 1970 to 1993) will have the original design and format but will receive an index on the front page with the respective links for easy content search and will be made available on the UIS Website when the whole batch is ready.

**Bernard Chirol**  
from France

My 2018 was the occasion for me to go back to Cyprus in order to improve the knowledges about history of caving there. I also gave 6 lectures on both sides of the border in Nicosia to teach the history of caving, the history of women in caves and Cyprus caving. This happened in the two universities and a caving training was organized indoor for the students.

In Austria (Ebenau), welcomed by the Austrian colleagues in a perfect Congress for FSE, we had Bureau Meetings of the UIS and several communications about history. Two of them given by your servant about Women in caves (world history) and the loss of the Rhône-river in France.

An international workshop in Cuba, organized by our Cuban colleagues for their Society and the Latin America and the Caribbean Speleological Federation (FEALC) was the occasion to meet the Latin-American friends about the feminine speleology, a subject that I go on working about to publish a synthetic book before the world Congress of Lyon (2021). The web site will soon be ready for Lyon 2021.

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The 18th International Symposium on Vulcanospeleology (ISV) was held in the Lava Beds National Monument (LBNM) area of northern California, USA in July 2018. The symposium attracted more than 50 participants from 8 countries (USA, Australia, United Kingdom, Iceland, Italy, Japan, Puerto Rico and Switzerland).

The 18th ISV activities were focussed on Winema Lodge, a rustic privately-owned facility located about 13 kilometres from the LBNM entrance. The Lodge was where most participants stayed, where meals were served and where all the presentations and a meeting of the Commission on Volcanic Caves took place.

For the five full days of the ISV, the program structure was based on morning presentations followed by a simple buffet lunch and then a range of excursion options each afternoon to caves, other volcanic features and historic sites. In the evenings there were informal after-dinner presentations on a variety of cave-related topics.

The program was well organised, the presentations were interesting, the excursion options were numerous and the social activities were relaxed and thoroughly enjoyable.

That the symposium worked so well was due in no small measure to the hard work and organisational skills of Mary Rose, the Symposium Convenor. Mary made many of the arrangements herself, but she was ably assisted by members of the Redwood Grotto, who led trips and undertook many preparatory and behind-the-scenes tasks, and by several individuals who deserve particular mention. Peter Bosted stepped in at a late stage to organise the program of presentations, publish the abstracts and to organise the Symposium Proceedings. Ed Strausser operated and maintained all the audio-visual equipment. Bruce Rogers led entertaining and highly informa-

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Participants at the 18th International Symposium on Vulcanospeleology, California, USA.
tive trips to caves and other volcanic features every afternoon. A number of LBNM staff also helped by facilitating access to the area and to restricted-access caves and by leading field trips.

PRESENTATIONS

More than 20 presentations were made during the course of the symposium. They covered a broad range of interests, including the history, geology and exploration of the local lava caves, microbiology, cave formation processes, management and protection issues, exploration and documentation (with a focus on Hawaii and Vietnam), early human occupation and use of caves and an overview of the UIS. There were also two presentations concerning extra-terrestrial lava cave studies. Presentations about lava tubes on the Moon and on Mars have featured at previous ISVs, but as this appears to be a growing area of interest, perhaps the “I” in ISV should in future refer to Interplanetary.

Proceedings of the Symposium will soon be published on the Commission’s Website: www.vulcanospeleology.org.

MEETING OF COMMISSION ON VOLCANIC CAVES

A meeting of the Commission on Volcanic Caves was convened on the morning of 25 July. Most of the ISV participants attended.

The meeting confirmed the four existing office holders would continue in their respective positions:

Chairman: John Brush
Vice Chairman: Gregory Middleton
Newsletter Editor: Ed Waters
Web Master: Dirk Stoffels

Three resolutions were unanimously agreed to at the meeting:

The internationally-important values of lava caves in Iceland
To urge government agencies in Iceland to recognise the national and natural heritage values of lava caves and their features and to ensure that they are protected from degradation and permanent damage resulting from surface developments and unconstrained and unsympathetic public access or commercial activities.

19th International Symposium of Vulcanospeleology (ISV)
To accept an offer by the Gruppo Grotte Catania to host the 19th International Symposium of Vulcanospeleology at Catania, Sicily (Italy) at a date to be fixed in July 2020.

NB: It has since been decided to put back the date of the 19th ISV to September 2020 (exact dates 29 August to 5 September, 2020).

Vote of thanks to Convenor of 18th ISV
To thank Mary Rose and her team for organising an excellent symposium program that had a good balance of informative presentations, interesting field excursions and relaxed and enjoyable social activities.

FIELD EXCURSIONS

On each of the five excursion afternoons, at least three guided trips were offered, including a surface trip option. Participants also had the option of making their own trip arrangements to many of the features in the area.

Clinker-surface lava flow with rafted blocks, Hopkins Chocolate Cave.

ISV participants exploring Hercules Leg Cave, LBNM.
Most of the excursions were to sites within the LBNM, which lies on the northern flank of the Medicine Lake Volcano. This is a large shield volcano about 50 kilometres in diameter that has been active for about 500,000 years with the last eruption occurring about 1000 years ago. More than 800 caves have been recorded within the LBNM. About 20 caves are open to the general public and have formed paths leading to them and where necessary, have metal steps and walkways to facilitate safe access. Some of the public access caves are very impressive and most of them were visited during the symposium, either on a trip led by Bruce Rogers, or on a self-guided basis. Participants were also able to visit several restricted-access caves that contain permanent ice or have important biological, cultural or geological values.

The non-caving excursions included visits to surface volcanic features, bird watching sites around nearby Tule Lake, petroglyph sites of the Modoc People and historic sites dating back to the Second World War and to 19th century battles between the Modoc People and the US Army.

Pre-symposium excursions

**Medicine Lake volcano caving trip**
*Information supplied by Harry Marinakis*

This 3-day excursion was led by members of the Redwood Grotto and attracted seven participants. It was based in the small Californian town of McCloud near the base of 4322 metre Mt Shasta. Each day participants travelled about 70 kilometres to the north-east to explore a small area on the flank of the Medicine Lake Volcano that has received relatively little attention from cavers.

On the first day of the excursion, the group undertook a long and difficult hike down a collapse trench in a vain search for caves. On the second day, the group explored a lava flow close to a road and investigated several caves that had extensive accumulations of ice. On the final day, the group abseiled into a large cave that is known for its unusual features.

The pre-symposium excursion to the Medicine Lake volcano was exciting, rewarding, and very well organised.

**Rogue River rafting trip**
*Information supplied by Ann Bosted*

This excursion to the Rogue River area in south-western Oregon attracted ten participants. It was a commercial rafting trip for which all equipment, food and three guides were supplied by the rafting company.

The Rogue River is one of the most famous white-water rafting adventures in the American West. The excursion focussed on the most scenic part of the river where it meanders along a deep, forested valley.

Participants travelled about 60 kilometres down the river on rafts, in inflatable canoes and at times, by floating along in their buoyancy vests.
group successfully navigated through about 25 sets of the easier class II rapids, eleven of the more difficult class III rapids and three of the most challenging class IV rapids. Between the rapids, there were delightful quiet stretches that presented opportunities for observing abundant wildlife, including turtles, mergansers (a type of duck), golden eagles, osprey, turkey vultures, cormorants, mallard ducks and other riparian birds. Wildlife also featured on the short walks to hidden points of interest during the lunch stop each day.

At first glance this excursion appeared to have little to do with caves or caving. However, while floating along the river, at meal times and during the evenings, there were numerous conversations about cavers, caves, caving, cave trips, cave news and cave rumours.

Judging by the comments made by participants, the trip was a great success. It was well organised, the scenery and wildlife were fantastic and the food and wine were excellent.

**Crater Lake geological and historical excursion**  
*Information from Kirsty Mills*

Nine participants enjoyed a day trip outing from Winema Lodge, through southern Oregon and on to the Crater Lake National Park. In essence, it was a guided trip by mini bus that covered historical, cultural, hydrological and geological aspects of the area travelled.

Crater Lake lies in a crater that was formed about 8000 years ago after a large volcano (Mt Mazama) collapsed following a major eruption. Later eruptions formed subsidiary cones within the crater, such as is seen on Wizard Island. At nearly 600 metres deep, the lake is the deepest in the United States.

On the return journey, the group travelled past a partially reconstructed US Army camp where Native American leaders in the Modoc Wars of the 1870s were executed and buried, and through Modoc Point where it learnt about the historical and cultural implications of the ongoing adjudication to the Klamath Tribes’ treaty rights and the water issues.

Throughout the entire day the group was kept extremely well informed by Todd Kepple, Manager of the Klamath County Museum, and by David Grimes, a National Parks Ranger.

**SOCIAL ACTIVITIES**

In addition to the more serious meeting and presentation aspects of the Symposium, the program included a range of social activities, commencing on the first evening with a welcome party in the lounge area of Winema Lodge.

The welcome party kicked off with canapes and a good range of local wines and beer and was followed by a very enjoyable buffet meal.

Most participants stayed at Winema Lodge and, as it is located in a rural area remote from any restaurant, coffee shop or bar, there were ample opportunities for informal socialising. Especially at meal times.

One evening everyone gathered near the visitor centre of the Lava Beds National Monument for dinner and other activities. The festivities started in the late afternoon and continued with a huge BBQ feast provided by a catering company. As night fell, participants had opportunities to view the stars and planets through large telescopes set up by local enthusiasts and we were entertained with live music provided by two of the participants (John Tinsley and Bill Frantz).

On the final evening of the ISV, the farewell dinner was served in the outdoor lawn area at Winema Lodge. As the sun set, there were several brief speeches, presentations to the key organisers and a toast to Mary Rose before participants gravitated inside to escape marauding mosquitos. The farewell dinner was a fitting conclusion to a very successful and enjoyable Symposium.
UIS SUPPORTED THE MEETING

“125 YEARS OF DAS KARSTPHÄNOMEN”

Belgrade, Serbia, November 7 2018

By Jelena Ćalić
Secretary of the Board on Karst and Speleology - Serbian Academy of Sciences and Arts (SASA)
UIS Delegate of Serbia
j.calic@qi.sanu.ac.rs

UIS supported the meeting “125 years of Das Karstphänomen.”

The book which established karstology as a particular scientific discipline, “Das Karstphänomen” by Jovan Cvijić, was published in 1893 in “Arbeiten des Geographischen Institutes” in Vienna. The current year 2018 marks the 125th Anniversary of that significant publication. This jubilee was celebrated by the Serbian Academy of Sciences and Arts (SASA) and its Board on Karst and Speleology, with the scientific meeting “125 Years since Publication of Jovan Cvijić’s Das Karstphänomen.”

The meeting took place on 7th November 2018 in the central Great Hall of the Academy, in Belgrade, Capital of Serbia. Apart from the Board of Karst and Speleology SASA, the co-organizers were the Serbian...
Society of Geomorphologists, Serbian Geographical Society and the Karst Commission of the Serbian Geological Society. The meeting was formally supported by the UIS and the Karst Commission of the International Association of Hydrogeologists (IAH).

The organizers could not afford a large-scale international conference and therefore opted for a national level meeting, in Serbian language, in order to attract both the local karstological, speleological and caving community, students of geo-sciences, as well as a broader audience. The meeting was opened by Academician Vladimir Kostić – the president of the Serbian Academy of Sciences and Arts.

The scientific part of the meeting consisted of 20 invited presentations from various fields of karstology – from historiographic reviews to geomorphology, hydrogeology, tectonics, as well as evaluation of geoheritage.

Nearly half of the presentations referred particularly to speleology, either through reminiscence to former generations of speleologists/cavers, or through new results in explorations and protection. The overall impression of all the participants and attendees was that the contributions were of high quality. The attendance exceeded 150 people, which is significant for our relatively small karstological community; especially considering the fact that the meeting took place during the working hours and that a number of people joined only the afternoon sessions.

Organization of this event was a contribution to the efforts of keeping karstology in the limelight of scientific and nature-exploration community.

**List of organizers and supporters of the meeting**

“125 Years since Publication of Jovan Cvijić’s Das Karstphänomen”
Innovation in Show Cave management: THE 2018 ISCA CONGRESS

Genga-Frasassi, Italy, 13-17 October 2018

By Brad Wuest (USA)
President of the International Show Cave Association (ISCA)
bwuest@naturalbridgecaverns.com

Photos By George Veni

Genga-Frasassi, Italy - As many as 46 delegations from all over the world took part in the 8th Congress of the International Show Caves Association (ISCA). Five continents were represented at Genga-Frasassi, Italy, comprising some of the most representative show caves in the world. In order to highlight the role of Genga-Frasassi as the location where ISCA was founded and headquartered, the Congress adopted the slogan: “Frasassi, Italy, a place ISCA calls home”.

The opening ceremony was held in the Oratorio della Carità, a beautiful oratory in the historic centre of Fabriano, which was decorated at the end of the 16th century by the painter Filippo Bellini. Dignitaries who attended the opening ceremony included: Gabriele Santarelli, Mayor of Fabriano; Giuseppe Medardoni, Mayor of Genga; Ugo Pesciarelli, Mayor of Sassoferrato; Moreno Pieroni, Councillor of the Marche Region responsible for Tourism; as well as local civilian and military authorities. The ISCA President, Brad Wuest from Natural Bridge Caverns (Texas, USA), and all the conventioneers were also in attendance.

Riccardo Strano, the Vice President of the Consorzio Grotte di Frasassi, served as Chairman of the General Assemblies and organized and coordinated all the congress activities. Strano said, “85 conventioneers coming from 24 countries on five continents gathered at Genga-Frasassi because the long ISCA journey started here and, therefore, it became its ‘home’. The congress was an opportunity to strengthen the international relationships among ISCA members. It was a moment for dialogue and interaction aimed at the development of new projects that will lead to an...
improvement in the management of the touristic heritage represented by the underground world. In all this, the Frasassi Caves and their beauty acknowledged and corroborated by those present, provided a valuable example for the construction of innovative solutions.”

PRESENTATIONS SUPPORTING THE CONGRESS THEME INCLUDED:

- George Veni (New Mexico, USA), President of the International Union of Speleology (UIS), made the first presentation on “UIS Goals, Projects and Common Interests with ISCA” (www.uis-speleo.org). Following, Veni and Wuest spoke about the International Standards Organization’s (ISO) newly formed Technical Committee on Karst and how ISO Standardization could impact show caves and speleology.

- Harry Tomasisdes (Indiana, USA), Chief Revenue Officer Digonex Technologies, presented “How Dynamic and Variable Pricing Can Increase Revenue, Improve Visitor Experience, and Lower Visitor Environmental Impacts for Show Caves” (www.digonex.com).

- Nadja Zupan Hajna (Ljubljana, Slovenia), from the Karst Research Institute, presented “Development of Karst Sciences and Use of Science in Show Caves: Examples From Slovenia” (https://izrk.skc-sau.si/en/sodelavci/nadja-zupan-hajna-en#v).


- Rod Graves (Virginia, USA) presented “New Entrance to Luray Caverns: Tunnelling and Construction” (www.luraycaverns.com).

- Greg Passmore (Texas, USA), Founder of Passmore Lab presented “LIDAR Scanning, Photogrammetry and New Media Technologies and Their Uses for Show Caves” (www.passmorelab.com).

- Alexander Chrapko (Herborn, Germany), Manager of Cave Lighting Co., presented “Modern LED Lighting Systems for Show Caves: The Example of Frasassi Caves and Grotte De Han” (www.cavelighting.de).

In addition to the business sessions, the ISCA congress also offered many excursions, including visits to the world famous Frasassi Caves. Attendees agreed that Frasassi is one of the most spectacular show caves in the world with giant chambers and beautiful speleothems, and many expressed their emotional response to the caves’ enormous size and beauty. The night excursion to the cave was particularly appreciated. The attendees entered total darkness equipped with helmets and torches. As soon as they reached the well-known speleothem, called “The Giants”, they started hearing a song in the distance until the tenor Massimo Prosperi appeared in the darkness. Greeted by a thunderous applause, he sang a series of classical pieces.

Wuest said, “The visits to Frasassi Caves were a Congress highlight. In addition to being a spectacular cave, Frasassi also showcases many best practices in proper cave development and management techniques.” Wuest also said, “Frasassi provides many jobs and brings tourism revenue to Genga and the Marche
region. It’s a prime example of how show caves can benefit the economy of the areas where they are located and are an excellent model of sustainable development.”

