

NEWS No. 2

July 2023

INTERNATIONAL ASSOCIATION
OF VOLCANOLOGY AND CHEMISTRY
OF THE EARTH'S INTERIOR



This Newsletter is intended to keep IAVCEI Members and individual scientists informed about the activities of the Association and its bodies, and the actions of the IAVCEI Executive Committee. Past issues are posted on the IAVCEI website. Your comments are welcome. The IAVCEI Newsletter may be forwarded to non-members who may benefit from the information.

FROM THE PRESIDENT



Photo by © Francesca Zizola

Dear colleagues,

This Newsletter 2023-2 is the 16th and last one I write you as IAVCEI President on behalf of the 2019–2023 Executive Committee. It contains several important announcements and news items to report:

1. The recent elections and composition of the new IAVCEI Executive committee for 2023–2027;
2. Our 2023 IAVCEI General Assembly in Berlin (July 14–19) and the Awards ceremony (2023 Thorarinsson, Fisher and Krafft medals, plus GA2023 Wager medal and Walker award);
3. A summary of main advances achieved by the outgoing Exec board and the Bulletin of Volcanology's editorial team over the past four years;
4. A report on the results of our survey to Volcano Observatories for the rejuvenation of the WOVO;
5. Meetings and Workshops in 2019–2023;
6. 2019-2022 financial report from our Secretary General;
7. Exec proposed resolutions to update/complement our Statutes-&-ByLaws that will be submitted to member approval during our GA in Berlin

Just a few words here to tell you how honored it has been, for the outgoing Executive board and myself, to serve IAVCEI and

the volcanological community in 2019–2023. Our mandate has been heavily challenged by the COVID pandemic, but we've tried our best to make our Association thriving in spite of such difficult circumstances. Not all initial objectives could be achieved, but we are proud of a number of good results, as reported thereafter, among which the substantial growth of active IAVCEI members (with paid membership) during this period, the increasing proportion of women among members and in our instances (up to the presidency, from next July 18 on, for the very first time in IAVCEI history), the reinforced activity of our Commissions, the attractiveness of our website and new IAVCEI webinars, the brilliant evolution of Bulletin of Volcanology in the recent years, and the healthy financial status of our Association.

I congratulate the newly elected Executive Committee members and wish them the best in leading IAVCEI in 2023–2027.

My best wishes to all IAVCEI members,

Patrick Allard

July 10, 2023



1. Elections of the IAVCEI Executive Committee for 2023–2027

The nomination then election process for renewing the IAVCEI Executive Committee in 2023–2027 lasted from January 17 to June 13. Fairness of the overall process was monitored by the Elections Oversight Committee, chaired by *Ray Cas* (Australia) and composed of *Shanaka de Silva* (USA), *Eliza Calder* (UK), *Hiroshi Shinohara* (Japan) and *Francesca Bianco* (Italy). We thank them for having taken care of this important responsibility. Many thanks also to *Denisa Svatkova*, assistant from our private partner GUARANT International (Praga), for her successful management of our membership data base and technical aspects of the anonymous electronic voting.

By the end, **34.5 %** of our **1224** current paid members actually voted, which is a reasonably fair proportion. The election results, validated by the Elections Oversight Committee, were published on our website on June 15, one month prior to our General Assembly in Berlin, in conformity with IAVCEI Statutes. The composition of the newly elected Executive Committee for 2023–2027 results as follows:

President

(2 candidates nominated for 1 position):



Costanza BONADONNA (Switzerland)
306 votes

Vice-Presidents

(2 candidates nominated for 2 positions):



Marta CALVACHE (Columbia)
270 votes



Andy HARRIS (France)
199 votes

Secretary General

(3 candidates nominated for 1 position):



Ulrich (Ulli) KUEPPERS (Germany)
185 votes

Scientific councilors

(4 candidates nominated for 4 positions):



Alessandro AIUPPA (Italy)
159 votes



Alvaro AMIGO (Chile)
164 votes



Alessandro BONFORTE (Italy)
131 votes



Nobuo GESHI (Japan)
178 votes

Early Career Researcher Rep.

(2 candidates nominated for 1 position):

**Joali PAREDES (Chile/New Zealand)**

276 votes

On behalf of the IAVCEI community, we congratulate the new Committee members and wish them the best for their term of office. Let me express our pride that, **for the very first time in its >100 years history, IAVCEI will be presided in 2023–2027 by a female volcanologist**, in the person of Costanza Bonadonna. This is a milestone at a time when the proportion of women is markedly increasing in the volcanological community and in our instances (see thereafter).

In conformity with our Statutes, the immediate Past President (P.A.) will remain on the EC in an ex-officio role, to provide continuity and advice when needed. As a novelty proposed by the outgoing Exec, to be endorsed in Berlin, the immediate Past Secretary General should also remain as an ex-officio member of the EC but for a limited 2-yr transitional period with the newly elected SG (8-yr mandate), in order to provide continuity and advice on the financial management of IAVCEI (Section 6).

The new Exec Committee will officially take over management of IAVCEI at the end of the **IAVCEI General Assembly and Awards ceremony meeting** in Berlin (IUGG2023). This meeting will occur on Tuesday, July 18 (04:00–06:30 pm, City Cube, Level 1, A4). We ask those attending IUGG2023 to participate in this key Assembly that will include the celebration of the GA2023 IAVCEI Awardees, member approval of proposed changes/updates on our Statutes, and meeting with the new Executive Committee.

2. IAVCEI General Assembly in Berlin (July 14–19)



Within a few days we'll have our General Assembly in Berlin during the 28th IUGG Assembly. From July 14 to July 19 the IAVCEI will hold **14 Symposia of pure Volcanology** and co-lead **22 joint Symposia** with other IUGG's Associations. The overall program is at: <https://www.iugg2023berlin.org>

Other events will include:

- **IAVCEI Union Lecture (July 18, 11:30–12:00, AM2)**

Given by *Robin MATOZA* (Associate Prof. of Geophysics at the Department of Earth Science, University of California, Santa Barbara) on: “*Advances in Global Volcanic Eruption Monitoring and Cataloging using Seismo-Acoustic Observation Systems*”.

- **Early Career Scientists Events**

Three main events will be dedicated to Early Career Scientists (ECSs) or Early Career Researchers (ECRs):

- 1) *Summer Get-together* (Geo.X Early Career Scientist Section) at the TU Berlin, on Friday 14 July at 19:00–21:30
- 2) the *ECS social event* on Saturday 15 July at 18:30–20:30
- 3) the *Big Theme lunchtime session* on Sunday 16 July at 12:15–13:15

- **IUGG's 2023 Awarding**

Jose Társilo GIRONA HERNANDEZ (University of Alaska, Fairbanks, USA), nominated by the IAVCEI Exec in 2022, will receive the **2023 IUGG award honoring Early Career Scientists** for their outstanding research in Earth and space sciences and for their international research cooperation (July 13, 17:30, Opening and Award ceremony).

Valérie Masson-Delmotte (LSCE, Saclay, France), 2023 IUGG Gold Medal (July 15, 13:30–14:30).