Other excursions included touring the medieval town of Jesi, truffle hunting at Acqualagna where participants enjoyed watching the skilled dog find truffles, dig them up, and bring them to his master. After experiencing the traditional truffle hunting, they enjoyed a truffle lunch accompanied by the best local wines. Another afternoon, attendees enjoyed the view from Monte Conero and Portonovo Bay on the Adriatic Sea. Attendees also visited the Beata Vergine cave and adventurously climbed the mountain, Monte Cucco one foggy afternoon to tour the cave within the mountain.

“My compliments to our hosts for an incredible Congress. Show Cave managers from around the world had the opportunity to network and learn while enjoying the region’s amazing sights, tastes, and hospitality,” said Wuest.

ISCA’s Secretary/Treasurer, Renata Marinelli, affectionately known as “the Mother of ISCA”, retired at the end of the Congress. Marinelli was granted Honorary Membership in grateful appreciation for her 28 years of dedication and outstanding service to ISCA. It was very fitting that the last congress Marinelli helped organize was in her home town, Genga-Frasassi.

Honorary Membership was also given to Past President, David Summers, in grateful appreciation for his dedication and outstanding service to the International Show Caves Association. Summers served as ISCA’s President for 8 years and travelled around the world representing the show cave industry and growing membership.

The following Board of Directors was elected to serve for the next 4-year term:

**OFFICERS**
- **President:** Brad Wuest (USA)
  Natural Bridge Caverns
- **First Vice President:** Friedrich Oedl (Austria)
  Eissriesenwelt Cave
- **Second Vice President:** Rafael Pagés Rodríguez (Spain)
  Asociación de Cuevas Turísticas Españolas
- **Secretary/Treasurer:** Francesca Serpentini (Italy)

**DIRECTORS**
- Jodie Anderson (Australia) – Jenolan Caves
- Guilhem De Grully (France) – Grotte des Demoiselles
- Peter Gazik (Slovakia) – Slovak Caves Administration
- Hein Gerstner (Malaysia) – Mulu Caves & World Heritage Area
- Nuno Querido Jorge (Portugal) – Grutas De Mira De Aire
- Ewa Krywko (Belgium) – Grottes De Han
- Mario Verole Bozzello (Italy) – Grotta del Vento
- Yvonne Wagner (Germany) – Saalfelder Feengrotten
- Heros Lobo (Brazil) – Univ. Federal de São Carlos
- Zhang Shouyue (China) – Chinese Academy of Sciences, Beijing

The following people were appointed to the Board of Directors:

**EX-OFFICIO DIRECTORS**
- Riccardo Strano (Italy) – Representative of Grotte di Frasassi, the host of ISCA’s headquarters
- Juan José Durán Valsero (Spain) – Chairman of ISCA’s Scientific and Technical Committee
- Joëlle Darricau (France) – Chairwoman of ISCA’s International Commission on Prehistory in Show Caves

*ISCA visitors are amazed at the size and beauty of Grotte di Frasassi: Simple splendor!*
Greg Passmore of Passmore Lab, who is a new media designer, film director, and cave enthusiast was appointed Chairman of ISCA’s newly created Media Committee.

The following 24 countries were represented at the 2018 ISCA Congress: Italy, USA, France, Belgium, Austria, Germany, Spain, Portugal, China, Japan, Croatia, Slovenia, Slovakia, Czech Republic, Malta, Laos, Bermuda, Iceland, Australia, New Zealand, Malaysia, UK, South Africa and Mauritius.

ISCA congresses are held every 4 years in a different part of the world. In 2022, ISCA’s 9th congress will be held for the first time in the USA in San Antonio, Texas hosted by Natural Bridge Caverns (www.naturalbridgecaverns.com).

ABOuT iSCA

The International Show Caves Association (ISCA) was founded in 1990 and is headquartered in Frasassi/Genga, Italy. ISCA is an international organization of persons, associations, corporations, and government agencies who own, manage or operate show caves that are open to the public. ISCA provides a critical forum for show caves to network and collaborate on matters that pertain to their caves. ISCA aims to promote, encourage, and support the cooperation of show cave operators, speleologists and cave enthusiasts through the sharing of information and to promote the preservation and conservation of caves, while increasing public interest in the world of show caves by way of unique marketing and the evolution of methods to enhance the show cave experience.

For more information on the International Show Caves Association and its members, please visit www.i-s-c-a.com.

For more information on the International Union of Speleology (UIS), please visit www.uis-speleo.org.

MEDIa CONTACTS

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bwuest@naturalbridgecaverns.com
+ (1) 210-651-6101

Francesca Serpentini, ISCA Secretary/Treasurer
francescaserpentini@alice.it
+ (39) 0732 972108
EVENTS

12TH BALKAN CAVER’S CAMP 2018

Baru Mare, Romania, 2-8 July 2018

By

HEGEDUS, Gyula (Hungary)
UIS Adjunct Secretary
hegedusgyula@t-online.hu

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

The Romanian Speleological Federation organized the annual meeting of the Balkan Spelological Union (BSU) as the 12th Balkan Caver’s Camp (BCC) in Baru Mare/Romania between 2-8 July, 2018. Two other events were held together with BCC as follows: Romanian Spelological Congress and 36th “Speoarta” International Media Contest. As this year is the 150th birth anniversary of Emil Racovita, father of biospeleology and Romanian speleology, there was a commemoration of him.

197 registered and more than 200 non-registered persons participated on BCC from 15 countries:

- Belgium
- Bulgaria
- Croatia
- France
- Greece
- Hungary
- Moldova
- Poland
- Puerto Rico
- Romania
- Slovenia
- Switzerland
- Turkey
- Ukraine
- USA

There were
- 12 caves visited
- 9 hiking trails to Retezat Mountains
- 2 cultural trips
- 1 canyoning
- 19 presentations held in scientific session

The idea of focusing most of the camp on caving tours and excursions and to offer the presentations in the late afternoon and early evening was a major asset of its success especially as the region it was good and there was something for everyone.

Thank you to the guides who have dedicated themselves to volunteering their visits. A big plus in relation to the congress camp organized four year ago in Baile Herculaneum where an unfortunate mercantile spirit (it was necessary to pay for most of the visits of caves) really broke the traditional spirit of team and help of cavers.

The participation of food trucks to ensure meals was a good idea given the camp’s location.

Participants really enjoyed the presentation and the original organization of the inauguration of the exhibition SpelArte. Congratulations for thinking of inserting through the orchestra and the closing meal the cultural, traditional and folkloric aspect. These were great moments!

The topics and speakers selected for the main presentations were interesting and of great value. We had a lot of very positive feedbacks.

Participants enjoyed the very, very friendly atmosphere that reigned throughout the camp which was initiated upon the arrival of them by the personalized and super warm welcome that was reserved for them.

Gyula HEGEDUS talking during the Opening Ceremony of the event.
The constant availability of the organizers, their unparalleled helpfulness, their desire to satisfy everyone, their smiles and the kind words addressed to each of the participants during the departures on the excursion or on their return are the important and decisive factors which have created and maintained an excellent atmosphere on the campus among the participants. It boils down to “Be happy!”

They had an excellent, interesting and sporty week in Baru Mare.

The UIS representatives discuss a long time with Spencer Coca, the actual President and Gheorghe Ponta. We think this organizational experience will allow the Romanian Speleological Federation to better understand the feasibility study of the organization of a future International Speleological Congress.

And why not, as discussed during the last evening, in Cluj in 2025?

**REPRESENTATION OF UIS AT 12TH BCC**

- Efrain MERCADO (Puerto Rico)
  *UIS Vice President of Operations*

- Gyula HEGEDUS (Hungary)
  *UIS Adjunct Secretary*

- Jean-Pierre BARTHOLEYNS (Belgium)
  *President of the UIS Karst and Cave Protection Commission and former Adjunct Secretary*

During the opening ceremony, Gyula HEGEDUS did a welcome speech and he sent the greetings of the UIS President and whole UIS Bureau.

During the closing ceremony Jean-Pierre BARTHOLEYNS congratulated the organizers and thanked the huge and great job what they did for that meeting.

There were two UIS presentations:


- Gyula HEGEDUS: *UIS - past, present and future.*

**WHAT IS BSU?**

BSU (Balkan Speleological Union) itself is an association of national speleological organizations from the Balkan countries. It was founded informally during the Meeting of National Speleological Organizations of Balkan countries in Vratza, Bulgaria, on 7 September, 2002. Main goals of BSU are to coordinate and unite the efforts of the member organizations, associations, unions, federations of the speleologists for the Balkan states for:

- **a)** to promote sport and scientific speleology in the World and especially on the Balkan Peninsula by exploration, training, publications, mutual information, etc.;

- **b)** to support the institutions of each member country of BSU in matters concerning karst, caves and speleology;

- **c)** to work for better connections between cavers and speleological organizations of Balkan countries by sharing information, experience, mutual visits, joint expeditions, etc.

BSU is a regional organization working in the spirit of UIS.

**BSU/BCC HISTORY**


The idea of organizing a Balkan Caver's Camp (BCC) regularly arose in 2006.

- **1st BCC** - Tesel/Bulgaria, 27 June - 1 July, 2007
- **2nd BCC** - Kokkinogia/Greece, 13-22 June, 2008
- **3rd BCC** - Antalya/Turkey, 24-28 June, 2009
- **4th BCC** - Padis/Romania, 14-18 July, 2010

**Excellent atmosphere on the campus among the participants: result of constant availability and unparalleled helpfulness of the organizers.**
In 2014 BSU was officially registered in Bulgaria and became a legal organization.

- 5th BCC - Jasen/Macedonia, 29 June - 3 July, 2011
- 6th BCC - Logatec/Slovenia, 28 June - 1 July, 2012
- 7th BCC - Njeguši/Montenegro, 26-30 June, 2013
- 8th BCC - Valjevo/Serbia, 25-29 June, 2014

In 2014 BSU was officially registered in Bulgaria and became a legal organization.

- 9th BCC - Ogulin/Croatia, 16-22 November, 2015
- 10th BCC - Vratsa/Bulgaria, 21-26 June, 2016
- 11th BCC - Leonidio/Greece, 28 Aug - 3 Sept, 2017
- 12th BCC - BaruMare/Romania, 2-8 June, 2018

**BSU General Assembly**

BSU members and participating countries (blue letters) are:

- Albania
- Bulgaria
- Croatia
- Greece
- Macedonia
- Montenegro
- Romania
- Serbia
- Slovenia
- Turkey

President Alexey Zhalov presented a report about the activity for 2017-2018 and financial position for 2016-2017 of the BSU. Both report were approved unanimously.

Because the posts of Vice-President, Secretary General and Bureau member were opened an election procedure was done for those positions. After the election the BSU Bureau are as follows:

- **President:**
  Alexey Zhalov/Bulgaria (up to 2021)
- **Vice-President:**
  Yiorgo Karakiris/Greece (up to 2022)
- **Secretary General and Treasurer:**
  Ema Marcu/Romania (up to 2022)
- **Member:**
  Marko Rakovac/Croatia (up to 2022)
- **Member:**
  Aleksander Stojanoski/Macedonia (up to 2020)

The next Balkan Caver’s Camp of 2019 was requested by Elif Yavuz from the Turkish Federation of Speleology. The application will be formalised pending the official agreement of the Turkish Federation of Speleology during the national meeting in Turkey no later than two month.

President Zhalov provided information about BSU application to become an affiliated member of UIS. There was a non compliance reply from the UIS. GA advised BSU Bureau to make application for Cooperative membership of UIS again.

Some participants of the 12th BALKAN CAVER’S CAMP 2018 gathered for the classical photo.
BALKAN CAVER’S CAMP 2018
Images of field trips

SURA MARE CAVE - The Great Gours Room

SURA MARE CAVE
J-P Bartholeyns upstream of the river

BARU MARE CAVE - Canyon Jgheabului

SURA MARE CAVE
Bat skeleton trapped in calcite
INTRODUCTION

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 honor of Dr. France HABE († 10/12/1999) of Slovenia (Yugoslavia), who among his other many accomplishments served as President of the UIS Protection Department (1973-1997).

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 Prize is proposed every year. It will be awarded, if a worthy candidate if nominated and accepted. The quadriennia awards will be formalized at the International Congresses of Speleology (ICS) at the time of the second General Assembly of the UIS. A description of the person or organization who receives the Prize, and the reasons for receiving it, will be published on the UIS website and in the UIS Bulletin. The Jury will be made up of at least three members of the UIS Commission on Karst and Cave Protection.

Nominations of candidates for the Prize will be sent to the President of the UIS Commission on Karst and Cave Protection no later than May 20th of the current year. The Jury will review the nominations and send their decision to the UIS Bureau. The Jury is not required to award the Prize every year if the nominees are not considered worthy.

REGULATIONS OF THE FRANCE HABE PRIZE OF THE KARST AND CAVE PROTECTION COMMISSION OF THE INTERNATIONAL UNION OF SPELEOLOGY

1. HISTORY

On September 30, 2012, the UIS Bureau granted the UIS Department of Karst and Cave Protection a budget of €250 to create a Prize that will be awarded every 4 years at the ICS during the second
General Assembly of the UIS. It was awarded for the first time in 2013.

At its meeting in July 2013, the UIS Bureau has agreed that this award will be awarded each year in the future.

2. SUBJECT
The France HABE Prize of the UIS Commission on Karst and Cave Protection aims to promote the protection of karst and caves. It will reward the best or most important action, concrete idea, or publication for the protection of a cave, karstic zone, or underground environment in general.

3. AWARD
The France HABE Prize is currently awarded each year.

The amount of the Prize is currently fixed at €250. The UIS Bureau will determine the Prize amount for subsequent years. The France HABE Prize is open to any person, club, local federation, commission, or national federation, with preference given to those belonging to one of the member nations of the UIS.

The Prize will be awarded to only one person or organization for a specific action. Honorary Mentions and congratulations to other deserving works could also be announced when the Prize is awarded.

4. PARTICIPATION AND REGISTRATION CONDITIONS
Participation in the contest is free to any person or organization. Applying for the Prize implies acceptance, without any reservations, of the Prize regulations, the purpose of this Prize, and the decisions made by the Jury.

Nominations must reach, by electronic means, the President of the UIS Commission on Karst and Cave Protection. For the 2019 Prize, to Jean-Pierre Bartholeyns (jp.bartholeyns@gmail.com) by May 20, 2019.

The work will be presented in English with a sufficiently explicit summary in English and in one of the other official languages of the UIS (French, German, Italian, Spanish or Russian).

Illustrations must be sent, off-text, in JPEG format and photographs with mention of photographers’ names.

5. SUBMISSION OF WORKS
Nominators are solely responsible for delivering their nominations to the President of the UIS Commission on Karst and Cave Protection by the designated deadline by e-mail. Large digital files should be sent via We transfer (https://wetransfer.com/) or other mutualy acceptable means.

Assemblée Générale de l’UIS. Il a été décerné pour la première fois en 2013.

Lors de sa réunion en juillet 2013, le Bureau de l’UIS a accepté que ce prix soit à l’avenir décerné chaque année.

2. OBJET
Le Prix France HABE de la Commission de Protection du Karst et des Grottes de l’UIS a pour but de promouvoir la protection du karst et des grottes. Il récompensera la meilleure ou la plus importante action, l’idée concrète, ou la publication pour la protection d’une grotte, d’une zone karstique ou du milieu souterrain en général.

3. ATTRIBUTION
Le Prix France HABE est actuellement décerné chaque année.

Le montant du Prix est actuellement fixé à 250€. Le Bureau de l’UIS fixera le montant du Prix pour les années suivantes. Le Prix France HABE est ouvert à toute personne, club, fédération locale, commission ou fédération nationale, la préférence étant donnée à ceux qui appartiennent à l’un des pays membres de l’UIS.

Le Prix sera attribué à une seule personne ou une seule organisation pour une action spécifique. Des Mentions Honorifiques et des félicitations aux autres travaux méritants pourront également être annoncées lorsque le Prix est attribué.

4. CONDITIONS DE PARTICIPATION ET INSCRIPTION
La participation au concours est gratuite pour toute personne et/ou association et implique l’acceptation, sans aucune réserve, du présent règlement, du but de ce Prix et des décisions prises par le Jury.

Les candidatures doivent parvenir, par voie électronique, au Président de la Commission de Protection du Karst et des Grottes de l’UIS. Pour le Prix 2019 à Jean-Pierre Bartholeyns (jp.bartholeyns@gmail.com), pour le 20 mai 2019.

Le travail sera présenté en anglais avec un résumé suffisamment explicite en anglais et dans une des autres langues officielles de l’UIS (allemand, espagnol, français, italien ou russe).

Les illustrations doivent être envoyées, hors texte, au format JPEG et les photographies avec mention du nom des photographes.

5. SOUMISSION DES TRAVAUX
Les candidats sont seuls responsables de la remise de leurs candidatures au Président de la Commission de Protection du Karst et de Grottes de l’UIS avant la date limite désignée par e-mail. Les gros fichiers numériques doivent être envoyés via We transfer (https://wetransfer.com/) ou autres moyens mutuellement acceptables. Les documents
tually agreeable means. The nominating materials should include at least the following:

- Digital version of the work if available (for example, Word documents, photographs, illustrations, video, links to websites with other pertinent information);
- Registration form completed and signed by the nominator;
- Photograph of the nominated person or group;
- 10 to 15 sentences description of the importance of the work.

The Commission President will send an acknowledgement of nomination materials received.

6. COMPOSITION AND FUNCTIONING OF THE JURY

The Jury is made up of at least three members: the President of the UIS Commission on Karst and Cave Protection, and two members of the Scientific Committee of this Commission. Each member of the Jury has a vote. The votes are done by simple majority. If necessary, the Jury can be advised by experts who do not have a vote.

Each Jury member has to rank all of the nominees. The President then adds all of the ranks and the nominee with the highest score wins.

If the absence or the quality of work does not justify it, the Jury will not award the Prize. The deliberations of the Jury are secret and no appeal is possible.

The UIS Commission on Karst and Cave Protection will ensure there are sufficient jury members and they work within their deadlines. It will replace inefficient members or members who are not able to participate.

The members of the Jury will base their judgment on the originality, the dynamism, the active aspect or at least on the quality of the effort expended for this candidacy. They will be particularly attentive to the goals and objectives, with the ecological, “renewable and transferable” aspect, to the durability of the subject as well as its “communication” section (public concerned, message to be transferred, supports used), involvement of partners and cavers themselves.

7. PROCLAMATION

When the Jury gives its decision, the President of the Jury will promptly inform the UIS Bureau. The name of the Prize recipient will be proclaimed no later than July 15 of the current year; deserving competitors will also be congratulated.

The Prize recipient will be informed personally, by email, by the President of the Jury promptly after the Jury’s decision. The recipient will be asked to keep the decision confidential until it is officially de candidature doivent comprendre au moins les éléments suivants:

- Une version numérique du travail si elle est disponible (par exemple: documents Word, photographies, illustrations, vidéos, liens vers des sites Web avec d’autres informations pertinentes);
- Le formulaire d’inscription compilé et signé par le candidat;
- Une photographie de la personne désignée ou du groupe
- Une description de 10 à 15 phrases sur l’importance de l’œuvre;
- Le président de la Commission enverra un accusé de réception des documents de candidature.

6. COMPOSITION ET FONCTIONNEMENT DU JURY


Chaque membre du Jury dispose d’une voix. Les votes se font à la majorité simple. Si nécessaire, le Jury peut être conseillé par des experts qui n’ont pas de voix.

Chaque membre du Jury doit classer tous les candidats. Le Président additionne alors tous les points et le candidat ayant le plus de points gagne.

Si l’absence ou la qualité des travaux ne le justifie pas, le Jury ne décernera pas le Prix. Les délibérations du Jury sont secrètes et aucun recours n’est possible.

La Commission de Protection du Karst et des Grottes veillera à ce qu’il y ait suffisamment de membres du jury et qu’ils respectent leurs échéances. Il remplacera les membres inefficaces ou les membres qui ne sont pas en mesure de participer.

Les membres du Jury fonderont leur jugement sur l’originalité, le dynamisme, l’aspect actif ou au moins sur la qualité de l’effort manifesté pour cette candidature. Ils seront particulièrement attentifs aux buts et objectifs, à l’aspect écologique, “reconductible et transférable”, à la durabilité du sujet ainsi qu’à son volet “communication” (public visé, message à faire passer, supports utilisés), l’implication des partenaires et des spéléologues eux-mêmes.

7. PROCLAMATION

Lorsque le jury rend sa décision, le Président du Jury informera sans délai le Bureau de l’UIS. Le nom du lauréat du Prix sera proclamé au plus tard le 15 juillet de l’année en cours; les concurrents méritants seront également félicités.

Le lauréat du Prix sera informé personnellement, par courrier électronique, par le Président du Jury immédiatement après la décision du Jury. Il sera demandé au lauréat de garder la décision confidentielle jusqu’à
announced. The Jury will publish the name of the Prize recipient, other worthy nominees and the congratulations on the UIS website and Bulletin. The result of this contest will be widely circulated via the caving media.

8. INCOMPATIBILITY
No person or organization will receive the France HABE Prize twice consecutively.

The members of the Jury abstain from taking part in the contest.

9. EXPOSURE
The opening of each session of the contest will be extensively announced by the UIS Commission on Karst and Cave Protection by any means of communication, including its website, with any organization or any person potentially interested in caves; this text will be available to everyone.

Once the Prize is awarded, the recipients commit themselves to clearly showing the logo of the UIS as well as mentioning the “France HABE Prize from the Commission on Karst and Cave Protection of the International Union of Speleology” on all publications relating to the work for which the Prize was awarded.

10. FINAL PROVISIONS
The UIS Commission on Karst and Cave Protection assures that it is entirely impartial to the participants as to the progress of the contest. The contest organizers and their partners cannot be held responsible for any error or omission. Once the call for nominations is announced for the Prize, no information relating to the Prize will be changed until the recipient is announced; Prize rules may be changed afterward and before the next call for nominations is announced. No information relating this Prize will be exchanged, neither in writing, nor by phone. In the case of disagreement on the interpretation of the regulations, the text in the French language shall be definitive.

For the Spanish version, please, visit the UIS Website

Pour la version espagnole, merci de visiter le site Web de l’UIS

www.uis-speleo.org
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<td>Union internationale de Spéléologie</td>
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<td>Le proposant certifie par la signature ci-dessous être au courant des règles du Prix France HABE et en accepter toutes ses conditions.</td>
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HISTORY OF THE UIS

RESEARCH ON THE 60 YEARS OF UIS HISTORY

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

The International Union of Speleology (UIS) was founded on September 16, 1965, in Ljubljana, in what was then Yugoslavia (today Slovenia), at the closing general assembly of the 4th International Congress of Speleology (ICS). At that time, the first statutes were approved and the first bureau of directors was elected.

Since then, the entity has taken on responsibility for the organization of international congresses of speleology every four years (the 17th took place in Sydney, Australia, in 2017). It congregates representatives of around 40 countries around the world. The present bureau of directors is the fourteenth; the entity has been headed by 11 different presidents, and 54 speleologists from 36 different countries have served on the bureau.

Commissions and Working Groups have been created to encourage the development of all aspects of speleology. Internal regulations have been adopted to facilitate the management and administration of the entity, and the statutes have been revised various times. A Code of Ethics was written to provide guidance for disciplining the international practice of speleology. The UIS-Bulletin (68 issues, with the latest published in July of 2018) was created to publicize the activities of the entity, and the International Journal of Speleology (IJS, with volume 47-3 published in 2018) was founded to provide a channel for the presentation of scientific articles.

News about speleology is distributed around the world via its site www.uis-speleo.org, and communication between speakers of the numerous different languages of the world is facilitated by its multilingual technical dictionary which includes the terms related to speleology for 26 languages. Since it is an international entity, the UIS maintains formal relationships with all of the regional speleological entities (FEALC of Latin America and the Caribbean, FSE of Europe, BSU of the Balkans and AUS of Asia), as well as the International Show Caves Association (ISCA), the International Geographical Union (IGU), UNESCO (via the International Council for Science (ICSU)), and the National Cave and Karst Research Institute (NCKRI). A permanent address (Titovtrg 2, Postojna, Slovenia) has been furnished by a special agreement with the Karst Research Institute (KRI) and the government of Slovenia. All of these activities, as well as many others not mentioned here, have created the history of the UIS. This was summarized in the book Fifty Years of the UIS 1965-2015, published in 2015.

The first idea of registering the UIS history in a book arose in 2002, but it was only in 2006 that the idea was adopted as a project of the UIS. After seven years of research in the archives of the UIS and publications such as the UIS-Bulletin, the Proceedings of the ICS, and the IJS, as well as reports of the various commissions, publications of the national speleological organizations of various countries, and personal contributions, a preliminary version of the book was printed in 2013.

Twenty volumes of this publication were distributed to the ex-presidents and individuals with a
long history of involvement in the UIS so the information provided could be supplemented and corrections made. Two additional years of work were necessary to make it possible for the final version of the book to be published for the 50th Anniversary of the entity, which was celebrated in 2015 in Postojna, Slovenia, where the original congress giving rise to the UIS was held.

The book *Fifty Years of the UIS 1965-2015* congregates all the information that was available up to that time, although the numerous gaps and missing information, as well as punctual mistakes, suggested that an improved registration of the past of the entity would be in order. Moreover, the research did not terminate, but was supplemented by information contributed by many friends and collaborators from various parts of the world, including minor details, punctual corrections, and the supply of new, previously unavailable, materials.

Considering the dynamism of a history over time, as well as the importance of improving the registration of this history, a new project took shape to update the original book of the first 50 years of existence of the UIS. The research to do so should make it possible to present an update in the form of a new book in 2025: *Sixty Years of the UIS 1965-2025*. This should be made available during the 19th ICS, although the venue is still to be selected.

All contributions will be welcome. I would like to ask every caver and/or speleologist around the world to review your memories and check your archives, shelves and drawers for any relevant information about the past history of the UIS, especially the ICS held in Sydney, such as pictures, posters, adhesives, stickers, pins, name tags, bags, T-shirts, gifts, postmarked envelopes, invitations, and daily newspapers and clippings, as well as any other publications you may have access to.

Any and all relevant material will be more than welcome; if you cannot supply the original, a picture of it will be fine. These pictures can be sent using the UIS-Bulletin e-mail address ([uisbulletin@uis-speleo.org](mailto:uisbulletin@uis-speleo.org)), with a copy to [jo.labegalini@uol.com.br](mailto:jo.labegalini@uol.com.br), but if what you have is an artifact, you can send it to the following postal address:

**Av. Das Fontes, 645**
**37580-000 – Monte Sião – MG – Brazil**

**CURiosiTieS ABOUT tHe INtErNaTIONAL CONNeSSEs oF SPELEOLOGY (ICS)**

**Posters advertising**

Normally, each congress has its poster advertising; the same happened with the International Congress of Speleology, since the 1st ICS (Paris-France, 1953) until the last one, the 17th ICS (Sydney-Australia, 2017). The first of them were printed in black and white; color appeared later. A drawing appears in this poster of the 4th ICS, when the UIS was founded; photographs appeared in the posters some years later.

There is the information that the 10th ICS (Budapest-Hungary, 1989) did not have a printed poster; nevertheless, much information about ICS posters is needed to complete the history of the UIS with its congresses.

*Poster advertising the 4th ICS, printed on 650 x 44 mm paper, black and white, with a drawing showing an underground exploration.*
HISTORY OF THE UIS

THE UIS THROUGH THE PIN’S

L’UIS AU TRAVERS DES PIN’S

By Jean-Pierre Bartholeyns (Belgium)
Past UIS Adjunct Secretary
President of the UIS Commission on Karst and Cave Protection
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S
ince the beginning of speleological organisations (i.e. clubs, associations, federations, unions) they have commonly produced metal badges or pins with their emblems, or to celebrate specific events or congresses.

Some, by their precision, were real works of jewellery whilst others thanks to the inclusion of enamelled surfaces were splendid miniature artistic masterpieces.

Some International Union of Speleology events have benefited from this type of production.

Here are the ones I found in the collection of Guy De Block (Belgium), the result of patient research conducted since 1950. A real treasure!

There has been some for international caving congresses: Congrès International de Spéléologie – Paris – 1953 (France); II° Congresso Internationale di Speleologia – Bari – Lecce – Salerno 1958 (Italy); IVe Congrès International de Spéléologie – Ljubljana - 1965 (Ex-Yougoslavie); 5 Internationaler Kongress für Speläologie – Stuttgart – 1969 – (Germany); 16th International Congress of Speleology – Brno – 2013 – (Czech republic) and 17th International Congress of Speleology – Sydney – 2017 (Australia), but also for certain conferences or commission meetings of the UIS, like the Vth Cave Rescue Conference - UIS - PZA - Zakopane (Poland).

Some countries have also produced other objects in memory of the congress they organised.

For example Greece for the 14th International Congress of Speleology in Athens-Kalamos in 2005, produced a heavy polycarbonate rectangular memento 6 x 3 x 3 cm etched internally to suggest the evolution of the caveman to modern human.

Two plexiglas objects were engraved for the 15th International Congress of Speleology held in Ker ville, USA in 2009; a bat of 7.5 cm wingspan and a circle of 5 cm in diameter.

There are certainly other pins or objects... So let us call on anyone who can help us to complete this depuis le début de l’existence des organisations spéléologiques (clubs, associations, fédérations, unions) il était coutumier qu’elles réalisaient des insignes métalliques, épinglettes ou pin’s avec leurs emblèmes, à leur effigie ou à l’occasion d’événements ou de congrés.

Certains, de par leur précision, étaient de véritables travaux d’orfèvre. D’autres, grâce à l’inclusion de surfaces émaillées, de splendides petits chefs d’œuvre artistiques.

Quelques manifestations de l’Union Internationale de Spéléologie ont bénéficié de ce type de production.

Voici ceux dont j’ai retrouvé la trace dans la collection de Guy De Block, résultat d’une patiente recherche menée depuis 1950. Un véritable trésor!


Certains pays ont aussi produit d’autres objets en souvenir du congrès qu’ils ont organisé.

Ainsi, la Grèce a réalisé pour le 14e Congrès International de Spéléologie à Athènes-Kalamos en 2005 un parallélépipède en polycarbonate lourd de 6 x 3 x 3 cm suggérant l’évolution de l’homme des cavernes.

Deux sujets en plexiglas ont été gravés pour le 15e Congrès International de Spéléologie organisé à Kerville aux États-Unis en 2009, c’est une chauve-souris de 7,5 cm d’envergure et un cercle de 5 cm de diamètre. Il existe certainement encore d’autres pin’s ou objets... Aussi faisons-nous appel à toute personne qui pourrait nous aider à compléter cette liste qui illustre...
list that forms an original illustration of the history of the UIS. Ask the alumni of your clubs and federations, you may be surprised at their answers.

We are also interested in printed stickers from these occasions.

To provide us a picture of these pins would obviously be a plus.

And already big thanks for your collaboration.

**BIBLIOGRAPHY:**

CAVE RESCUE

The most internationally followed cave rescue in history:
THAM LUANG NANG NON, THAILAND

Compiled and Edited by Nivaldo Colzato
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INTRODUCTION

On July 10th, 2018, the world breathed a collective sigh of relief when the last of the boys and their soccer coach, who had been trapped by flooding for 18 days in Tham Luang Nang Non, in Mae Sai, Chiang Rai Province, in northern Thailand, were all safely out of the cave.

It was the most internationally followed cave rescue in history and the past issue of the UIS Bulletin brought an article by George Veni (USA), UIS President, not related to details of the operation itself but focused on sharing some general thoughts about rescues in general as well as the importance of the international participation for the success of Tham Luang rescue.

In that article, on behalf of the UIS, Veni sent deepest condolences to the family of former Thai Navy Seal diver, Saman Gunan, who died as a volunteer assisting with the rescue. He also invited the whole international speleological community to join the UIS in honoring the memory of Saman Gunan and all people who risk their lives bravely to save others, by helping the UIS improve cave rescue methods and in minimizing the need for cave rescues in the future.

(Click here to access the UIS Bulletin 60-1)

As a detailed report on Thai rescue was promised for this current issue of the UIS Bulletin, here we present more information on this highly complex and ultimately successful rescue operation. The focus is not on technical aspects of the rescue but on the efforts of the divers and many other volunteers who made the rescue possible.

Christian Dodelin (France), President of the UIS Cave Rescue Commission, contacted two cavers, authors of two different reports related to the chronology of the Tham Luang Nang Non rescue and who gave permission for their use in the UIS Bulletin. The report below combines and condenses those reports, which were initially published as:

A SUMMARY OF THE THAM LUANG RESCUE
By Martin Ellis (United Kingdom) - thailandcaves@gmail.com
Published on Sep 5, 2018, and updated on Oct 7, 2018 on https://www.thailandcaves.shepton.org.uk/rescue-summary
Copyright © Shepton Mallet Caving Club/Martin Ellis 2005-2018

SAUVETAGE DE THAM LUANG NANG NON
By Thierry Tournier (France) - itoune1@gmail.com
Published on Sep 16, 2018 on https://issuu.com/toune/docs/chronologie_du_sauvetage_de_tham_lu

We thank the authors for their support. Photos from different sources are included below.