- **IAVCEI General Assembly Session**

(July 18, 16:00–18:30, City Cube, Level 1, A4)

- **IAVCEI Awards ceremony**

Our General Assembly session will start with the Awards ceremony during which the 2023 Thorarinsson, Fisher and Krafft medals, then the GA2023 Wager medal and G. Walker Award will be successively attributed. Following our Statutes, the names of nominees are kept confidential until that ceremony. The great number of outstanding nominations for the 2023 IAVCEI Awards definitely attests to the vitality of our scientific Association. But it also implied a hard work for the members of the **IAVCEI Awards Committee!** Here I wish to publicly acknowledge *Alessandro Aiuppa, Ray Cas, Silvana Hidalgo, Mie Ishihara, Chris Newhall and Diana Roma*, the six nominated members of this Committee, for the great service they confidentially offered us over the past 4 years. It has been my great pleasure to work with them.

- **4-yr report of the current Exec Committee**

Our General Assembly will then proceed with the president's report on IAVCEI activities and evolution during 2019–2023. The financial part will be presented by our SG, Roberto Sulpizio. We'll also submit to official approval by attending members a series of proposed Exec resolutions aimed at improving or complementing our IAVCEI Statutes-&-ByLaws on a few points. These proposed resolutions are presented in Section 6.

- **Handover to the newly elected Exec Committee**

We'll conclude our GA session with the handover to the newly elected 2023–2027 Executive Committee, with presentations from the new President (C. Bonadonna) and new Secretary General (U. Kueppers).

3. Summary of Main Achievements in 2019–2023

I personally want to thank members of the outgoing IAVCEI Executive Committee for their individual and collective willingness to work hard during the last 4 years. The Covid-19 pandemic raised very difficult issues to work through, but we repeatedly adapted to the uncertain, evolving circumstances and could usually reach a consensus view of the committee. We have introduced a number of initiatives and hope to leave IAVCEI in a healthy state for the next Committee. Let me outline some main results:

■ Substantial increase in IAVCEI membership

IAVCEI Memberships	2019	2020	2021	2022	2023#	growth rate
Total	1808	2016	2141	2292	2497	38.1 %
Unpaid	904	960	1170	953	1278	
Paid	904	1056	971	1339	1219	34.8 %
ECR	339	396	320	449	415	22.4 %
Male (paid)	572	657	579	782	716	
Fernale (paid)	332	399	392	557	503	
% Female paid	36.7 %	37.8 %	40.4 %	41.6 %	41.3 %	10.8 %
% Female ECR	50.1 %	52.3 %	51.9 %	55.2 %	55.4 %	10.5 %

At mid-year

Our membership database demonstrates a substantial increase in the total number of IAVCEI members and paid memberships over the past 4 years, as shown below in Table 1.

By June 2023, the IAVCEI had **2497** members as a whole, about a half of which with due paid membership. **This corresponds to a respective increase of 38 % and 35 % relatively to 2019.** This very positive trend reflects an increasing attractiveness of our Association, in particular through the arrival of young (ECR) new members, which is extremely satisfying. In fact, our annual membership fee, whose amount depends on the professional status of each person, is a main source of income for IAVCEI to organize and/or support meetings, workshops, Commissions' activities, travel grants, awards, etc. As an illustration, 140 travel grants were attributed to young researchers and colleagues from low-income countries for attending COV11 in Crete (June 2022) and then our SA2023 in New Zealand.

Active (paid) members include Regular members, Life members, Young researchers and students (plus 42 post-COV11 free ones), and 5 Benefactor members. The 'Unpaid' figure includes members who did not renew their membership by the end of each year – recurrently solicited by our secretariat in Praga – but also some retired or deceased members. Unprovided individual information (e.g. people who either retired, moved elsewhere, or lost their login access to renew) hampers a regular update of this figure.

In order for IAVCEI to develop as a more and more vibrant Association of volcanologists, the Executive Committee and active members themselves must continue to attract new young scientists but also motivate the membership affiliation of numerous other colleagues worldwide who feel little concerned.

■ Improved gender balance and diversity

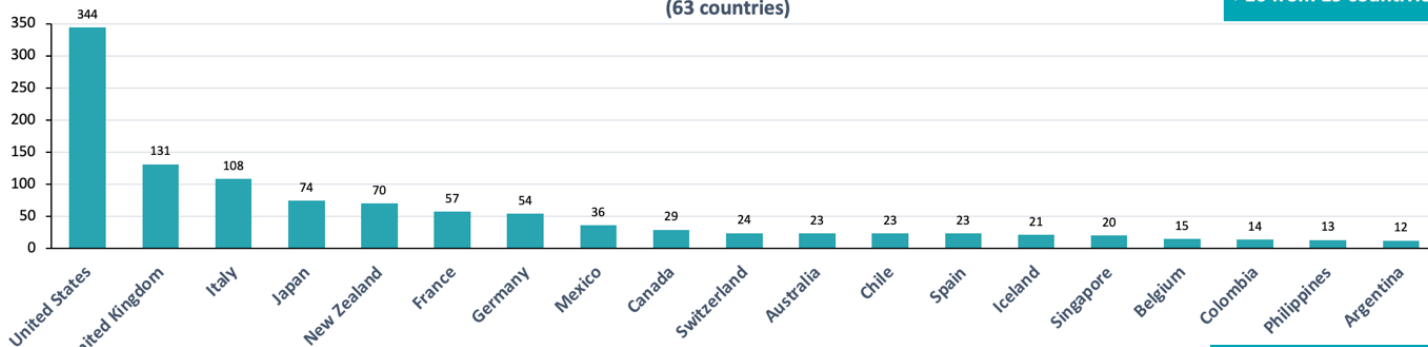
Improving gender equity and diversity within IAVCEI has been one key objective of the outgoing Executive Committee. As

shown in Table 1 above, the results obtained since mid-2019 are encouraging: starting from a ratio of 63 % male vs 37 % female in our overall membership, we are now at a ratio of 59 % / 41 %, which means a **ca. 11 % increase in four years.** Especially, note the increasingly prevalent proportion of women among our ECR members, which raised from **50 % in 2019 to 55 % in 2023.** This illustrates the growing involvement of young women in Volcanology, volcano Observatories and our international community. We'll need to continue and accelerate in that direction in order to move towards gender equality.

Perfect gender equality was actually promoted in our 2019–2023 IAVCEI Committees for Awards and Elections, as well as among our awardees and 2023 nominations of Honorary Life members (see our Newsletter 2023-1).