The basic timeline is focused on the British involvement between 23 June and 11 July 2018. All times are Thailand time.

The 13 boys: 9 days trapped in the cave before being found.
Saturday 23 June 2018

The day is sunny. At around 16:00, the young team (12 teenage boys and their football coach) of “Moo Pah” (wild boars) of the Football Academy of Mae Sai, a small town snug against the Myanmar border, enters the cave of Tham Luang Nang Non, located in the forest park of Khun Nam Nang No. With only few lamps, this visit is part of a regular training program aimed at reaching “Tham Lab Lae,” a point inside the cave 4 km from the entrance.

The thirteen were:

- Aekkapol Chanthawong - age 25 - Football coach
- Pornchai Kamluang - age 16 - Ban Pa Yang School
- Phirapat Sompiangjai - age 16 - Mae Sai Prasitsart School
- Mongkol Boonyiam - age 15 - Ban Pa Mued School
- Adul Sam-on - age 14 - Ban Wiang Parn School
- Prachak Sutham - age 14 - Mae Sai Prasitsart School
- Natthuwat Thakhamsai - age 14 - Mae Sai Prasitsart School
- Pipat Pothi - age 14 - Ban Sansai School
- Aekkarat Wobgsukchan - age 14 - Daroonrat Witthaya School
- Panumat Saengdae - age 13 - Mae Sai Prasitsart School
- Sompong Jaiwong - age 13 - Mae Sai Prasitsart School
- Chanin Wiboonrungruang - age 11 - Mae Sai Kindergarten School

The group progresses to the “Tham Lab Lae,” marked “low vault” on the survey of the French Pyrenean Association of Speleology dating back to 1987. On their return they find the passage sumped at a muddy U-bend just before getting back to Sam Yaek, the junction with Monk’s Series. Whilst they were in the cave, 15 mm of rain had fallen in one hour, and the cave had flooded via the Monk’s Series.

Then the group eventually found refuge at a high level, muddy slope located 2.25 km from the entrance, which was later named “Nern Nom Sao.” When the team didn’t return home, their parents contacted the police who called out the Mae Sai Rescue Unit at 21:00. On arrival at the cave, the Rescue Unit found ample evidence that the boys were in the cave: the backpacks they had dropped, cleats, shoes, their bikes parked outside. But they had zero evidence they were alive.

At 22:00, 14 members of the first rescue party entered the cave. However, they found the cave flooded just past Sam Yaek. Upon leaving the cave, the Sirikorn Rescue Unit in Chiang Rai were called out as they had diving equipment.

Nine days later, British cave divers Rick Stanton and John Volanthen found the group safe and sound.

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Sunday 24 June 2018

At midnight, the Governor of Chiang Rai, Narongsak Osatanakorn, was informed of the trapped party and he arrived at the cave at 01:00.

At 02:00, locally-based British caver Vern Unsworth is called out and along with 22 members of the Sirikorn Rescue Unit who enter the cave. However, they are unable to dive through the sumped section.

Thai cavers Noppadon “Taw” Uppakham and Anukoon “Guer” Sorn-Ek are involved with the rescue by the afternoon. Unsworth informs Rob Harper and Martin Ellis, who are in the United Kingdom (UK) about the rescue.

Narongsak, who is in charge of the rescue operations, requests help from the Thai Navy and a team of Thai Navy divers flies up from Sattahip (Chonburi Province) in the evening.

By evening, the international media is starting to show an interest in the story.

Monday 25 June 2018

02:45 - Twenty divers from the Royal Thai Navy (SEAL) from Sattahip are on site led by Captain Anan Surawan.

The divers go to the sump past Sam Yaek and work on a small muddy underwater hole and eventually get through. However, the Wild Boars aren’t there and as the cave soon sumps again the Navy are unable to progress further.

Harper suggests to Unsworth that experienced cave divers are required. Harper knows the cave and he has warned British cave divers Rick Stanton and John Volanthen to be on standby. However, an official callout from the Thai authorities is required so the British cavers e-mail the Thai Embassy in the UK and start to work their contacts to get the official invitation.

Tuesday 26 June 2018

It starts to rain hard, and the cave starts to flood from Sam Yaek almost back to Chamber 3. This means no further rescue attempts can be made. Over the next couple of days it rains at 6 mm/hr causing the cave to flood almost back to the entrance.

The Department of Mineral Resources start to coordinate the surface work and is in contact with Ellis, who sends them surveys and caving reports. The rescue effort at the cave ramps up and hundreds of people from many organizations are involved.

In the evening, Unsworth hands Narongsak and the Tourism Minister, Weerasak Kowsurat, a handwritten note with the three British cave diver’s names and forcibly points out they need to be called out as soon as possible if the Wild Boars are to stand any chance of being rescued. Weerasak phones Harper in the UK and Harper, Stanton and Volanthen are mobilized to Thailand that evening by the British Cave Rescue Council (BCRC).

Wednesday 27 June 2018

Rain overnight with a downpour at 04:45 causes the water to rise 15 cm in 1 hour and forces the rescuers back to Chamber 3. Diving teams had reentered on Wednesday morning, but could make no progress. There is a big effort to get pumps and hoses into the cave.

Teams from the army, police, National Park Department and volunteers search for other entrances and shafts on top of the mountain.

The cave floods causing rescuers to retreat from Chamber 3 to Chamber 2. Four Thai Well Water Association workers get trapped in Chamber 3.

19:30 - Harper, Stanton and Volanthen arrive at Tham Luang. They go straight to the cave with Unsworth, but it is flooding quickly and they are unable to get to Chamber 3.
Thursday 28 June 2018

British divers Stanton and Volanthen unexpectedly find and rescue the four workers from the Thai Well Water Association who were trapped in the cave.

By evening, the cave is sumped 200 m from entrance - between the entrance and Chamber 2 Harper and Unsworth conduct a surface search at Pha Mi, above the Monk’s Series, and find two shafts. The US Air Force Rescue team arrive from Okinawa.

“We will stay until we find them,” said Captain Wuttichai, who oversees the Thai Navy’s SEAL team who have been trying to reach them since Sunday. “They are healthy, they are young,” he says, confident of the survival of the group, “and moreover, they are athletes.”

The surface teams looked for possible access to the Monk’s Series.

A drone with an infrared camera crosses the massif in search of strategic points for drilling. A drilling point would be found and would allow the evacuation or partial diversion of floodwaters.

A team of dog masters arrives at the site.

Soldiers and police travel the north side of the mountain top to find “crevices wide enough to enter from above.” Four entrances are found, but only one was penetrable.

12:00 - a team of Laotian rescuers arrived on site.

13:16 - the rain continued to raise the level of water in the cave.

15:48 - the Department of National Parks (DNP) decides to temporarily ban access to the cave.

17:00 - Interior Minister Gen Anupong Paojinda announces the beginning of drilling operations by the Electricity Generating Authority of Thailand (EGAT).

Friday 29 June 2018

As the rain stops, the water level drops in the cave. Prime Minister Prayut Chan-O-Cha made a visit to comfort the rescuers and families, inspiring everyone to remain optimistic and calm.

Thai Navy divers penetrated from Chamber 2 to Chamber 3, but could only get 100 m upstream from Chamber 3 due to the strong current. At Pha Mi, Harper and Unsworth investigated the shafts found on 28 June.

Governor of Chiang Rai, Narongsak Osotthanakorn, informed the media that a 40-m deep shaft was found and that there were others to explore with hopes to reach the cave.

Rescuers dropped, or rather dumped down the 40-m pit, dozens of survival boxes of emergency supplies in the hope that they would float toward the group, with the intention that the victims would put them back in the water for the current to carry the boxes back outside. The “boxes of hope” contained sandwiches, cards, a pencil, drinks, candles, lamps, cell phones, flashlights, and a lighter.

Each box also contained a message asking for a phone call to the rescue team and to give their location, condition and medical needs. The message also said, “Please, indicate on the map where you are. Everyone will come to help you immediately.”

At Sai Thong, work commenced to clear the resurgence and pump out the water.

Six rescuers from the Beijing Peaceland Foundation (China) arrived with an underwater robot.

The Australian Federal Police Specialist Response Group arrived with other SEAL divers.

Considering the extent of the difficulties, Burmese, Filipino, Nepalese, and other rescuers were contacted.

Saturday 30 June 2018

Thai Navy and foreign divers, who include Ben Reymenants, Maksym Polejaka, Bruce Konefe, Rafael Aroush and Shlomi Aroush, slowly pushed upstream. A thick rope guideline was installed along with many bailout cylinders.

Harper, Unsworth & Volanthen visited Sai Thong resurgence. The large “Naga” pumps also arrive at the resurgence. The flood water level in the cave continued to drop.

The Chinese Green Boat Emergency Rescue Team, rescuers specialized in rescues in mountainous areas and caves, arrived.

Sunday 1 July 2018

There was no rain for the past 36 hours. The water levels continued to drop and the underwater visibility improved.

Birds’-nest collectors from Trang arrived to help with the surface searches.
Chinese rescue divers from the Beijing Peaceland Foundation arrived.

At 14:30, Stanton and Volanthen began their dive upstream from Chamber 3. Light rain fell at the cave at 15:50. At 23:30, Stanton and Volanthen returned having pushed their dive line to Sam Yaek.

**Monday 2 July 2018**

One hundred and one farmers are affected by the flooding of farmland from water pumped at Sai Thong. Surface teams started diverting the stream that sinks at the southern end of Tham Luang.

Thailand-based diving instructors Claus Rasmussen, Ivan Karadzic, and Erik Brown arrived at the cave. Stanton and Volanthen dove again and pushed their dive line a further 750 m from Sam Yaek and reach the boys. At 22:00, Stanton and Volanthen return to Chamber 3 after a 5½-hour trip. Forty minutes later, the news breaks that all 13 Wild Boars have been found alive.

**Tuesday 3 July 2018**

Ben Reymenants, Maksym Polejaka, and Bruce Konefe left Tham Luang.

At 22:00, six Thai Navy and one Army doctor entered the cave to go to Nern Nom Sao and deliver food, medicine and supplies to the boys, including high-calorie gels and paracetamol. Four of them, including Dr. Loharnshoon, volunteered to stay with the boys inside the cave for a week until all 12 were extracted.

How to extract them? There are many difficulties. The point where the boys were found is 2.25 km from the entrance, with 800 to 1,000 meters of limestone above their heads.

The passage leading to them has several flooded sections, some with strong currents, poor visibility and narrow passages, the smallest measuring 38 by 72 centimeters.

**Wednesday 4 July 2018**

At 14:30, BCRC mobilized Chris Jewell and Jason Mallinson (divers), Mike Clayton and Gary Mitchell (cave rescue coordinators), and Martin Ellis (Thai cave expert).

Jewell and Mallinson flew to Thailand on the evening flight. Harper left Tham Luang.

At 21:00, three Thai Navy divers returned to Chamber 3 after being away for 23 hours. Only three could make return journey as they used three of their four cylinders on way in, leaving not enough air for all seven to make the return dive. They took 23 hours for the return journey as they had to rest on their way out.

**Thursday 5 July 2018**

Stanton and Volanthen returned to Nern Nom Sao with supplies and an oxygen meter, which read 15%. Their trip lasted 5 hours.

Thai Navy divers, with three stage cylinders each, started to stage air cylinders in what is believed now to be Chamber 5, 6 and 7.

Cylinders were staged in Chamber 6 by four foreign (Rasmussen, Mikko Paasi, Brown and Karadzic, diving in pairs to stage three cylinders each) and, Saman Kunan and one other Thai Navy diver. The Thai divers met Rasmussen and one other foreign diver on their way in.

Clayton, Mitchell and Ellis took midday flights to Thailand.

Jewell and Mallinson arrived at Tham Luang in the evening.

**Friday 6 July 2018**

At 01:30, Saman Kunan, a former Thai SEAL diver and rescue mission volunteer, died after losing consciousness while placing relay bottles. He was posthumously promoted to the rank of Lieutenant Colonel of the SEALs. The King of Thailand would later decorate him with the highest distinction of the Order of the White Elephant.

Kunan’s companion diver arrived back at Chamber 3 alone after 15 hours. Other Thai divers then recovered Kunan’s body, which was near Chamber 3.

The authorities insisted that the rescue be carried out more quickly, because oxygen levels fell to 15%, below the safety zone of 21%.

Is it necessary to wait four months for the end of the monsoon, with divers providing food and water?

Should the group be taught the basics of diving?

Find another entry?

Drill a rescue well?

Lay an oxygen line?

Establish a phone line?
10:30 - Clayton, Mitchell and Ellis arrived at Tham Luang.

12:00 - Stanton, Volanthen, Jewell and Mallinson entered the cave with Unsworth and Chiang Mai-based cavers Mario Wild and Surachet “Add” Kongsingh to help carry equipment. Stanton and Volanthen only go as far as Chamber 3. Water levels had dropped enough so the dive base in Chamber 3 could now be reached without diving. Jewell and Mallinson dove to Nern Nom Sal taking supplies to the Wild Boars and the four Thai military rescuers.

14:30 - Stanton & Volanthen returned to the surface after their trip to the dive base at Chamber 3.

18:15 - Dr. Richard Harris arrived at the cave from Australia.

18:20 - Unsworth, Wild and Add enter the cave with three members of the US Air Force to look at where to place bolts for highwires, etc.

20:05 - Jewell and Mallinson returned from Nern Nom Sao with a message of apology to the parents of the children written by the team coach as well as the notes from the kids.

20:50 – All the divers returned from swimming pool after a successful testing session.

12:15 - All the rescue divers go to a local swimming pool with Thai doctors to try out face masks, packaging, etc. on local schoolchildren.

13:00 - Dr Harris and Challen entered the cave to go to Nern Nom Sao to assess the Wild Boars.

13:10 - Unsworth and Mitchell went to Chamber 3.

13:55 – A team of seven Chiang Mai climbers established high-lines in Chamber 2.

14:45 - Unsworth and Mitchell returned from the cave. Pumping operations continued to lower water levels before Chamber 3.

15:50 – All the divers returned from swimming pool after a successful testing session.

18:00 – The divers went off to a big briefing for the next day’s rescue operation.

18:30 – A full scale walk-through of the rescue plan, with all the divers and support team, was conducted in the car park.

19:15 - Dr Harris and Challen returned from the cave.

19:30 - Another very high level political meeting began to brief the Thai authorities, who at 22:45 gave the go-ahead to proceed with the rescue.

**Sunday 8 July 2018**

Change of strategy. Evacuation by the flooded gallery is the only solution. After sedation, the boys would be evacuated one by one.

Twelve international divers, five British, 2 Australian, 2 Danish, 1 Belgian, 1 Finnish and 1 Canadian, returned to the cave to attempt an evacuation.

08:00 Started to remove the journalists from the cave site to a district council building 5 km away.

08:20 – 09:15 - Diver briefing followed by the medical briefing.

09:55 - Roe and Warny arrived at the cave. Stanton, Volanthen, Jewell and Mallinson go to the US Air Force camp for the final briefing.

10:00 - Stanton, Volanthen, Jewell, and Mallinson entered cave.

10:20 - Dr Harris and Challen entered the cave.

10:30 - Paasi, Brown, Rasmussen and Karadzic enter cave

11:50 - All divers were in Chamber 3. Four continue further into the cave, with other six to go when ready

13:41 - Roe and Warny headed into the cave to go to Chamber 5 to assist with cylinder changes.

14:45 - Roe and Warny continued past Chamber 3.

15:29 - Heavy shower began, forecasted for approximately 20 mm and with a similar amount in the cave’s catchment area.

16:50 - Wild Boar 1 reached Chamber 3 with Mallinson.

16:58 - Wild Boar 2 reached Chamber 3 with

**Saturday 7 July 2018**

The authorities now think is reasonable to continue the dives.

More than 100 holes were drilled in the hope of creating a direct link with the survivors. Meanwhile, six people were injured in an accident involving a rescue vehicle.

10:30 - Clayton, Mitchell and Ellis arrived at Tham Luang.

12:00 - Stanton, Volanthen, Jewell and Mallinson entered the cave with Unsworth and Chiang Mai-based cavers Mario Wild and Surachet “Add” Kongsingh to help carry equipment. Stanton and Volanthen only go as far as Chamber 3. Water levels had dropped enough so the dive base in Chamber 3 could now be reached without diving. Jewell and Mallinson dove to Nern Nom Sal taking supplies to the Wild Boars and the four Thai military rescuers.

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20:05 - Jewell and Mallinson returned from Nern Nom Sao with a message of apology to the parents of the children written by the team coach as well as the notes from the kids.

20:50 - Narongsak was briefed by the divers.

21:00 - Unsworth, Wild and Add returned from the cave with the dive kit.

High level political meetings began to brief the Thai authorities and receive outline permission for the rescue plan.

BCRC starts to mobilize cave divers Jim Warny from Ireland, Connor Roe, and Josh Bratchley from the UK.

Thai Navy Seal diver, Saman Gunan, who died as a volunteer assisting with the rescue.

© ROYAL THAI NAVY SEAL

13:55 – A team of seven Chiang Mai climbers established high-lines in Chamber 2.

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15:50 – All the divers returned from swimming pool after a successful testing session.

18:00 – The divers went off to a big briefing for the next day’s rescue operation.

18:30 – A full scale walk-through of the rescue plan, with all the divers and support team, was conducted in the car park.

19:15 - Dr Harris and Challen returned from the cave.

19:30 - Another very high level political meeting began to brief the Thai authorities, who at 22:45 gave the go-ahead to proceed with the rescue.
Volanthen, who stayed in cave until all were out.

17:41 - Wild Boar 1 was out of the cave. Panic occurred at the medical center as the Thai medics couldn't get the mask off Wild Boar 1 as they were afraid of breaking it and the oxygen cylinder was down to 10 minutes of supply. They fetched Clayton and suited him up to enter the medical tent, but before he is allowed in a US military medical Major rushes in, brushes aside the Thai medics, and removes the mask.

17:56 - Mallinson returned to UK dive base from the cave.
17:58 - Wild Boar 2 reached the cave entrance.
18:46 - Wild Boar 3 reached Chamber 2 with Jewell.
19:04 - Wild Boar 4 reached Chamber 3 with Stanton.
19:12 - Wild Boar 3 was out of cave.
19:30 - Bratchley arrived at Tham Luang.
19:32 - Dr Harris returned to Chamber 3.
19:35 - Challen returned to Chamber 3.
19:47 - All 12 rescue divers were back in Chamber 3.
21:30 - The rescue operations team debriefed followed by a debrief and planning meeting for the divers.

Monday 9 July 2018

A total of 25-32 mm of rain fell in the 24 hours prior to midnight with no rain since.

08:33 - The Thai Medical chief was briefed, who then briefed the Thai leadership.
08:42 - Water levels as far as Chamber 3 continued to drop overnight, despite the previous day's rain.
11:02 - Harris, Challen Stanton, Volanthen, Jewell and Mallinson left Chamber 3 to rescue more Wild Boars.

11:25 - Chiang Mai climbers and Unsworth entered cave to operate the highlines.
11:57 - Paasi, Brown, Rasmussen and Warny also left Chamber 3 for more Wild Boars.
12:35 - Roe and Bratchley entered cave.
15:33 - Wild Boar 5 reached Chamber 3 with Mallinson.
16:29 - Wild Boar 5 was out of cave.
17:23 - Wild Boar 6 reached Chamber 3 with Volanthen.
17:34 - Wild Boar 7 reached Chamber 3 with Jewell and Warny.
18:10 - Wild Boar 8 reached Chamber 3 with Stanton.
18:23 - Wild Boar 6 reached the surface.
18:30 - Wild Boar 7 reached the surface. Brown, Challen, Dr Harris, Paasi and Rasmussen reached Chamber 3.
18:48 - Roe and Bratchley reached Chamber 3.
Body core temps of the four children rescued this day was 34.5°C and higher. The water temperature was 23°C and the air temperature was estimated to be 20°C.
Based on the tally board at the cave entrance, between 200 and 250 people are in the cave for the rescue, but only 12 divers went upstream of Chamber 3.
19:30 - Wild Boar 8 reached the surface.
19:39 – The Chiang Mai climbers and Unsworth exited the cave.
21:00 – The divers met to plan for the next day's rescue. The weather forecast was good until midnight.

Tuesday 10 July 2018

02:00 - Elon Musk and his team visited the cave to Chamber 3, but without their rescue pod which remained at the temple, away from the cave site, used by the Thai Navy as a base.
08:00 – A total of 5.8 mm of rain fell at Tham Luang from 00:00 to 08:00 and in the 2.69 sq. km Monk's Series catchment area. This was 1 mm more than the previous rday. This day would probably be the last weather window to finish the rescue, and it wasn't a big window.
09:00 – The divers had their briefing, and a separate large briefing occurred for the Thai support team.
09:20 – The divers’ briefing finished.
10:00 - Harris, Challen Stanton, Volanthen, Jewell, Mallinson, Paasi, Brown, Rasmussen, and Warny entered cave.
11:10 - Roe and Bratchley entered cave.
11:00 - Harris, Challen Stanton, Volanthen, Jewell and Mallinson continued beyond Chamber 3 for the remaining trapped victims.
11:40 - Paasi, Brown, Rasmussen, and Warny followed them, leaving Chamber 3.

12:45 – The rain stopped, with a hint of blue sky.
12:55 - Roe and Bratchley left Chamber 3.
15:16 - Wild Boar 9 (the coach) reached Chamber 3 with Warny.
15:36 - Wild Boar 10 reached Chamber 3 with Volanthen.
16:15 - Wild Boar 9 was out of cave.
16:20 - Wild Boar 11 (the smallest) reached Chamber 3 with Stanton.
16:36 - Wild Boar 10 was out of cave.
17:00 - Wild Boar 12 could no longer be felt on the dive line. Jewell was with Wild Boar 12, but he lost the line. He found an electrical cable which he followed back to Chamber 4. There Mallinson, with Wild Boar 13, went past him. Dr Harris then took Wild Boar 12 and came out followed by Jewell.
17:04 - Wild Boar 11 was out of cave.
17:49 - Wild Boar 13 reached Chamber 3 with Mallinson.
18:02 - Dr Harris and Jewell reached Chamber 3.
18:03 - Brown reached Chamber 3.
18:15 - Paasi reached Chamber 3.
18:17 - Rasmussen reached Chamber 3.
18:21 - Roe and Bratchley reached Chamber 3.
18:27 - Challen reached Chamber 3.
18:53 - Wild Boar 12 reached the hospital and Wild Boar 13 reached the cave entrance.
20:46 - Chiang Mai rope access and Unsworth exited the cave.
21:00 - Two Thai military from Chamber 9 reached Chamber 3.
21:02 - Third Thai military from Chamber 9 reached Chamber 3.
21:10 - Fourth and final Thai military diver from Chamber 9 reached Chamber 3. No one was upstream of this point. At this time, a water pipe coupling breaks causing the water to rise rapidly between Chambers 3 and 2. The ~50 people who were still in Chamber 3, who served as advanced base camps, quickly fell back to Chamber 2.

Wednesday 11 July 2018

10:00 – The remaining rescuers met at the cave to pack up their equipment. Three vans were needed for all the equipment and people.
13:00 – The last of the rescuers left Tham Luang.

FOREIGN ASSISTANCE

Up to 20 Australians were involved in the rescue, including Dr. Harris and Craig Challen, who received diplomatic immunity from the Thai government to protect him from potential problems with child sedation. Other international support included:

- 1 Belgian diver - Ben Reymenants
- 1 Canadian diver - Erik Brown
- 2 Danish divers - Ivan Karadzic and Claus Rasmussen
- 1 Finnish diver - Mikko Paasi
- 1 German diver - Nick Vollmar
- 1 Singaporean diver - Douglas Yeo
- 1 Spanish diver - Fernando Raigal
- 6 Beijing Peaceland Foundation rescuers and their underwater robot
- 1 British diver – Tim Acton
- 1 American diver – Bruce Konefe
- 1 French diver - Maksym Polejaka
- 1 Ukrainian diver - Vsevolod Korobov
- 1 Thai diver - Ruengrit ‘Pae’ Changkwanyuen
- 1 New Zealand diver - Ross Schnauer
- 11 cavers from the British Cave Rescue Council – divers Rick Stanton, John Volanthen, Chris Jewell, Jason Mallinson, Connor Roe, Josh Bratchley and Jim Warny plus surface support Rob Harper, Mike Clayton, Gary Mitchell and Martin Ellis
- 1 UK caver – Vern Unsworth
- Chiang Mai Rock Climbing Adventures staff Josh Morris (US) and Mario Wild (Austrian) with Thai staff Surachet Kongsingh, Noppadon Uppakham, Adithep Khamsri, Archan Nawakul and Jarundech Tongnak
- Thanet Natisri (Thai/US) – groundwater expert and translator
- 1 Israeli diver - with communication means provided by Maxtech NetWorks
- Several Japanese groundwater engineers - including Shigeki Miyakes, a specialist in the Japan International Cooperation Agency in Thailand
- Several Laotian rescuers - from Vientiane Rescue
- Several Dutch drainage specialists
- Several Indian pumping experts
- 36 US Military's Indo-Pacific Command (USINDOPACOM)

The twelve boys and their soccer coach described their ordeal at a news conference in Chiang Rai after they left the hospital.
• The Czech Republic government was ready to supply 4 pumps of 400 liters/second, but after inspection on the ground it was proved to be unsuitable.
• Volunteers, teams and technical specialists from countries such as Myanmar, the Philippines, Sweden and Ukraine.
• France, which followed the situation very closely, proposed to send a team of Speleo Secours Français (https://www.speleo-secours.fr/?p=2574), but the Thai authorities estimated that adequate resources were already available on the site. Other teams and cavers were about to leave when the first survivors were being evacuated.

FINAL CONSIDERATIONS

About 10,000 people contributed to the rescue, including more than 100 divers, representatives of about 100 government agencies, 900 police officers, 2,000 soldiers and many volunteers. The equipment included ten police helicopters, seven police ambulances and more than 700 diving tanks, of which more than 200 were left in the cave. More than a billion liters of water (the equivalent of 400 Olympic-sized pools) were pumped from the cave.

It is worth to mention that the weather conditions were preponderable over the happy end of this long rescue story. It could very well have happened to a team of foreign cavers, coming as part of a monsoon expedition as we have seen in the past.

Thailand does not pass close to climate change. Heavy rains can now fall in the middle of the “dry” period in the north of the country. December 2018 is a good example, with floods, and unusual and very significant rainfall.

In the spiritual field, all the Thai caves are sacred. Buddhist and Animist beliefs are very strong. To the majority of Thai people who have followed this, the happy end of this story is also attributed to the venerable Kruba Bunchum, who will be the only one to deliver the hostages of the princess of Tham Luang. With his prayers, predictions will bring hope to Thai families and rescuers.

Regardless of belief, the Thai people gratefully acknowledge the participation of many people from around the world.

BOOKS ON THE THAI RESCUE

**PRIS AU PIÈGE: L’INCROYABLE HISTOIRE DES ENFANTS SURVIVANTS DE LA GROTTE THAÏLANDAISE**
*By Thierry Falise* - Editeur Florent Massot

**THE BOYS IN THE CAVE: DEEP INSIDE THE IMPOSSIBLE RESCUE IN THAILAND**
*By Matt Gutman*
Available on: https://www.amazon.com
https://www.harpercollins.com

**RISING WATER: THE STORY OF THE THAI CAVE RESCUE**
*By Marc Aronson*
Available on: https://www.amazon.com

**THE CAVE: THE INSIDE STORY OF THE AMAZING THAI CAVE RESCUE**
*By Liam Cochrane*

**THE GREAT CAVE RESCUE**
*By James Massola*
Available on: https://www.allenandunwin.com

Source: https://www.independent.co.uk/

Divers from the rescue mission (from left to right) Chris Jewell, Mike Clayton, Rick Stanton, Lance-corporal Connor Roe, Josh Bratchley, Gary Mitchell and Jim Warny, speak to media after arriving back at London’s Heathrow Airport.
Elected last July, the new Mexican president, Andrés Manuel López Obrador, announced an ambitious tourist train project that will cross the main regions of the Mayan heritage. It is a pharaonic project proposed by Obrador (aka “AMLO”), who succeeded Enrique Peña Nieto on December 1st, 2018, and will be the first head of state of a left-wing party in modern history from the country.

To boost tourism in southern Mexico, “AMLO” proposes to invest 120 to 150 billion pesos (5.5 to 7 billion Euros) in a train that connects the main sites of the Mayan region in the peninsula Yucatán in the south-east of the country. The scheme will require building an additional 854 km of track and using the existing 646 km. In four years from now if this project comes into being, details the press, this train will leave the State of Tabasco to make a loop of 1,500 km along the peninsula of southern Mexico, via Chiapas, Campeche, Yucatán and Quintana Roo.

The “Mayan train” will greatly facilitate the transit of one archaeological or natural site to another in this peninsula of Yucatán of great tourist value but where, at present, there are no fluid connections between the different interests. Thus, to reach Chiapas from Cancún for example, you have to take a bus or an airplane.

On the other hand, the construction of the Maya Train poses environmental risks to the region’s underground water networks and the long-term survival of the jaguar, experts have warned.

Studies would take at least a year but government wants to begin immediately. The 1,500-kilometer railroad, which will link cities in the three Yucatán peninsula states as well as Tabasco and Chiapas, has been rejected by indigenous communities but its construction was confirmed following a public consultation last November that found just under 90% support for the project.

The Sac Actún underwater cave system and the Dos Ojos system in Tulum, Quintana Roo – which together form the world’s largest cave – are among the subterranean bodies of water that could be adversely affected by construction of new railway tracks.

Experts also warn that the land above the aquifers may not be able to support the weight of the tracks and passing trains. “These aquifers make up one the biggest fresh water storage areas on the planet; they’re of great importance to the ecosystem because a lot of tree roots are nourished from the water. In addition, they’re vital for the whole jungle and the present and future of the entire [Yucatán] peninsula,” said Francisco Remolina, a former director of the Yum Balam Natural Protected Area (ANP).

Arturo Bayona, the scientist who was in charge of carrying out the environmental studies for the ambitious mapping venture known as the Great Mayan Aquifer (GAM) project, said there is a risk of fissures opening up if the railroad is built where there is only a thin layer of karst – an area of land made up of limestone. “Soil surveys are fundamental because you need to ensure that the rock layer is strong enough to, firstly, support the weight of the train and later, the vibration it causes when it passes,” he said.

Emiliano Monroy, a hydrogeologist at Northwestern University in Illinois, United States, is also concerned about the potential impact of train vibrations.
“Some cave systems are very unstable, we don’t know whether there is a two-tonne rock beneath the track or one that could easily be displaced. You also need to consider that vibrations will be generated for years and that could accelerate the natural process of collapses,” he said.

GAM project director Guillermo de Anda said it is essential to carry out a comprehensive assessment of the land on which the Maya Train is slated to run before any construction work begins. “First recommendation: if something is going to be built, you have to be sure that the ground is appropriate and take into account that you shouldn’t drill down too deep. The ideal route [for the train] would be that which least endangers the karst areas and the subterranean areas in accordance with a formal study that determines the porosity, structure and strength of the land...” he said.

The experts say that land where there are already tracks that the Maya Train intends to use must also be evaluated. “When those tracks were built we had no idea about the peninsula’s subsurface structures, its geological structures. How do we know if that leg [of the route] crosses a 200-meter-wide cavity or several cenotes [water-filled sinkholes]?” de Anda asked.

Monroy said that carrying out the studies required would take “at least a year,” a timeframe that would stymie President López Obrador’s plan for construction to start this month of December.

Bayona said that construction of the stations for the new railroad is also a cause for concern, pointing specifically to the pressure thousands of passengers will place on sewage systems. “Where is the wastewater, generated by thousands of [train] users, going to go?” he asked.

Remolina, who is now a member of a wild cats conservation group, said the planned route of the railroad would also affect areas where many of Mexico’s dwindling population of jaguars live.

Building the Maya Train rail line is akin to putting up a barrier that will limit jaguars’ home range within which they hunt, reproduce and raise their young, he said. “If we put up a ‘wall’ that restricts the jaguar from passing from one side to the other, we’re going to bring about [a situation] in which these animals can’t... reproduce with individuals that are genetically a little bit more removed from them, we’ll deny them the chance of having greater genetic variability with which to ‘nourish themselves,’” Remolina said.

“Barging in on the jaguar’s home range would cause, in the future, consanguinity. Little by little, we could edge towards [a situation] in which they have less chance of survival,” he added.

De Anda said that the experts’ views didn’t amount to a complete rejection of the 120 to 150-billion-peso (US $5.9-billion to $7.4-billion) project, which is designed to boost the economy in the southeast of Mexico, but rather as a reminder that utmost environmental care must be taken.