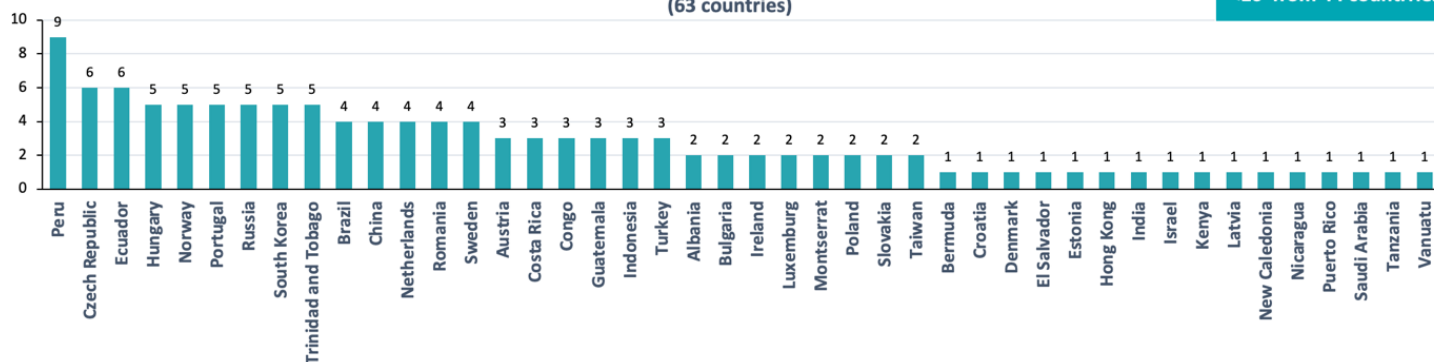
As regards geographical inclusion, **IAVCEI members represent 63 countries** in all parts of the world. However, as shown in the graph on the next page, members originate predominantly from two tens of countries (USA, UK, Italy, Japan, New Zealand, France, Germany, Mexico, Canada, Switzerland, Australia, Chile, Spain, Iceland, Singapore, Belgium, Columbia, Philippines, Argentina and Peru, by decreasing order). Many other countries lack to be represented at the level expected from their importance in terms of volcanic activity and hazards (e.g. Indonesia). This relates to their lower income, weaker connection or/and small size. Hence, efforts have been made in the past four years to provide free membership to colleagues from these countries or/and to better attract them into IAVCEI activities. For instance, the IAVCEI co-supported with IASPEI a project entitled *Towards creating and launching the Network for African Volcanologists (NAV)* that was successfully funded by the 2022–2023 IUGG Grants Program. However, this remains a long path that will require stronger international supports and efforts, in particular through the activities of our INVOLC and WOVO Networks. This justifies the novel inclusion of INVOLC and WOVO representatives on the IAVCEI Executive Committee (see Section 6).

IAVCEI Members by country 2023
(63 countries)



IAVCEI MEMBERS
>10 from 19 countries

IAVCEI Members by country 2023
(63 countries)



IAVCEI MEMBERS
<10 from 44 countries

■ New website and Communication

- A new IAVCEI website (<https://www.iavceivolcano.org>), coupled with dedicated social media accounts (Twitter, Instagram and Facebook), was activated since June 2021 thanks to the combined efforts of our webmaster (E. Nicotra) and our private partner Guarant International. Various sub-domains were created, in particular for hosting the *Bulletin of Volcanology* and the webpages of several Commissions and Networks. This ongoing process has already been completed for 14 Commissions and Networks.
- We created and activated in 2021 an **IAVCEI Communication Team**, led by our webmaster and including 3 young volunteer researchers from different countries.
- We created on our website an **e-Volcano platform** dedicated to specialists, teachers, students and the public, which allows us to publish peer-reviewed video docs, with referenced DOI numbers, on all subjects and lessons in Volcanology. Three e-video projects were already approved and made accessible by early 2023. This activity is coordinated from Geneva by *Jessica Kandlbauer*.

■ Activation of IAVCEI webinars

Travel restrictions imposed by the Covid-19 pandemic in 2020–2021 stimulated us to initiate a series of IAVCEI-sponsored webinars since June 2021, reserved for active members.

These webinars, reserved for pre-registered active members, have attracted a wide audience and actually promoted membership renewal or even new membership. Recording of each webinar has been systematically posted on our website, in particular for those unable to attend.

The first series of webinars was dedicated to ongoing or/and recent volcanic eruptions of major interest to the international community. Four such webinars were held in 2021 (Etna, Iceland, Soufriere in St. Vincent, and Nyiragongo eruptions) and others are planned.

We also activated and sponsored thematic online webinars of our Early-Career Researchers network (since December 2021) and of our Commissions (since 2022).

For illustration, three recent webinars were co-organized with the IAVCEI Commission on Explosive Volcanism:

- **“Phreatic and hydrothermal eruptions: Insights from fieldwork & lab experiments”**, given on March 28 by Cristian Montanaro (LMU, Munich, Germany). **133 registered, 78 participants, and 8 panelists.**
- **“The causes and consequences of mafic explosive volcanic eruptions: A case study from the mafic Curacautin Eruption at Volcan Llaima, Chile”**, given on April 20 by Brittany Brand (Boise State University, USA). 155 registered, 97 participants and 7 panelists.
- **“From Enigma to Understanding: A Multidisciplinary Journey into the Mechanics of Deadly Pyroclastic Density Currents”**, given on June 28 by Eric Breard (University of Edinburgh, UK). 153 registered, 67 participants and 8 panelists.

■ IAVCEI Commissions and Networks

The thematic Commissions and Networks of IAVCEI – some of which are joint with other IUGG’s Associations – constitute its driving force. During his 2019-2023 mandate, the outgoing Executive Committee realized an overall survey of all IAVCEI Commissions, Networks, and Working Groups in order to

evaluate their activity, facilitate their functioning, and try to reduce their number. This work has been coordinated by the two Vice-Presidents and the results were approved by the EC.

The following main decisions and results were reached:

- The four *Liaison Committees*, created in 2012 to improve horizontal connections between Commissions but revealed useless in practice, were disestablished.
- Instead, **better communication between Commissions** is now facilitated by:
 - A new email distribution list of Commission leaders kept up-to-date by our Guarant partner in Prague (commissions@iavcei.eu).
 - More accurate and up-to-date information about Commission leadership and contact information on our IAVCEI website
 - A **regular Commission Leaders workshop** hosted by the IAVCEI Exec at our two major meetings (both SA and GA). The first such workshop was held in February 2023 during our Scientific Assembly in Rotorua. The meeting, with 21 out of our 28 Commissions represented on-site, was extremely successful.
- Guidelines for the Commissions' activity, management, reporting, creation, or deactivation were updated. The IAVCEI website now includes the following forms:
 - The Commissions annual report template
 - Application form for proposing a new Commission
 - Application form for proposing a new Working group.

Today the IAVCEI hosts **18** purely IAVCEI Commissions, **3** Networks, and **7** Joint Commissions with other IUGG's Associations:

a) Purely IAVCEI Commissions

1. Chemistry of Volcanic Gases
2. Volcanic Lakes
3. Volcanic Clouds (ex-Remote Sensing)
4. Collapse Calderas
5. Explosive Volcanism
6. Monogenetic Volcanism
7. Submarine Volcanism
8. Volcanic and Igneous Plumbing Systems
9. Large Igneous Provinces
10. Volcano Geology
11. Volcanogenic Sediments
12. Tephrochronology
13. Tephra Hazard Modelling
14. Statistics in Volcanology
15. Volcanic Hazards and Risk
16. Cities and Volcanoes
17. International Volcanic Health Hazard Network (IVHHN)
18. Volcano Geoheritage and Protected Volcanic Landscapes

b) Networks

1. Early-Career Researchers Network (ECR-Net)
2. International Network for VOLcanology Collaboration (INVOLC)
3. World Organization of Volcano Observatories (WOVO)

c) Joint Commissions

1. IAG/IAVCEI Commission on Volcano Geodesy

2. IASPEI/IAVCEI Commission on Volcano Seismology and Acoustics
3. IASPEI/IAVCEI/IAGA Commission Physics & Chemistry of Earth Materials
4. IAGA/IASPEI/IAVCEI Working Group on Electromagnetic Studies of Earthquakes and Volcanoes (EMSEV)
5. IASPEI/IAVCEI International Heat Flow Commission
6. IAVCEI/IACS Commission on Volcano-Ice Interaction
7. IAPSO/IASPEI/IAVCEI Commission on Tsunamis

■ IAVCEI Awards

The Covid-19 pandemic strongly disrupted the schedule of our major meetings and hence of IAVCEI Awards delivery.