“If it’s a social benefit program, we can’t oppose it being done. But we can ... demand that it be done in an orderly way and, above all, that it be supported by science... Obviously, any project in an area as sensitive as Tulum makes certain places vulnerable. That’s why we have to be extremely careful,” he said.

Sources:
Courrier International website: https://www.courrierinternational.com/article/au-mexique-un-grand-projet-de-train-pour-sillonner-la-route-maya


Sin Embargo website: https://www.sinembargo.mx/13-08-2018/3456419

Underwater cave systems around Tulum, through which the Maya Train will run.
SESSION 1
Saturday August 25, 2018
at 13h30 (local time)

ATTENDANCE
President: George VENI
Vice-President of Administration: Zdeněk MOTYČKA
Vice-President of Operations: Efrain MERCADO
Secretary General: Fadi H. NADER
(attendance via Skype)
Treasurer: Nadja ZUPAN HAJNA (present for last hour)
Adjunct Secretaries:
Bernard CHIROL
Nivaldo COLZATO
Mladen GARAŠIĆ
Satoshi GOTO
Gyula HEGEDUS
Tim MOULDS
Bärbel VOGEL
Honorary Members/Past-Presidents:
José Ayrton LABEGALINI
Guests:
Jean-Pierre BARTHOLEYNs - President, UIS Commission of Karst and Cave Protection
Mario VEROLE BOZZELLO - Deputy Delegate of Italy / Italian Show Cave Association
Daniela PANI - National Delegate of Italy

1) Opening speech of the UIS President / Approval of Agenda
George VENI thanked all participants for coming to Ebensee (Austria). He presented the apologies of Fadi NADER for not attending this annual UIS Bureau meeting in person. George VENI highlighted in his opening speech the following points:
   a) Based on the group photograph of attendants of the recent UIS International Symposium on Volcanoespeleology, most of these attendants are over 60 years in age! This fact is alarming, showing that the young cavers appear not to be interested in UIS – or simply unaware.
   i. Encourage National Delegates to share information about UIS;
   ii. Getting cavers to recognize efforts made by the UIS in supporting and funding projects and expeditions.
   b) While the Education Commission has been mostly involved in teaching cavers, we need to reach out to educate the larger public.
   Jean-Pierre BARTHOLEYNs recalled why UIS was not deeply involved in public education. Countries run their own education programs.

DECISION 1: The Agenda items of the Meeting (3 sessions) were approved by the present Bureau members.

2) Approval of Minutes of Regular Bureau Meeting of 2017 (Penrith, Australia)
One mistake was noted: Mladen GARASIC’s name was misspelled on page 6.

DECISION 2: The minutes of the 2017 annual meeting were approved by the UIS Bureau.

3) Review Action Items and Decisions of previous UIS Bureau Meeting (2017) – Decisions to be made on follow up un-accomplished actions
   a. Action Items and Decisions
   All action items are done.
   
   b. Discussion on projects for adjunct secretaries:
   Clear decisions and activities for all adjunct secretaries
   • Gyula, Hungary, interested in IYCK, promoting information on UIS in neighbor countries, and sharing information about UIS in the Hungarian speleological information system.
   • Mladen, Croatia, education projects and UIS film.
   • Satoshi, Japan, involved in Iran, Malaysia, Philippines, China and Thailand projects for developing speleology.
   • Nivaldo, Brazil, UIS Bulletin, publications of old bulletins not yet digitally converted.
   • Bernard, France, History Commission, Cyprus Project.
   • Tim, Australia, making cavers from Australia and some parts of southeast Asia aware of UIS.
   • Bärbel, Germany, UN liassion and ISO Technical Commission on Karst.
DECISION 3: Adjunct Secretaries defined their specific activities within the context of the UIS Bureau obligation — briefly: Gyula (IYCK), Mladen (Education and film), Satoshi (Speleo development in Asian countries); Nivaldo (UIS Bulletin), Bernard (History Commission), Tim (focal point for Australia and southeast Asia), Bärbel (UN liaison).

c. New version of the Internal Regulations (G. VENI, F. NADER)

Corrections and comments made by the national delegates and revised by George VENI and Fadi NADER were presented to the UIS Bureau and approved.

The UIS Logo issue should be further discussed. Precise information relevant to the use of UIS Logo should appear in events guidelines too (check Point §13, Session 2 – below).

ACTION 1: George VENI will send the revised Internal Regulations first to all Bureau members and then to National Delegates.

d. UIS Archives in Postojna (Z. MOTYCKA, P. BOSAK)

Zdenek MOTYCKA presented the structure of the archives and showed how it works.

José-Ayton LABEGALINI asked to be sent old ICS posters for the History of UIS Book and to archive in Postojna.

ACTION 2: Zdenek MOTYCKA will provide the posters of the 16th ICS for the UIS Book and to deposit at the Postojna UIS archive office.

4) Report by B. VOGEL on her work on the UN’s High Level Political Forum this summer.

The UIS participated as part of the UN NGO Major Group during the UN’s High Level Political Forum on Sustainable Development Goals (SDG) in New York City. UIS was represented by Veronika VOGEL (German Federation of Speleology) and Dr. Robert Brinkmann (National Cave and Karst Research Institute-NCKRI). The purpose is to influence the UN SGDs by inserting speleological information.

The Report on the UN High Level Political Forum (HLPF) in New York and UIS engagement in UN NGO Major Group on sustainable development was represented by Bärbel.

• A working group of the German Federation of Speleology (VdHK) together with George Veni (UIS) was engaged in the NGO Major Group. The purpose is to influence the UN NGO papers by inserting input of speleology in the development of sustainable environmental goals.

• Two 30-second videos used at HLPF were shown and officially posted by UN NGO Major Group on Facebook and shared at the UIS Facebook Page.

• Bärbel proposed UIS to become part of the United Nations Economic and Social Council (ECOSOC) to be listed as NGO to get an independent access at HLPF.

• UNESCO: Fadi Nader gave Bärbel the internet link to the UNESCO NGO Group to investigate about UIS becoming a member of ECOSOC (it was recommended by the Ambassador of France at UNESCO).

• Regarding International Union for Conservation of Nature (IUCN) – recommend to cooperate with working group on Karst and Caves (Nadja, Bärbel and George are members).

Fadi Nader noted that the UN activities should be well explained to the community of UIS and the National Delegates, so that they become more interested (replies on emails and Facebook postings show disinterest of the international community of cavers / and we need to work more to reach out for them).

5) UIS Media

a. Website (E. MERCADO)

i. Mladen GARASIC will send info from European Federation about GDPR.

ii. Risk Management Procedure sent to UIS Bureau for comments.

iii. Risk Management Procedure sent to Tim MOULDS (Australia) for English language correction.

iv. Jasmina RIJAVEC will add a banner to the webpage to comply with GDPR.

v. Transfer UIS domain name from Melbourne to HostGator. Inform Jasmina RIJAVEC.

b. Facebook Page

Efrain MERCADO reported 1667 members on the UIS Facebook page.

c. UIS Bulletin (N. COLZATO)

i. Nivaldo highlighted the Bulletin status: need for info from Australia and other countries, reasons for delay in publications, each volume exceeds 100 pages - 2 issues a year.

ii. There is good input from the caver community about the Bulletin, the following actions were decided: Put the bulletin in Facebook (Mladen GARASIC); Add download statistics to UIS Bulletin in webpage; digitize old Bulletins and add them on UIS website (Nivaldo COLZATO).

d. UIS History video (M. GARASIC)

The video is complete except that permission is being sought to use the music.

ACTION 3: GDPR issues will be settled on the UIS Website, coordinated by E. MERCADO.

ACTION 4: UIS Bulletin (2 issues per year) will be organized by N. COLZATO and promoted through UIS website and Facebook (M. GARASIC).
ACTION 5: Old UIS bulletins will be digitized and added on UIS website by N. COLZATO.

ACTION 6: UIS History video will be finalized and put on website by M. GARASIC.

   - For the new ISO commission deadlines were set.
   - UIS had a good collaboration with ISCA but the information was too late for delegates to act in time.
   - Ask National Speleological Federations to contact national ISO members.
   - Ask national ISO members to cooperate in terms of money, status, and government support.
   - Bärbel explained why UIS should engage with ISO.
   - George will attend a meeting in China and discuss with Chinese the goals of the ISO committee and the estimated times and costs of participation.
   - As far as Bärbel found out due to ISO statues UIS cannot be an observer or participant.
   - VdHK will meet in mid-September with the national ISO member at the German Ministry of Environment and will keep UIS updated.
   - European Cave Protection Commission ECPC agreed to set up a task force on ISO.

ACTION 7: G. VENI will inform National Delegates about the status of ISO karst technical commission and request support for UIS.

ACTION 8: G. VENI will meet the Chinese and talk about the status of ISO karst technical commission and UIS point of view.

7) UIS Bureau internal functioning (F. NADER / G. VENI)
   a. Information policy inside the Bureau (email, deadlines, skype)
      i. Important to answer communications
      ii. Immediate reaction, even if briefly
      iii. Skype shall be at least each three months
      -- see Point §3 (above) and DECISION 3
   c. Regular work shared and reported regularly.
   d. Skype meetings

DECISION 4: The UIS Bureau will organize more Skype meetings throughout the year.
• Difficulties: sponsors and public sponsors. Limited funds.
  • 1500 attendees expected.
  • There is $3,000 seed money to help.
  • George VENI recommends having at least three budget plans, one for low attendance, one for expected attendance, and one for high attendance, and make sure the registration fees can cover expenses in all scenarios.
  • EuroSpeleo Forum plans to meet at ICS 2021.
  • Laurence asked about IYCK celebration (see below) Nadja ZUPAN HAJNA suggested going through the French National Commission of UNESCO for their support (and probably funds) for the 2021 ICS. It could be called “The UIS Scientific Conference of Caves and Karst”.

**ACTION 9: G. VENI will send the Guidelines for ICS organization to Laurence TANGUILLE.**

9) UIS Relationships with Regional Organization and Countries (F. NADER / G. VENI)

a. Discussion of new and renewing member countries: how to keep countries and bring in new and former members (reports from S. GOTO, E. MERCADO).
b. Mongolia paid its fees.
c. Paraguay will pay in next FEALC congress in Colombia on November.
d. Costa Rica (Ferdinando Diddona) was informed about real fees.
e. Honduras has a new speleological organization. Arrangements in its way for joining UIS.
f. Armenia: Bärbel VOGEL will contact Samuel from Armenia and ask Armenia to join.
g. Venezuela was contacted today. They will attend the FEALC Congress in Colombia and fix their payments.
h. George VENI asked for time for countries applying for UIS membership to speak to the General Assembly in Lyon.
i. Bärbel VOGEL spoke with a Georgian caver asking to join UIS.
j. Report on the AUS meeting in Indonesia and the discussions with AUS president and vice president (Satoshi GOTO and Nadja ZUPAN HAJNA).
k. Bangladesh and Myanmar do not have organized speleology (S. GOTO).
l. Nadja ZUPAN HAJNA reported that Indonesian cavers ask UIS to support some young cavers to attend next ICS.
m. Philippines: Two groups; One is not interested in joining UIS. (J.-P. BARTHOLEYNS) They will be represented by the Asian Federation.
n. Fadi NADER explained the situation and request of PAKISTAN. Decision was made that if they pay their dues, UIS Bureau can ask for the re-entry of Pakistan to UIS General Assembly.

**ACTION 10: B. VOGEL will contact representatives of Armenia and Georgia to see about their prospective membership in UIS.**

**ACTION 11: G. VENI will add on the agenda of the UIS General Assembly of ICS 2021 time for “would-be member countries of UIS” to address the Assembly.**

**ACTION 12: F. NADER will inform Pakistan that they have to pay membership fees before considering how to re-integrate Pakistan in UIS (Extraordinary General Assembly or Standard General Assembly).**

**DECISION 5: Only (active) Member Countries who paid their dues will remain on the UIS website list. National Organizations may still have their information on the contacts page on the website – but not on the page of the UIS Member Countries.**

10) ISCA News (G. VENI)

George VENI presented to the UIS Bureau the status of relationship between ISCA and the UIS, which is good and that he, Nadja ZUPAN HAJNA and Satoshi GOTO will meet with ISCA at their Congress in Italy in October 2018.

11) IYCK 2021 (G. VENI, N. ZUPAN HAJNA, F. NADER)

a. Present situation (reported by F. NADER)

i. George VENI gave Laurence TANGUILLE and the UIS Bureau an introduction about IYCK and what has been done so far with UN/UNESCO and supportive organizations.

ii. UIS plans to celebrate IYCK with or without UNESCO on a national level – Z. MOTYCKA approves and thinks that we do not need UNESCO’s designation for the international year.

iii. Another option was proposed by A. KLIMCHOUK (Ukraine) but for a year after 2021.

iv. Fadi NADER explained the work done so far with the UNESCO – and shared the proposal to have a launching event from UNESCO venue in Paris in 2021 for a UIS IYCK 2021 and to ask for the UNESCO label for the ICS 2021 (Lyon). He explained that this does not contradict having another UN/UNESCO IYCK after 2021 (if possible) or other special events like an international day or week.

b. International Day proposal (G. VENI)

i. Tim MOULDS favored an international day instead of a year and supported by countries.

ii. Efrain suggested asking a proclamation of the international day of caves and karst from countries parliaments, congresses or legislatures.

iii. Ferdinando DIDONNA and B. VOGEL suggested...
communicating with ISCA and local countries for promotion.

iv. George VENI supports negotiation with ISCA to change the name. Satoshi, George and Nadja will attend the ISCA Congress at Frasassi Cave in October 2018 to talk about it.

v. Gyula proposed that 16 September – birthday of UIS – could be a good date for the International Day.

c. Way forward

• George VENI listed the organizations that supported the UIS IYCK project, which was followed by voting by the UIS Bureau for maintaining the UIS IYCK 2021 (with or without UNESCO/UN support or designation):
  11 votes YES. Creation of IYCK Committee: George, Fadi, Gyula, Nadja and Zdenek.
  - Bärbel asked committee to send minutes of the meetings to Bureau.
  - George will send communication to Chinese about our IYCK event and about supporting entities.

DECISION 6: UIS Bureau voted to pursue the IYCK 2021 project with or without the UN/UNESCO designation. A Committee was formed (George VENI, Fadi NADER, Gyula HEGEDUS, Nadja ZUPAN HAJNA and Zdenek MOTYCKA) to follow up on the organization of the IYCK 2021.

ACTION 13: The UIS IYCK 2021 Committee will start meetings and preparation and share the minutes of its meetings and activities with the UIS Bureau.

12) UIS Commissions and Expeditions (Z. MOTYCKA)

a. HABE Prize (J.-P. BARTHOLEYNS)
An allotment of 250.00 euros each year through 2021 were approved for the France Habe Prize (the UIS website needs to be updated accordingly to).
  Jean-Pierre BARTHOLEYNS asked for an increase of funds up to 500.00 Euros, and if possible to carry on the funds to next year in case there is no prize allocated to a certain year.
  • Vote approved assigning 250.00 Euros each year to Protection Commission for the HABE Prize. These funds will not be carried on to the next year in case there is no prize allotted for a certain year.

b. UIS Commissions (support)
Up to 2,000 Euros have been assigned to support commissions (George VENI).
  • Monica PONCE asked for support (500 Euros) to the Materials and Techniques commission.
  • Speleotherapy commission asked for support – 300 Euros (request rejected by UIS Bureau but set for a vote after the Bureau Meeting).
  • Karst Hydrogeology commission asked for support (250 Euros).

• Firn and Glacier commission request:
  - UIS shall not pay for travelling expenses
  - UIS Bureau needs more precise information

Funds allotted for this year. May change as funding requests fluctuate in the next years.

UIS supports commissions webpages linked to UIS Website. Mirror page from commission sites could be provided on UIS Website.

DECISION 7: The UIS Bureau will support requests by the UIS Commissions in the following amounts: 250 euros for the Protection Commission’s France HABE Prize, 250 euros for the Karst Hydrogeology and Speleogenesis Commission, and 500 euros for the Materials and Techniques Commission. [Within a month after the meeting, when some addition information was received, the Bureau approved 500 euros for the Glacier, Firn, and Ice Caves Commission and 300 euros for the Speleotherapy Commission.]

c. International Expeditions (support)
UIS supported two international expeditions: Greece (Maaras Expedition) presented by Z. MOTYCKA, and Cyprus Kyrenia Project by M. GARASIC
  • UIS International Expeditions support: First application was from Greece (Maaras Expedition 2018)=1,360.00 Euros granted/ Report expected soon.
  • A summary for the UIS Bulletin should be sent. Add this to item 5 of special conditions for supported expeditions.
  • It is necessary to have 2 deadlines for the different expeditions. Next deadline is November 2018. No one has asked yet for funds beyond those mentioned above.

DECISION 8: The next deadline for the UIS International Expeditions support bid is set to November 2018 – advertisement will be made via website and Bulletin.

• Cyprus Kyrenia Project (M. GARASIC): 30 people involved, 14 caves explored, and the expectation of the establishment of new national caving group – no financial support requested from UIS.
  - George VENI asked for a report for the UIS Bulletin.
  - Project will end in November 2018 (Fadi NADER).

ACTION 14: Fadi NADER will work on a report on the Cyprus Kyrenia Project and UIS involvement for the upcoming UIS Bulletin.

d. News of Commissions

• Monica Ponce approved the new leader of Materials and Techniques commission.
  • New education commission president, András
Hegedűs, from Hungary, proposed by Gyula. Approved by UIS Bureau. UIS Video Photo Commission proposed by Jean-Pierre Bartholeyns) and supported by B. Vogel.
- Shall be presented to General Assembly.

13) Adding a section to UIS Internal Guidelines for the use of Logo

Added. Only national representative organizations of member countries can use the UIS Logo. Others shall ask for permission and all must be used per the Visual Identity Guide. These changes were made in the UIS Internal Regulations.

SESSION 3

Monday August 27, 2018

at 09h00 (local time)

ATTENDANCE

President: George Veni
Vice-President of Administration: Zdeněk Motyčka
Vice-President of Operations: Efrain Mercado
Secretary General: Fadi H. Nader
(Television via Skype)
Treasurer: Nadja Zupan Hajna
Adjunct Secretaries:
- Nivaldo Colzato
- Mladen Garasić
- Satoshi Goto
- Gyula Hegedüs
- Tim Moulds
- Bärbel Vogel

Honorary Members/Past Presidents:
- José Ayrton Labeagalini

Guests:
- Jean-Pierre Bartholeyns - President, UIS Commission of Karst and Cave Protection
- Mario Verolle Bozzello - Deputy Delegate of Italy / Italian Show Cave Association

14) MESS 2018 - Turkey (F. Nader)

Fadi NADER presented to the Bureau the recent updates of the fourth Middle East International Speleology Symposium, which will take place for the first time outside Lebanon, in Antalya (Turkey).

Mladen Garasić will attend the MESS 4, and will represent the UIS in this event.

DECISION 9: Mladen Garasić will represent the UIS at the MESS 4, October 2018 (Antalya, Turkey).

15) Update on Sami Karkabi Prize (F. Nader)

Fadi NADER presented the project proposed by the Speleo-Club du Liban (SCL) for setting an international speleological prize on the name of Sami Karkabi. He explained that the proposed prize will be based on a single photo related to speleology and karst, and is not a UIS prize. Still, the Prize is to be granted only at the ICS with the collaboration of the ICS organizers and UIS. The awarding mechanism will be set after approval by UIS Bureau, it will consist of having an international board with members of SCL, the UIS, and the ICS organizers.

Fadi NADER asked the Bureau to approve the request to the ICS organizers to allocate a time and place for giving out such international prizes by Member Countries and associations, provided that they respect the host country and ICS program and that they follow the UIS Code of Ethics.

The Sami Karkabi Prize will not overlap with any other prizes (so coordination shall be undertaken with the ICS organizers) – the first Prize will be at the 2021 ICS in Lyon (France).

Mladen Garasić was appointed to represent the UIS in this event.

ACTION 15: The UIS agrees on having international prizes given at the ICS by Member Countries; Fadi NADER is asked by the BUREAU to inform SCL and the ICS 2021 organizers this decision and follow up on the organization of the Sami Karkabi Prize with them. George Veni will notify La Venta.

ACTION 16: George Veni asked Nivaldo Colzato to create a UIS, Scientific Achievement Prize.

16) Finance Update (N. Zupan Hajna)

a. Summary – Status

Not updated until 2nd month (end of fiscal year). Still, Nadja Zupan Hajna noted difficulties with PayPal (Koper Banka has its own payment system) and reminded that UIS is registered in Slovenian Business Register - Nadja Zupan Hajna is registered as the owner of the account for the UIS.

- Efrain Mercado proposes to use Banka system for UIS Fees payment and for selling books
  - Costa Rica fees will be waived for three years once UIS receives a formal request letter. Approved.
  - Honduras is out. There is a new organization in the country. They must reapply as member country in getting accepted in Lyon 2021.
• George asked to waive Venezuela’s fees until 2021. Bureau accepts under the conditions of having an official request letter.
• Pakistan: Decision was made that if they pay their dues, UIS Bureau can ask for the re-entry of Pakistan to UIS General Assembly (see above Point §9, above).
• George proposed to have an explanation on the UIS website about categories and specific payments of each member country.

**ACTION 17:** Costa Rica’s fees will be waived for 3 years (pending receipt of request letter); Venezuela’s fees waived until 2021 (pending letter of request); Honduras is no more a UIS member country; Pakistan needs to send an official letter and pay fees before asking General Assembly for its return. Fadi NADER will inform the above listed countries about these decisions.

**ACTION 18:** George VENI asked Efrain MERCADO to add on the UIS website information on categories and specific payments of each member country.

b. Upcoming payments (Internet, Commissions, …)
• Commissions (see above – up to 2000 Euros)
• Sponsorship support: TransKarst and National Mexican Congress.
  1. Agreed. Send a Bureau photo and a short video clip to support the Mexican congress.
  2. Mexican Congress 500 Euros, two UIS history books, and cave geology books (according to postage costs)
  3. $1,500 US to support six students ($250 each) to attend the TransKarst Conference.

**DECISION 10:** The UIS Bureau agreed to support the TransKarst Conference and the Mexican National Congress. George VENI will notify them.

c. Indonesia proposal:
  1. Indonesia Project Proposal. To help funding a potable water system in a village.
  2. Nadja reported that the issue of karst groundwater contamination is much bigger than what UIS can fund. She thinks UIS should ask the Indonesian government to react.
  3. We should ask UNEP to initiate a program for water supply in Indonesia and to work with.

**ACTION 8 Jean-Pierre BARTHOLEYNS will ask further information from UNEP and report back to UIS Bureau.

d. UIS Website:
  Payment of 200 – 300 Euros for website support to Jasmina RIJAVEC (Z. MOTYCKA).

**ACTION 19:** Nadja ZUPAN HAJNA will transfer up to 300 Euros to Jasmina RIJAVEC for website support.

17) **Venue and date of the 2019 UIS Bureau Meeting**

The following options were discussed:

a. Japan - Japanese Speleological Society meeting (Satoshi Goto); Satoshi withdrew his earlier suggestion to meet in Japan and recommended meeting in the Philippines.

- Mindanao area is unstable and not safe, seek second option (Bohol).
- Bureau will ask for more safety information.

c. Other proposals?
- Brazil asked to receive UIS Bureau in June 2019 in Bonito (Brazil). Nivaldo showed a short video on Bonito.
- Spanish CEC asked to have UIS Bureau meeting in 2020 in Valencia (Spain), during their congress.

**DECISION 11: The UIS Bureau meeting for the year 2019 will be at the 3rd TransKarst meeting (Philippines) in coordination with AUS, if security permits.

18) **News from major past speleological events**


g. British Cave Research Association, 28th Cave Science Symposium, 20-21 October 2017 (Leeds, UK), website to be announced. (no news).
19) Attendance of future speleology events (listing events and attendees)


c. International Workshop for Women Speleologists in Latin America, 2-6 October 2018, (Viñales, Pinar del Río, Cuba), presidentesec@ceniai.inf.cu B Chirol to attend.

d. Middle Eastern Speleology Symposium, 3-6 October 2018 (Antalya, Turkey), http://mess4.com/ M. Garasic.

e. British Cave Research Association 29th Science Symposium, 13 October 2018 (Bristol, United Kingdom), for information contact Gina Moseley (gina.moseley@uibk.ac.at) Andy Eavis?


i. National Conference of Hungarian Cave Professionals, Sopron/Hungary. 16-18th November 2018., G. Hegedus.

j. 1st Colombian Speleological Congress and 8th Congress of FEALC (Federation of Latin American and Caribbean Speleological Associations), 6-10 November 2018 (San Gil, Colombia), http://sociedadcolombianadegeologia.org/8cealc/ E. Mercado, N. Colzato, J. Labegalini.


l. International Cave Rescue Training, 10-18 November 2018 (Lozere, France), dodelchristian@gmail.com.


t. 3rd Asian TransKarst Conference, 30 August – 1 September 2019 (Philippines), website to be announced.


20) Any other business

a. Proposal that NCKRI becomes a Cooperating Organization of the UIS (G. Veni) - Agreed by the UIS Bureau (G. Veni abstained).

b. MOU between UIS and the Karst Research Institute (N. Zupan-Hajna) - To be finished in September by N. Zupan Hajna.

c. Request by Bernard Chirol for financial assistance - UIS does not support travel for members of the Bureau or the Commissions, therefore the Bureau did not support the request.

d. Use of logo at Casola and UIS attendance (G. Veni) - Agreed for use of the UIS logo.

e. Italian request on accident protocols - G. Veni to share with UIS Cave Rescue Commission.

DECISION 12: The UIS Bureau agreed that NCKRI becomes a Cooperating Organization of the UIS.

DECISION 13: The UIS Bureau agree to grant the UIS Logo use to CASOLA event 2019.

ACTION 20: Nadja ZUPAN HAJNA will finalize the MOU between UIS and the Karst Research Institute in September 2018.

ACTION 21: George VENI will distribute to UIS Cave Rescue Commission the Italian request on accident protocols for consideration.

f. UIS T-shirts, Pins

- Who will sell them? Store them?
- A formal UIS shirt or other clothing (tie, scarf etc.) for professional meetings? Pre-ordering / limited edition produced every few years?
- Keeping stocks in different parts of the world to minimize postage/costs/storage?
- Use a commercial online seller partner?

ACTION 22: The UIS Bureau decided to form a committee for shirt/clothing design and specific products, with JP BARTHOLEYNS, G. HEGEDUS and N. COLZATO (they will coordinate with IYCK 2021 Committee).

g. Raising the profile of the UIS

The Bureau agreed that this topic was discussed in many different ways during the meeting and no further discussion was needed. Everyone was encouraged to work on their plans.

h. Are there ways to simplify the process of approving requests from the UIS? Formation of subgroups to review requests for money or logo was discussed to possible reduce unneeded communication within the Bureau. It was decided that all important decisions should be made by the entire Bureau.

i. Translate the UIS Code of Ethics into other languages. Request each member country to provide a translation.

j. Provide a translate option for the UIS website (N. COLZATO and M GARASIC to coordinate with Fadi NADER by approaching a native speaker of each major language from the UIS delegates).

ACTION 23: Nivaldo COLZATO and Mladen GARASIC will coordinate with Fadi NADER to provide translation options for the UIS website.

ACTION 24: Fadi NADER will prepare the minutes of the meetings and the Action List for 2018/2019.

21) Closing Statements (G. Veni)

George VENI closed the 2018 UIS Bureau meeting, by reminding Bureau members to reach out to people from outside the Bureau to help with their tasks and by thanking them for their time and input.

Meeting closed at 17h46, on the 27th August 2018.
Ebensee, Austria, August 27, 2018: UIS Bureau and friends at the EuroSpeleo Forum.
THE MERDEKA AWARD

Andy Eavis (UK), UIS Past President, receives the Malaysia’s most prestigious award

By Nivaldo Colzato
UIS Adjunct Secretary/Editor of the UIS Bulletin
nivaldo@karinaetiquetas.com.br

Sources:
British Cave Association (BCA) Newsletter - Nº 34 (October 2018, page 16)

Merdeka Award website: http://www.merdekaaward.my

Congratulations to Andy Eavis, who recently accepted the Merdeka Award - ‘Malaysia’s most prestigious award for excellence’ - for the work that’s been done in opening up the great caves of Mulu, a task in which he has been involved since the first Royal Geographical Society expedition in 1977-8. He has been a participant or leader in 13 of the 26 Mulu expeditions, most recently last year.

The citation for the prize, which is worth about £55,000 and was awarded at a ceremony in Kuala Lumpur by the Sultan of Perak, Darul Muizzidin Shah, says it was given for Andy’s ‘outstanding contribution to the people of Malaysia,’ and goes on to praise ‘his pioneering work in the areas of geomorphology and cave survey through the Mulu Cave projects with the Royal Geographical Society Expedition and the discovery of the Sarawak Chamber, leading to extended research on rainforest habitats and ecosystems, and establishing international collaborations for scientific and nature expeditions.’

Dick Willis, another veteran of Mulu caving who survived a demanding through trip there earlier this year, reports that Andy has ‘no intention of keeping any of [the money] himself because the Award represents an acknowledgement of the work of 174 cavers of various nationalities who have participated in 26 expeditions that have taken place in Mulu over the last four decades, and which have contributed hugely to the study and management of this stunning UNESCO world heritage site.’ The money, he adds, ‘is currently being held in a Malaysian account while any tax implications of moving it to Britain are explored and discussions take place between Andy and other key Mulu Caves Project personnel about various options for its use.’

THE MULU CAVE PROJECTS

The caves of Mulu, Malaysia, have been explored for over forty years by a coordinated series of Anglo-Malaysian expeditions which first visited the area in 1978. The Mulu Caves Project is a collaboration between UK speleologists and the Sarawak Authorities, particularly the Sarawak Forestry Corporation, working in association with Gunung Mulu National Park management and staff. This collaboration has been operating since 1978 when a group of 6 speleologists visited the Park as members of the Royal Geographical Society Expedition and established Mulu’s importance as the location of some of the planet’s most extraordinary and vast underground landscapes.

In the 40 years since cavers first visited Mulu, successive expeditions have been unravelling the secrets of this vast hidden world and yet the full potential of Mulu’s caves has not yet been fully realised – surely there are spectacular discoveries yet to be made.

Once in the field, the expeditions utilise local services and labour for logistical support to ensure that we contribute directly to Mulu’s local economy.

For more information, please visit http://www.mulucaves.org/wordpress/about
IN MEMORIAM

Jeanne Marie Gurnee

Englewood, New Jersey, USA

1926 - 2018 (Age 91)

By Nivaldo Colzato (Brazil)
UIS Adjunct Secretary / Editor of the UIS Bulletin
nivaldo@karinaetiquetas.com.br

Source: https://www.barrettfuneralhome.net/obituaries/Jean-Gurnee/#!/Obituary

SPELEOLOGIST, EXPLORER, WRITER, EDITOR, CONSERVATIONIST, AND LAND-USE PLANNER

On Sunday, June 17, 2018, Jeanne Marie Gurnee passed away at the age of 91 at her home in Tennessee. Born in 1926 in Englewood, NJ, Jeanne was a graduate of Tenafly High School in Tenafly, NJ, and the Katharine Gibbs School in New York, NY. In 1951 Jeanne married Russell Gurnee and settled in Closter, NJ (New Jersey, USA). During this time Jeanne worked for an art studio in Rockefeller Plaza and was an active member of her community, serving on the Board of Zoning Adjustment and as the Environmental Commissioner for the Borough of Closter.

Jeanne was a long-time member of the Society of Woman Geographers; she was one of the first female members, and first female president, of the National Speleological Society (NSS); and as a member of The Explorers Club she served on the Board of Directors of the Club and was the editor and publisher of The Explorers Club Magazine, The Explorers Journal.

Jeanne and her husband Russell had a life-long interest in speleology, the scientific study and exploration of caves. Together they explored and developed many caves, including Kartchner Caverns in Arizona, Harrison's Cave in Barbados, Fountain Cave in the British West Indies, and most notably, the Rio Camuy Cave system in Puerto Rico. She was an author of numerous articles and co-author with her husband of Discovery at the Rio Camuy (Puerto Rico) and Gurnee Guide to American Caves.

Jeanne is preceded in death by her husband and will be lovingly remembered by her daughters Susan Gurnee and Wendy (Mike) Gustafson, grandchildren Luke (Mackenzie) Gustafson and Hillary (Roy) Adcock and great-grandchildren Miller Gustafson and Michael and Ethan Adcock.

“I had the privilege to meet Jeanne and her husband Russell some decades ago. Their contribution to the development of speleology was really incredible and is the result of a cooperation of two exceptional persons. Their contribution to the foundation of the International Show Caves Association (ISCA) in 1990 was instrumental when we went a couple of nights to prepare the initial constitution. But this is only one aspect of their activity in the development of show caves. Jeannie was the First Lady inside the National Speleological Society of USA and in many other institutions.

In the whole career she played the role of a leader and consequently we all are debtors for the many achievements. Thank you Jeannie, we will never forget you.”