The **Volcano Surveillance and Crisis Management (VSCM) Award**, created in 2016 and given every 2 years during the Cities on Volcanoes (COV) conferences, honors the personnel from volcano observatories and/or Institutions responsible of monitoring volcanoes that have made a remarkable contribution to the mitigation of volcanic hazards and volcanic risks. In 2020, this award was attributed to the *Instituto Geofísico-EPN of Ecuador* during a virtual ceremony. Instead, in June 2022 it could be delivered on site, during COV11 in Crete (Heraklion), to the *Seismic Research Center of the University of the West Indies*.

The other Awards and Medals are usually given during our Scientific Assembly or/and General Assembly. The **George Walker Award** and the **Wager Medal** are given every two years to brilliant young (7 yr post-PhD) and relatively young (15 yr post-PhD) researchers, respectively. During our 2023 Scientific Assembly in Rotorua (postponed by two years), the Walker Award was attributed to Drs. *Emma Liu-Christopher* (UK) and *Andrea Bevilacqua* (Italy). The Wager Medal was awarded to both Profs. *Suzanna Jenkins* (Singapore) and *Yves Moussallam* (USA).

The **Thorarinsson, Fisher and Krafft Medals**, attributed every 4 years to outstanding senior scientists, as well as a second-run of Walker award and Wager medal, will be attributed on July 18, 2023, during our General Assembly in Berlin.

■ Bulletin of Volcanology

Bulletin of Volcanology, the official journal of IAVCEI edited by Springer, is the most ancient journal in Volcanology (since 1922) and one of the most recognized in this research field.

Andy Harris, Editor-in-Chief, and *Frances van Wyk de Vries*, his Editorial Assistant, just closed their 6-yr long service term in June. They handed over the reins to *Marie Edmonds* (UK) and *Richard Herd* (UK), candidates nominated for the 2023-2027 term by the outgoing Exec (see our Newsletter 2023-1).

We congratulate Andy and Fran, together with their team of Associated editors, for the great job they made in actively promoting the *Bulletin of Volcanology* over the last years. This is demonstrated by the substantial increase of BV's impact factor, raised from 2.03 in 2019 to **3.5 in 2022**. That is the highest level ever reached by the journal, which now places it

Q2 in GEOSCIENCES, MULTIDISCIPLINARY (70/201 out of the assessed journals).

Year	Submissions	Publications	Impact Factor
2018	152	70	2.23
2019	150	81	2.03
2020	118	75	2.52
2021	153	88	2.91
2022	141	98	3.50

One may highlight, in particular, the recently issued Special Issue of *Bulletin of Volcanology* on the past, present, and future of volcanology (see our website).

■ Memorandum of Understanding 2019–2023

Although hampered for two years by the Covid-19 pandemic, the 2019–2023 IAVCEI Executive Committee has signed a new Memorandum of Understanding (MoUs) with some international and regional Associations:

- the *Geochemical Society (GS)*
- the *European Association of Geochemistry (EAG)*
- the *International Association of Physics Students (IAPS)*
- and, the *Italian Association of Volcanology (IAV)*

■ IAVCEI and the UN's Initiative on Global Early Warning Systems

The Secretary General of the United Nations has launched in 2022 a 5-yr **UN's Initiative on "Global Early Warning Systems"**, developed within the 2015–2030 Sendai Framework for Disaster Risk Reduction, that will be coordinated by the *World*

Meteorological Organization (WMO). After an official exchange with the Secretary-General of WMO, Prof. Petteri Taalas, it was agreed that the IAVCEI should be involved into this global initiative. IAVCEI is indeed interested in participating through its specific competences in early warning systems devoted to the survey of volcano-atmosphere interactions and the mitigation of volcanic disasters. This framework may offer us a rare chance for very rapid investment in volcano-related early warning systems (*Tupper and Bear-Crozier, BV 2022*), as well as for enhancing the role of the WOVO – in course of rejuvenation (see Section 5) – within global plans of early warning and mitigation of natural hazards.

On February 4–5, 2023, in Rotorua (NZ), both IAVCEI and WMO hold together the **8th Workshop of IAVW (International Airways Volcano Watch)** entitled "Managing and mitigating volcanic risks to aviation with an explosion of science!". This workshop has allowed to bring together research and operational experts and stakeholders from the volcanological, meteorological and aviation communities, and to discuss the worldwide scientific and technological advancements (research-to-operations, science-for-services) made over the past decade – and to be made in the future – through the IAVW and with the *International Civil Aviation Organization (ICAO)*.

Since 2011 *Arnau Folch* (Geosciences Barcelona, CSIC) was the IAVCEI liaison officer with WMO within IUGG. He decided to step out at the term of his mandate and we thank him very much for this service to our community. *Sara Barsotti*, Coordinator for Volcanic Hazards in the Icelandic Meteorological Office (IMO), has accepted to candidate to take over the role. Her appointment will be proposed to the IUGG Council during the IUGG 2023 in Berlin.



4. Rejuvenation of the WOVO

Created in 1981, the **World Organization of Volcano Observatories** (WOVO) has developed under the IAVCEI umbrella as one Commission amongst others. However, it is markedly different from other thematic Commissions in that its members are Volcano Observatories or/and Institutions responsible for volcano monitoring and eruption forecasting in respective countries. Members also include the 9 Volcanic Ash Advisory Centers (VAACs) that provide alert information and simulation on volcanic ash clouds to civil aviation.