Arrigo Cigna (Italy), UIS Past President

Jeanne was bestowed Honorary Member of the National Caves Association (NCA/USA) in 2015.
IN MEMORIAM

John Robert Holsinger

Richmond, Virginia, USA
Apr 6, 1934 – Nov 10, 2018 (Age 84)

By John Moses (USA)
National Speleological Society (NSS) International Secretary
jmoses@chicagobooth.edu

NOTED BIOSPELEOLOGIST, PROFESSOR EMERITUS OF BIOLOGICAL SCIENCES AT OLD DOMINION UNIVERSITY

Best known for his research to document different species of subterranean amphipod crustaceans, Professor John Holsinger died November 10, 2018. A number of cave-adapted invertebrate animals, including species of amphipods, isopods, spiders and snails, have the official Latin name holsingeri. Even two genera, an amphipod and a snail, are named Holsingerius and Holsingeria, respectively. Widely considered one of the world’s top authorities on the blind crustaceans that live in streams and pools inside caves, he sat in judgment hundreds of times on specimen that he and others had discovered in caves, and which may or may not be new species.

His work with cave crustaceans ranged far beyond the United States, to places such as South Africa, Russian Far East, India, Brazil, Oman and Mexico. Among his hundreds of research publications, he co-authored the following in 2007 on a new genera:

Amurocrangonyx, a new genus of subterranean Amphipod (Crangonyctidae) from the Russian Far East, with a redescription of the poorly known Crangonyx arsenjevi and comments on biogeographic relationships. Journal of Crustacean Biology, 27(4), Sidorov, D. A., & Holsinger, J. R.

Holsinger traced his interest in caves and karst to his undergraduate days at Virginia Tech University. “There is a lot of caving activity there and I got involved,” he said in an interview several years ago. “I was a biology major, so cave organisms became my focus.” Holsinger continued with that focus through his doctoral studies at the University of Kentucky, another institution with karst and caves nearby. He received his Ph.D. in biological sciences in 1966 and two years later joined the faculty at Old Dominion University.

A long-time member of the National Speleological Society (USA), he was named honorary member, fellow, certificate of merit awardee and science award winner. He was elected to multiple terms on the Society’s board of directors. As the International Secretary of the National Speleological Society, he last served as the USA delegate to the 12th International Congress of Speleology in 1997.

Born April 6, 1934, in the Shenandoah Valley region of Virginia, the young Holsinger would have been exposed to a rich karst geography and such notable show caves as Luray Caverns. As a young

John doing field work about 1980.

© Dave Hubbard

John Holsinger in 2014.
man he become deeply interested in caves of the Virginia Region of the NSS. He was a key contributor and assistant to Henry H. Douglas who was leading the Virginia Cave Survey. Once Douglas published Caves of Virginia (1964), Holsinger realized that there were many more caves, particularly those in the southwestern counties that were not investigated or described. So Holsinger accepted the role as Director of the Virginia Cave Survey (the forerunner of the Virginia Speleological Survey). Over a ten year period, with the assistance of cavers throughout Virginia, he compiled a tremendous amount of material and authored, Bulletin 85, *Descriptions of Virginia Caves* (1975), published by the Virginia Department of Mineral Resources. This book described the 2,319 caves known in Virginia at that time. It was during this tremendous project that Holsinger collected throughout Virginia the many species of cave adapted organisms, most of which had never been previously described. He became recognized as “Captain Karst” - the most prestigious caver/scientist throughout the Virginia Region. He was named by the governor to the Virginia Cave Board at its 1978 inception. The Board is charged with preserving and protecting Virginia’s caves.

To that end, Professor Holsinger’s wife and family asked that donations in his honor go to the the Holsinger Memorial at the Virginia Department of Conservation and Recreation, Division of Natural Heritage: 600 E. Main Street, 24th Floor, Richmond, Va. 23219, USA.

**SOURCES INCLUDE:**
- Old Dominion University website - [https://www.odu.edu/news](https://www.odu.edu/news)
- Virginia Speleological Survey website - [www.virginiacaves.org](http://www.virginiacaves.org)
- Phil Lucas, personal communication, 12/10/2018

John, in 2002, when he received the annual award of the Karst Waters Institute (Virginia, USA) given to the outstanding member of the cave and karst field.
**CONGRESS PROCEEDINGS**

**BRAZILIAN CONGRESS OF SPELEOLOGY**

**15 issues available online**

By Marcelo Rasteiro (Brazil)

*Editor of Proceedings of the Brazilian Congress of Speleology (CBE)*

sbe@cavernas.org.br

Brazilian Speleological Society (SBE) makes 15 issues of the Proceedings of the Brazilian Congress of Speleology available online. This year the Brazilian Society of Speleology has made available the electronic version of the past 15 Brazilian Congresses of Speleology (CBE). The most recent issues were already available on the internet, but the others were only available in printed form, which made access difficult.

The number of publications is impressive. There were 690 articles and a total of 4,781 pages, plus the index and publications data. Moreover, the contents show an interesting change. In the first issues, most of the articles presented field reports and technical work; they average 5 pages in length. In more recent issues, however, the majority are scientific and academic articles averaging 8 pages per article.

All of this effort shows that the work of the SBE does not stop when the congress finishes. It continues indefinitely. In addition to republishing the older versions of articles online, in each issue of the bulletin SBE Noticias (http://www.cavernas.org.br/sbe-noticias.asp) it presents two or three articles from the latest congress. It is the volunteer Elis Schneider who must be thanked for her help in preparing these divulgations. The SBE also maintains the registration and all the documentation of the publications in our library, and we make the Proceedings of SpeleoBrazil 2001 (26th CBE/13th ICS) available on the site of the International Union of Speleology (UIS) among other activities.

Once these 15 issues have been made available, we take on new challenges. We have already started the work of including the references from the Proceedings of the Brazilian Congresses of Speleology in the National Register of Caves of Brazil (CNC). We are also updating the data found in the articles which is lacking in the CNC. This is a significant task, since this means that each article must be re-read, the caves cited identified in the CNC (references to the registration number of the cave in the article is of great help!) and the inclusion of the data in the registry of each cave identified. This means that the updating is being done bit by bit, but we know that the work is of great importance and should help the users of the CNC to find good references about the caves being investigated.

The papers are in Portuguese, but the most recent also include the title and abstract in English. All issues of the Proceedings of the CBE can be consulted for free in www.cavernas.org.br/anaiscbe.asp.
Launch:
GUIDEBOOK OF GOOD ENVIRONMENTAL PRACTICES FOR THE QUARRYING OF LIMESTONE IN KARST AREAS

The Technical Partnership between Brazilian Speleological Society, the Votorantim Cimentos, and the Atlantic Forest Biosphere Reserve has just made available via free download the Guidebook of Good Environmental Practices for the Quarrying of Limestone in Karst Areas.

The work organized by Luis Henrique Sánchez and Heros Augusto Santos Lobo counts on texts of eight other specialists of diverse areas of knowledge. Originally published in Portuguese in 2016, it now gains this English version, expanding the reach and internationalizing the result of three years of work that counted with the collaboration of mining and speleology technicians through public consultation.

With the intention of disseminating good environmental practices in the quarrying of limestone, the Guidebook of Good Environmental Practices provide a summary of information about karst environments, including the processes of formation, their ecological and evolutionary importance, and their role as provider of resources and services for society.

The document can contribute to raising the awareness and technical preparation of mining professionals of the importance of karst environments and their vulnerability with global application, reducing risks and enabling future generations to access the resources and services furnished by karst environments. In addition to enabling the team of environment and sustainability of companies, allowing a systemic view and real assessment of the situation and possible opportunities.

Click below to access the document:
www.cavernas.org.br/GUIDEBOOK_QUARRYING_KARST.asp
PDF: www.cavernas.org.br/editorasbe/GUIDEBOOK_QUARRYING_KARST.pdf
Website/FLIP: www.cavernas.org.br/GUIDEBOOK_QUARRYING_KARST.asp
Learn more about Technical Partnership in: youtu.be/_MBLLAaM_q8
**Calendar of Events**

**2019**

**XIV National Congress of Speleology**  
1-4 February 2019 (Hermosillo, Sonora, Mexico) - http://umae.org/congreso2019/

**1st Colloquium on the Caves of Azé**  
9-10 March 2019 (Saône-et-Loire, France) - lionel.barriquand@wanadoo.fr

**Hypogea 2019: The International Congress of Speleology in Artificial Caves**  

**35th Brazilian Speleological Congress - 50th Anniversary of the Brazilian Speleological Society**  
19-22 June 2019 (Bonito, Mato Grosso do Sul, Brazil) - http://www.cavernas.org.br/35cbe/

**XII International Convention on Environment and Development Caves, Karst and Underground Environments**  
1-5 July 2019 (La Habana, Cuba) - http://www.cubambiente.com

**National Speleological Congress of Switzerland**  
9-12 August 2019 (Interlaken, Switzerland) - https://www.facebook.com/events/127209681328664/

**3rd Asian TransKarst Conference**  
7-10 September 2019 (Bohol, Philippines), http://www.transkarst2019.com/

**ArmConference 2019: Caves as Natural and Cultural Monuments**  

**Geological Society of America Convention**  
22-25 September 2019 (Phoenix, Arizona, USA)  

**13th EuroSpeleo Forum**  

**46th IAH Congress “Groundwater Management and Governance Coping with Water Scarcity” (Topic 7: Karst Hydrogeology)**  

**National Cave and Karst Management Symposium**  
7-11 October 2019 (Bristol, Virginia, USA)  
http://nckms.org/2019-symposium

**16th Multidisciplinary Conference on the Engineering and Environmental Impacts of Karst**  
20-24 April 2020 (San Juan, Puerto Rico) - www.sinkholeconference.com

**19th International Symposium on Vulcanospeleology**  
29 August – 5 September 2020 (Catania, Italy) - http://www.19isvetna.com/

**18th International Congress of Speleology**  
23-29 July 2021 - (Lyon, France)  
http://uis2021.speleos.fr/
OFFICIAL POSTER

18th INTERNATIONAL CONGRESS OF SPELEOLOGY

July 25th > August 1st 2021, LYON (France)

ONLINE INFORMATION & REGISTRATION
uis2021.speleos.fr

more details of the event on the next page
Welcome to Lyon, city of heritage and gastronomy, in the heart of a famous caving area

Exceptional pictures of Lyon taken from a drone
https://youtu.be/53q2WOeUW9U

Video “Welcome to Lion”
https://www.dailymotion.com/video/x5s5itf

ACCOMODATION & CONVIVIALITY
Opening July 2020

HOTEL ACCOMMODATION
HOTEL CAPACITY OF GREATER LYON IN 2016
More than 18,000 rooms:
Hotel 5*  343 rooms
Hotel 4*  4,319 rooms
Hotel 3*  4,308 rooms
Hotel 2*  3,507 rooms
Hotel 1*  969 rooms
Hotel NC  898 rooms
Apartment hotels (all categories): 3,467 apartments

ON-SITE STUDENT ACCOMMODATION
500 double or single rooms available on campus
### UIS BUREAU 2017/2021

**President:**
George VENI (USA)

**Vice-President of Operations:**
Efraín Mercado (Puerto Rico)

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

**Secretary General:**
Fadi NADER (Lebanon)

**Treasurer:**
Nadja ZUPAN HAJNA (Slovenia)

**Adjunct Secretaries:**
- Nivaldo COLZATO (Brazil)
- Mladen GARAŠIĆ (Croatia)
- Bernard CHIROL (France)
- Satoshi GOTO (Japan)
- Gyula HEGEDUS (Hungary)
- Tim MOULDS (Australia)
- Bärbel VOGEL (Germany)

### UIS Past-Presidents

- Arrigo A. CIGNA (Italy) - 1973-1981
- Adolfo ERASO ROMERO (Spain) - 1981-1986
- 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

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**UIS BUREAU 2017/2021 in Ebensee, Austria, August 29, 2018.**

_Left to right:_ Efrain MERCADO (Vice-President of Operations/Puerto Rico); Satoshi GOTO (Adjunct Secretary/Japan); Gyula HEGEDUS (Adjunct Secretary/Hungary); George VENI (President/USA); Nadja ZUPAN HAJNA (Treasurer/Slovenia); Mladen GARAŠIĆ (Adjunct Secretary/Croatia); Bernard CHIROL (Adjunct Secretary/France); Bärbel VOGEL (Adjunct Secretary/Germany); Zdeněk MOTYČKA (Vice-President of Administration/Czech Republic) and Nivaldo COLZATO (Adjunct Secretary/Brazil).

_Insert photo above:_ Fadi NADER (Secretary General/Lebanon).
LIST OF MEMBER NATIONS
as reported by the UIS Treasurer

55 Member Nations

UIS FEES JANUARY 2019

<table>
<thead>
<tr>
<th>Paid through (or longer) 2018</th>
<th>Paid through 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Mongolia</td>
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<tr>
<td>Austria</td>
<td>Philippines</td>
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<tr>
<td>Brazil</td>
<td>Russia</td>
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<tr>
<td>Bulgaria</td>
<td>Slovakia</td>
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<tr>
<td>Canada</td>
<td>Slovenia</td>
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<tr>
<td>China</td>
<td>South Africa</td>
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<td>Costa Rica</td>
<td>South Korea</td>
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<tr>
<td>Croatia</td>
<td>Spain</td>
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<td>Czech Republic</td>
<td>Venezuela</td>
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<tr>
<td>Germany</td>
<td>Vietnam</td>
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<td>Hungary</td>
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<td>Iran IR</td>
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<td>Italy</td>
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<td>Japan</td>
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<td>Kyrgyzstan</td>
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<td>Lithuania</td>
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<td>Luxembourg</td>
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<td>Mexico</td>
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<td>Netherlands</td>
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<td>Norway</td>
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<td>New Zealand</td>
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<td>Poland</td>
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<td>Portugal</td>
<td></td>
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<tr>
<td>Puerto Rico</td>
<td></td>
</tr>
<tr>
<td>Romania (3/4 paid)</td>
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<tr>
<td>Serbia</td>
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<td>Sweden</td>
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<tr>
<td>Switzerland</td>
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<tr>
<td>Ukraine</td>
<td></td>
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<tr>
<td>United Kingdom</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td></td>
</tr>
</tbody>
</table>

Debts for more than 2 years

- Algeria
- Colombia
- Honduras
- Paraguay
- Turkey
- Venezuela
- Vietnam
- Sweden
- Switzerland
- Ukraine
- United Kingdom
- USA

Some countries have paid their annual fees up to 2022. Some haven’t paid for 2 years or more!

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 zupan@zrc-sazu.si.

We do not know who to contact in some countries or we do not have their proper address.

Have not found your country in this list? Ask the UIS Treasurer

UPDATE your status now!

CONTACT UIS

UNION INTERNATIONALE DE SPÉLÉOLOGIE
Titov trg 2, 6230 Postona, Slovenia
www.uis-speleo.org
FINANCE

ANNUAL CONTRIBUTIONS

By Nadja ZUPAN HAJNA (Slovenia), UIS Treasurer - zupan@zrc-sazu.si

The UIS General Assembly at the 17th International Congress of Speleology (Sydney, Australia, 2017), approved the 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 are as follows, starting after the 17th ICS, Sydney, Australia:

**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 100 but fewer than 1,000 ... 240 Euros
**Category D:** 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**

<table>
<thead>
<tr>
<th>Account name</th>
<th>Account N°</th>
<th>SWIFT Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mednarodna speleološka zveza-UIS</td>
<td>IBAN SI56 1010 0003 7861 520</td>
<td>BAKOSI2X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bank (name and address)</th>
<th>Accepted Currencies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intesa Sanpaolo Bank d.d.</td>
<td>EUR (Euros)</td>
</tr>
</tbody>
</table>

**STATE OF UIS BANK ACCOUNT 2018**

**EUR**

<table>
<thead>
<tr>
<th>Initial account balance 1.1.2018</th>
<th>Total expense</th>
<th>Total income</th>
<th>Account balance 31.12.2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>37,600.75</td>
<td>24,655.10 (20,000 deposit)</td>
<td>4,910.00</td>
<td>17,855.65</td>
</tr>
</tbody>
</table>

**USD**

<table>
<thead>
<tr>
<th>Initial account balance 1.1.2018</th>
<th>Total expense</th>
<th>Total income</th>
<th>Account balance 31.12.2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>50,191.26</td>
<td>35,000.00 (deposit)</td>
<td>564.88</td>
<td>15,756.14</td>
</tr>
</tbody>
</table>

Deposits in EUR and USD bring interest to cover various bank and account charges.
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