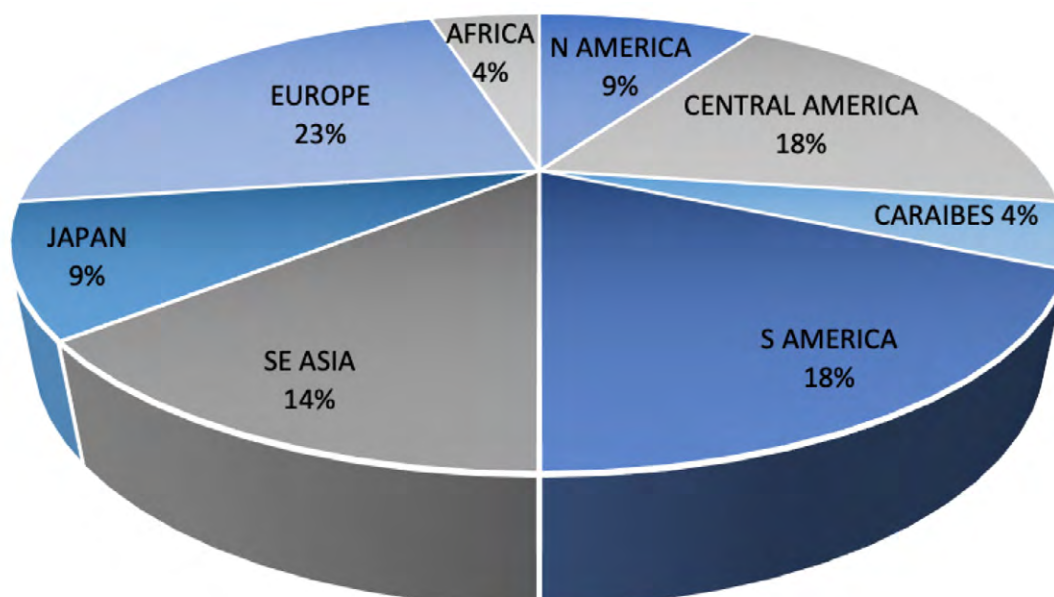
In 2021 the outgoing Exec Committee thus agreed to change the status of WOVO from a Commission to a Network and to prepare its restructuring in order to render it more operational and efficient in its functioning, communication, and coordination for the benefit of worldwide Volcano Observatories. From that perspective, a working group was created and a dedicated Survey was sent to all Volcano Observatories in order to check their expectations and suggestions (IAVCEI Newsletter 2021-3). Unfortunately, this project as well has been hampered by the Covid-19 pandemic and by the slow reaction of some VOs. Therefore, the WOVO rejuvenation – an important project for the IAVCEI – still remains to be achieved.

However, we could finally obtain **fruitful replies to our Survey from 23 Volcano Observatories/Institutions** representing different parts of the world and in charge of numerous active volcanoes. The results collected were sent to members of the working group and are synthesized below.

List of Volcano Observatories/Institutions which replied (Alphabetic order)

1. ALASKA VOLCANO OBSERVATORY – USGS, USA
2. COLIMA VOLCANO OBSERVATORY, MEXICO
3. CVGHM-BADAN GEOLOGI, INDONESIA
4. DOA-MARN, SALVADOR
5. EARTH OBSERVATORY OF SINGAPORE (EOS)
6. GEOLOGICAL SURVEY OF JAPAN – AIST
7. IGEPN, ECUADOR
8. INSTITUTO GEOFISICO DEL PERÙ
9. ICELANDIC METEOROLOGICAL OFFICE (IMO)
10. INETER, NICARAGUA
11. INGV, ITALY
12. IPGP – OVS, FRANCE
13. ISMOSAV, GREECE
14. IVAR, AZORES
15. MOUNT CAMEROON OBSERVATORY/CRGV/IRGM
16. NKUA, GREECE
17. OAVV/SEGEMA, ARGENTINA
18. OVI-INGEMMET, PERU
19. PHIVOLCS, PHILIPPINES
20. SAKURAJIMA VOLCANO RESEARCH CENTER, JAPAN
21. UWI – SRC, CARAIBES
22. UCR-ICE, COSTA RICA
23. YELLOWSTONE VOLCANO OBSERVATORY – USGS, USA

World distribution of VOs replies

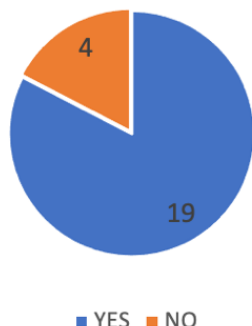
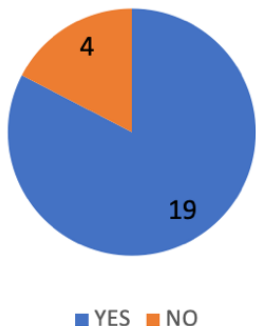


Q1: *Is your institution officially mandated to respond to volcanic crises?*

Q2: *Is your Institution currently a member of WOVO? If not, would it apply to join the renewed WOVO under the IAVCEI's umbrella?*

Q1: Officially mandated?

Q2: Current WOVO Member?



All VOs not yet members of WOVO agree to integrate the network.

Q3: *What main values/benefits would you like to see from a rejuvenated WOVO?*

Answers at 100%:

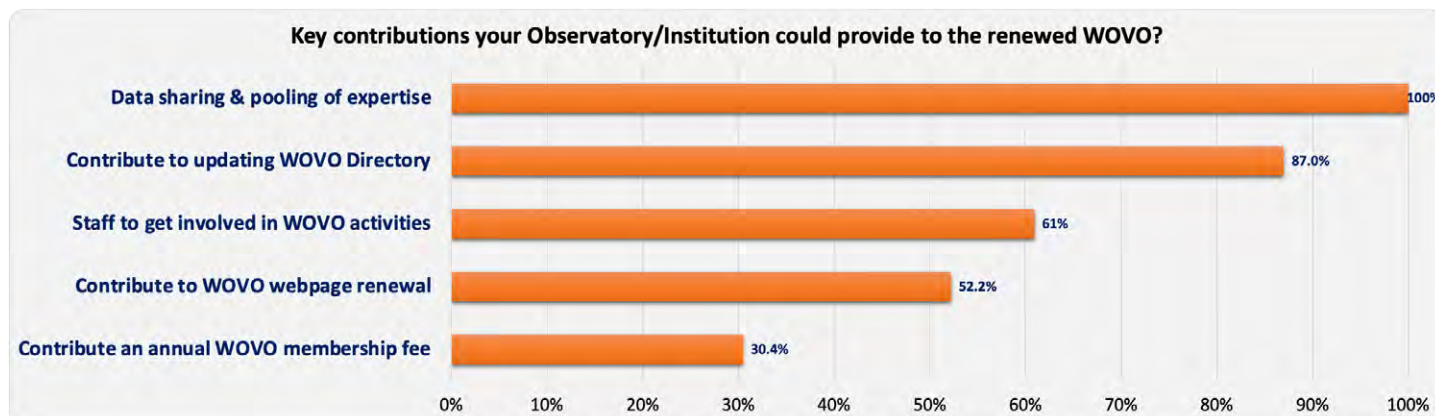
1. An international network to foster collaboration and synergies between VOs in the long term (networking, workshops, training, hazard evaluation, assistance during crises, etc.)
2. To promote the professionalization of VOs in terms of best practices for instrumentation, early warning systems, communication, standardized feedback on volcanic crises, etc.
3. WOVO as VOs' representative body for interacting with international and national Organizations and Agencies, especially ICAO and WMO, in order to get specific services and needs supported (VONAs, recurrent funding, etc.)
4. To stimulate new generations of VOs scientists amongst young people through visiting stays in observatories, exchange programs, training schools in different languages, workshops, etc. observatories; organization of drill exercises about the volcanic crisis; etc.

Other suggestions:

5. Exchange of knowledge concerning new technologies and innovative approaches to monitoring volcanoes.
6. Promotion of synergies between scientific and non-scientific entities worldwide through novel communication tools.
7. Creating an integrated open-access data hub to serve the wider scientific community and associated public authorities.
8. Pay greater attention to submarine volcanoes adjacent to big cities or/and highly populated areas.

Q4: *In turn, what key contributions could your Observatory/Institution provide to the renewed WOVO in order to make it thrive?*

Answers:

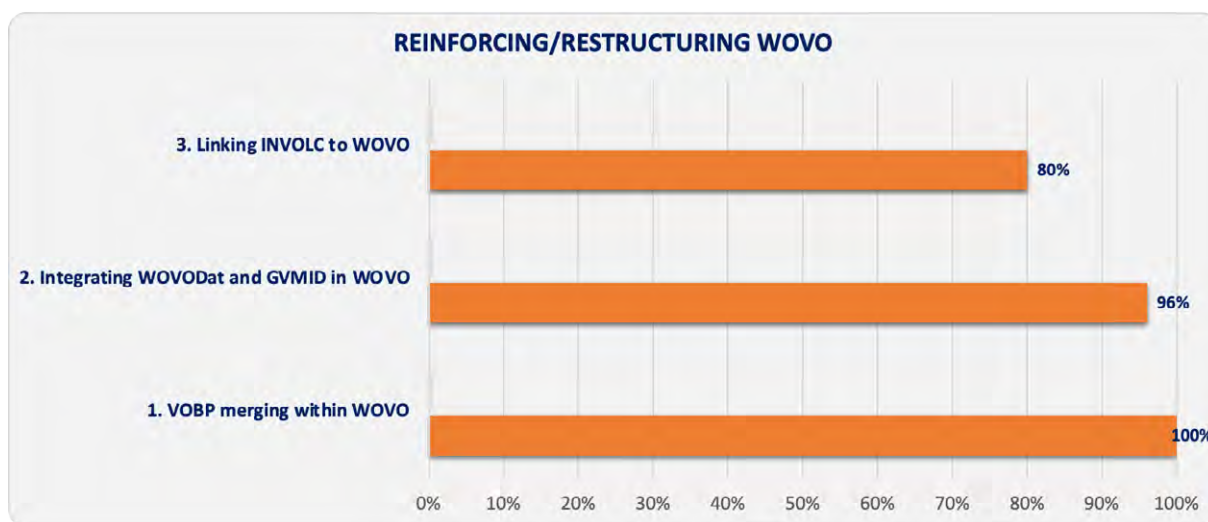


Q5: Which are the **best ways for you to interact** with the WOVO council and be informed of WOVO's activities?

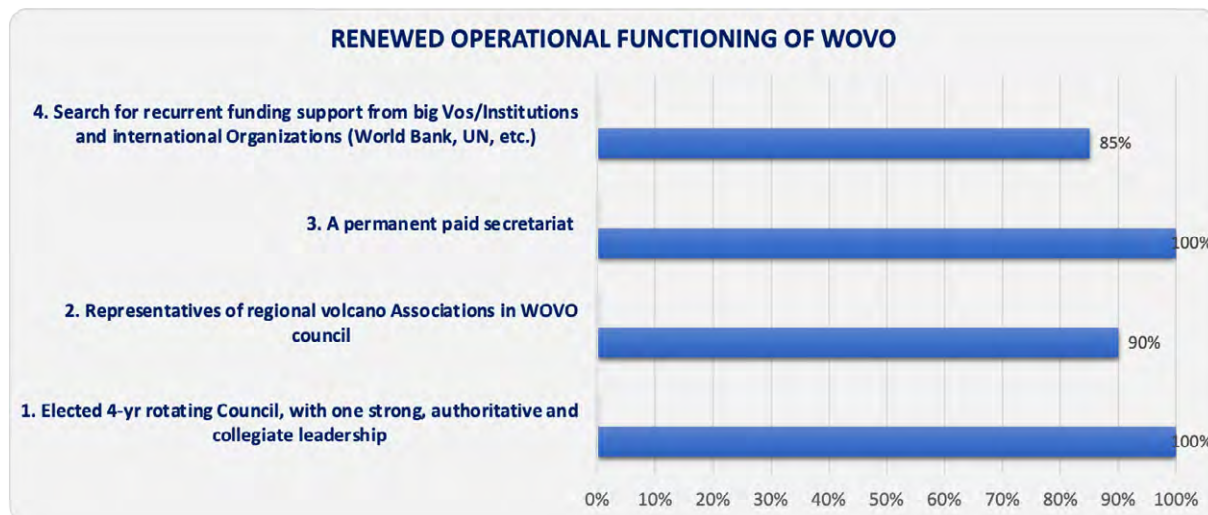
Answers at 100%:

1. Periodical video meetings of WOVO members and steering committee
2. Email
3. Digital team collaboration tool
4. Continuous update of WOVO website, secondment by volunteer staff from VOs
5. Dedicated workshops and projects
6. An online IAVCEI/WOVO meeting dedicated to the WOVO renewal project

Q6: As a current or new member of WOVO, would your Observatory be interested in benefiting from **VOBP** merging in WOVO, integrating and sharing information/data with **WOVOdat** and **GVMID**, and linking **INVOLC** with WOVO?

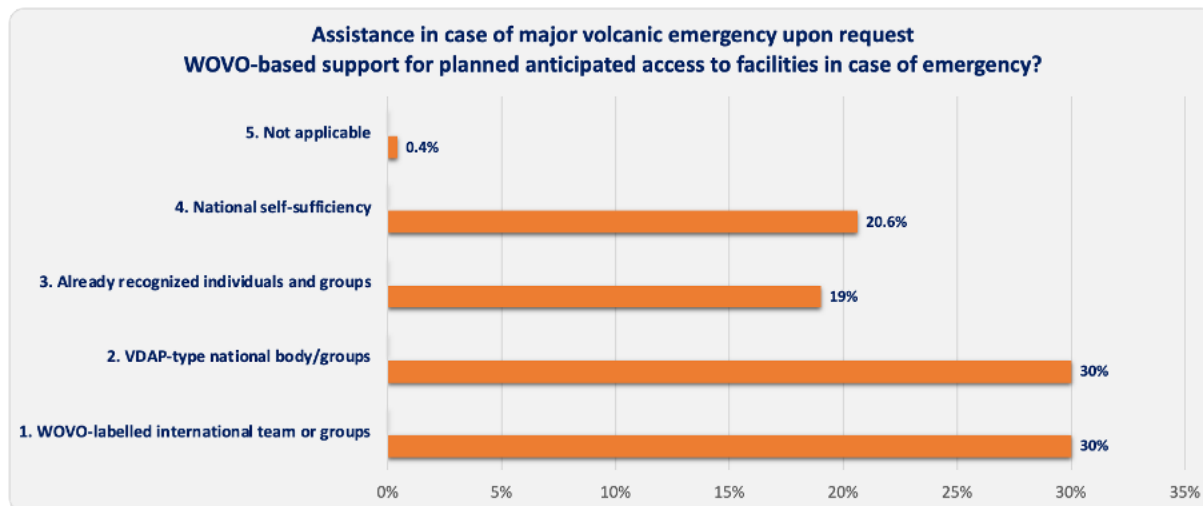


Q7: Planning a different organizational structure for WOVO, we will appreciate knowing **your opinion on the following ideas** and how would you see your Observatory/Institution best represented?

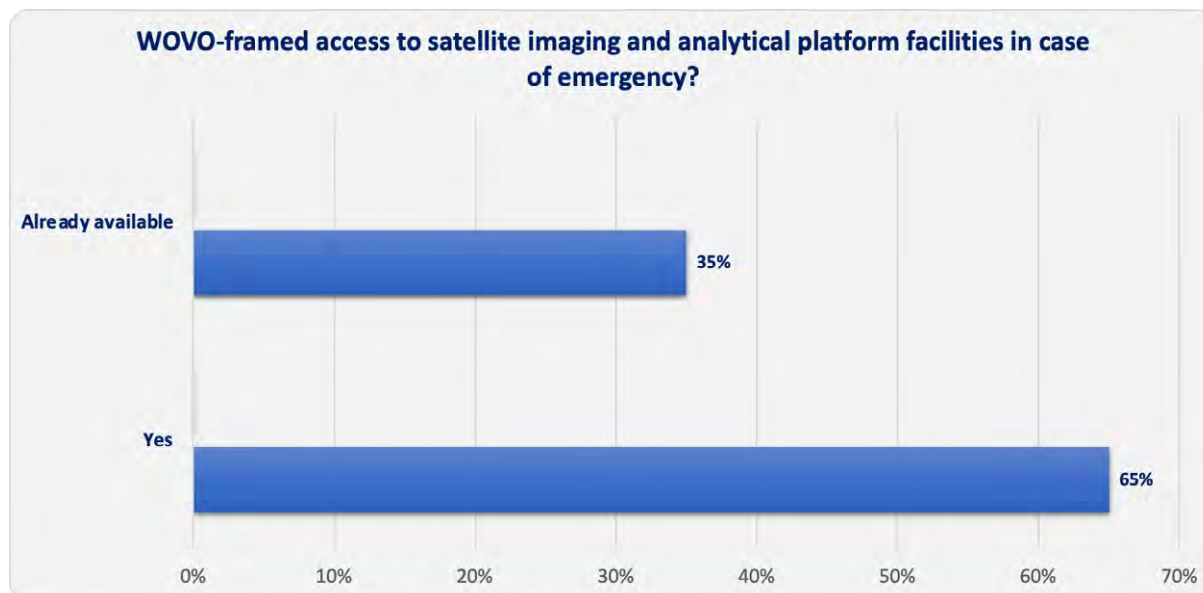


Q8: Assistance in case of major volcanic emergency?

In case of major volcanic emergency, what your Observatory would need or appreciate as temporary reinforcement, upon request, from foreign colleagues: a) just one or a few individuals you already know, b) a national team from any one country (e.g. VDAP), or c) an international team organized by IAVCEI/WOVO?



Q9: Within the WOVO framework or, at least, with the WOVO support, would your Observatory/Institute be interested in the possibility of planned anticipated access to facilities (e.g. analytical platforms, satellite image processing, machine learning services, etc.) that may not be available locally and could be needed during volcano emergency?



Q10: If you agree to support the efforts of IAVCEI for the WOVO renewal, will you be interested in participating/contributing to an online WOVO meeting dedicated to this project?

Answers at 100%: **YES**

5. Meetings and Workshops in 2019-2023

The Covid-19 pandemic forced the IAVCEI Executive Committee to reprogram several meetings. Online meetings became the only alternative in 2020–2021, while also revealing a useful new tool in future. In-person meetings could be reactivated since mid-2022 as travel restrictions were dropped off. We list below the meetings either directly organized or sponsored by the IAVCEI from mid-2019 to 2023.

■ 2019 (since July)

- IAVCEI 2019 General Assembly, Montreal, Canada, July 8–18
- 4th Edition of the Volcanology Field Course in Colombia, August 24–31
- Annual Workshop of the IAVCEI-IASPEI Commission on “Volcano Seismology and Acoustics”, Tenerife, Canary islands, Spain, October 27 – November 3
- 4th international Volcano Observatory Best Practices (VOBP) Workshop, Mexico City, November 18–23

■ 2020

- 1st ALVO Congress on “Volcanology in the current Latin America context”, virtual, March 23 and 26
- International conference on “Strategies for the prevention and mitigation of volcanic risk in Peru”, organized by ALVO (Latin American Volcanology Association), virtual, November 4 and 6

■ 2021

- International Workshop on “Volcano monitoring infrastructure on the ground and in space”, Global Volcano Monitoring Infrastructure Database, online, February 18–23
- First virtual Workshop of the IAVCEI Commission on Chemistry of Volcanic Gases (CCVG), May 24–26
- IAVCEI-EAG co-sessions on “Magmas and Volcanoes” at 2021 Goldschmidt Conference, Lyon, France, virtual, July 4–9
- 14th International AIV summer school, Lipari (Italy), August 28 – September 4
- 9th Edition of postgraduate Course in Volcanology, Olot (Spain), October 18–31
- 2nd European Workshop of Volcano Observatories-Volcanic Ash Advisory Centers on “Volcano-Aviation”, virtual, November 8–10

- 2nd International Conference on “Volcanic Eruptions: Contributions of Research and Monitoring for Volcanic Risk Management », IGP, virtual, November 17–19

■ 2022

- International Conference on “Mitigating Volcanic Risks in the Virunga Region”, Goma, R.D. Congo, on-site (250) and virtual (19), March 19–21
- 11th Conference Cities on Volcanoes (COV11), Heraklion, Crete (Greece), on-site (354) and virtual (240), June 12–17
- IAVCEI-EAG co-sessions on “Magmas and Volcanoes” at 2022 Goldschmidt Conference, Honolulu, Hawaii, hybrid, July 10–15
- 5th Alfred Rittmann Conference, AIV, Catania, Italy, on-site, September 29 – October 1
- Symposium on “Submarine Volcanism”, IAVCEI Commission SV-Early Career Researchers, virtual, November 8–9
- 14th Field Workshop of IAVCEI Commission on Chemistry of Volcanic Gases (CCVG), Arequipa, Peru, on-site, November 6–16

■ 2023

- IAVCEI Scientific Assembly, Rotorua, New Zealand, on-site (894) and virtual (205), January 29 – February 3
- International Workshop on “Genesis and dynamics of large active calderas: the case of Campi Flegrei and the Campanian Plain”, Naples, Italy, May 2–5
- IAVCEI General Assembly, 28th IUGG GA, Berlin, Germany, July 15–19
- 11th Workshop IAVCEI Commission on Crater Lakes, Sao Miguel, Azores, Portugal, August 28 – September 5
- Annual Workshop of IAVCEI Commission on Volcano Seismology & Acoustics, Ischia, Italy, October 1–6



6. Financial Summary 2019–2022

We do not have yet the financial accounts for the first half of 2023, but we greatly appreciate that for the overall period from 2019 to the end of 2022, the financial health of IAVCEI was well equilibrated, as summarized by our SG Roberto Sulpizio in the Table below.

Insert IUGG body name (IAVCEI)	
Financial report period 01/01/2019 - 31/12/2022	
Income - (EUR)	
MEMBERSHIP DUES	97515
IUGG ALLOCATION	96858
ASSEMBLY SURCHARGE	34000
ROYALTIES	57.32
MISCELLANEOUS (Interest/Other Sources of Income)	36201
TOTAL INCOME	264631
Expenditures - (EUR)	
11. ADMINISTRATION	
11.1 Personnel	0
11.2 Equipment	7300
11.3 Supplies	0
11.4 Communication	6281.25
11.5 Travel	21449.62
11.6 Miscellaneous	2000
12. SCIENCE AND EDUCATION INITIATIVES	
12.1 Education and Outreach	26200
12.2 Science	63186.01
13. ASSEMBLIES	
13.1 Organizational Expenses	39750.5
13.2 Travel Grants	33000
14. SYMPOSIA	
14.1 Symposia	0
16. DUES	
16.1 Dues	0
18. FEES	
18.1 Professional Services	52559.82
18.2 Bank Fees	2402.5
19. OTHER EXPENDITURES	
19.1 Other Expenditures	1822.94
TOTAL EXPENDITURES	255953
Result Years 2019-2022	8678.68

Bank account at 31/12/2022:

EUR 334 808

2. Exec Proposals to Update the IAVCEI Statutes-&-by-Laws

Based on its experience over the past four years, the outgoing Exec Committee has approved a few decisions and some proposals to improve or modify our IAVCEI Statutes-&-by-Laws (last updated in May 2015). Proposed changes and resolutions will require approval by 2/3rd of IAVCEI members present at our General Assembly in Berlin on July 18. Proposed changes are listed below and outlined with **blue color**.

For comparing with the present Statutes please refer to our website ("About Us").

A) STATUTES IV. Administration of IAVCEI

■ Art. 10: Composition of the Executive Committee – Updates and changes

"The Executive Committee of the Association shall consist of 9 elected members plus 5 *ex-officio* members and one webmaster. Elected members will be:

- President
- Secretary General
- Two Vice-Presidents
- Four Scientific Councilors
- One Early Career Researcher, defined as up to eight (8) years post PhD (or equivalent) award at the time of nomination*

Ex-officio members will include the immediate Past President, the immediate Past Secretary General (for 2 years every 8 years), the Editor-in-chief of *Bulletin of Volcanology*, and [DECISION] 2 representatives of the WOVVO (World Organization of Volcano Observatories) and INVOLC (International Network for Volcanology Cooperation).

The Executive Committee may also co-opt other members from time to time when needed."

* Note: this eight-year period may be extended for the following reasons: 1) maternity: 18 months for each child; 2) paternity, adoption or parental leave; 3) inability to work due to illness or accident; 4) care duties; 5) services that benefit the general public; 6) continuing education; 7) non-academic employments; (8) temporary unemployment. Eligibility will be decided on a case-by-case basis by the Elections Oversight Committee.

■ Art. 14: Mandate duration of Secretary General

We propose to modify Art. 14 as follows:

"The Secretary General is elected for two 4-year terms. The immediate past SG will overlap with the newly elected SG for an up to 2-year transition period in order to provide continuity and advice in the financial management of IAVCEI."

B) STATUTES V. Nomination and Voting for the IAVCEI Executive Committee

■ Art. 25, 26 and 28:

In order to avoid confusion and nomination problems in the future, we wish to specify (and hence modify) that the terminology "members of IAVCEI" means "IAVCEI members with due paid membership at the time of submission".

■ Adding a new Art. between 27 and 28:

"In addition to science qualifications, nominations for all positions in the Executive Committee should consider both gender and geographic balance and representation of all disciplines of IAVCEI. In particular, it is highly desired that gender balance be reached amongst the 2 positions of Vice-Presidents and the 4 positions of Scientific Councilors."

■ Art. 29: Nominations of candidates for election to the IAVCEI Executive Committee

The Exec recommends to modify as follows: "Nominations of candidates for election to the IAVCEI Executive Committee, must be seconded by three other current individual members, of whom a maximum of one may be from the same country as the candidate."

This Article must be complemented by the following specific requirement: *"The nomination package must include a CV and one-page motivation/acceptance letter from the candidate for the role."*

■ Art. 34:

"A Nominating or Election Committee will be responsible for overseeing the voting process to ensure that it is undertaken in accord with the current IAVCEI statutes and by-laws."

We recommend to rename the "Nominating or Election Committee" by "Elections Oversight Committee", and to complement this Article with the following specific duty:

"The Election Oversight Committee will carry out a compliance check of nomination packages upon their submission. In case of non-compliance, the Chair of the Committee will notify the lead nominator and allow a limited period of time for nomination packages to become compliant."

C) STATUTES VI. IAVCEI Awards

■ Art. 45:

This Article "awards to be made are" mentions only the G. Walker Award, the Wager Medal and the Thorarinsson Medal. Therefore, it needs to also include the Fisher and Krafft Medals, as well as the IAVCEI Award for Volcanic Surveillance and Crisis Management (VSCM).

Below are the recommended new indications:

• Fisher Medal

"The Fisher medal honors a scientist who has made outstanding contributions to volcanology based primarily upon field studies

of *the geology of volcanoes and the sedimentology of volcanic products*. It is awarded every 4 years at the IAVCEI Scientific Assembly. Detailed criteria are available on the IAVCEI website.

- **Krafft Medal:**

“The Krafft Medal honors an individual who has made outstanding contributions to volcanology through service to the scientific community or to communities threatened by volcanic activity. It is awarded every 4 years at the IAVCEI Scientific Assembly. Detailed criteria are available on the IAVCEI website.”

- **Volcanic Surveillance and Crisis Management Award:**

“The Volcanic Surveillance and Crisis Management Award honors the personnel from volcano observatories or/and institutions responsible for monitoring volcanoes that have made a remarkable contribution to the mitigation of volcanic hazards and volcanic risks. It is presented every 2 years at the Cities on Volcanoes conference. Detailed criteria are available on the IAVCEI website.

- **Art. 46–47**

Same change as for Art. 25–28 upon the denomination “members of IAVCEI”: “...*IAVCEI members with due paid membership at the time of submission*”.

- **Art. 48:**

“Nominations for all IAVCEI awards must be made in writing by one member, and supported with supporting letters by

no more than 3 other members.” Like **Art. 29**, this should be complemented by: “*The nomination package must include a CV and one-page motivation/acceptance letter of the candidate for the role*”.

- **Art. 50**

We recommend adding that: “*For the G. Walker award and the Wager Medal, the Awards Committee may decide to select more than one (up to two) candidates*”.

- **Art. 51**

We recommend introducing it with: “*In exceptional circumstances (e.g. anniversary or other), the Executive Committee may recommend an exceptional awarding at IAVCEI Assemblies*.” In addition, ...

C) BY-LAWS – II

- **Art. 7 – Duties of the Secretary General of the Association**

The outgoing Exec Committee has agreed that the SG should now control himself the financial costs and payments in organizing our future IAVCEI meetings, rather than delegating this to a LOC as done until now, for both easier and cheaper management. We thus propose to introduce the following new Article in the duties of the Secretary General:

“*To control himself the financial organization of IAVCEI Assemblies and COV meetings*”.

