

NEWS No. 2

July 2021

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



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Dear colleagues,

We all hope that the ongoing vaccination campaigns will gradually permit to overcome the health and societal impacts of the Covid-19 pandemic and hence allow us a gradual return to normal life. In these difficult times we've continued working on the objectives defined by mid-2019. This Newsletter 2021–2 provides the opportunity to update you on our efforts to improve the functioning and international outreach of the IAVCEI at mid-mandate.

IAVCEI website and Communication Team

Our first objective was to make the IAVCEI communication more professional and more reactive. The *new IAVCEI website*, activated on February 2, has been gradually implemented since then through a close collaboration with our private partner Guarant. The work is still going on, different sub-pages being in the course of completion and update.

In order to warrant the continuity of your information and our communication, we decided to create a *Communication Team* that will be in charge of routine implementation of our website and our social media accounts (Instagram, Twitter and Facebook). Following a call to trained volunteers on 17 February 2021, an IAVCEI Communication Team has been established under the coordination of Eugenio Nicotra. As detailed thereafter, it is composed of Alana (New Zealand), Audrey (France) and Silvia (Italy), all trained with communication on social media. In order to be as representative as possible and to communicate in different languages in the future, we hope the team to be complemented soon with volcanologists from other parts of the world (Latin America, Asia, Africa).

IAVCEI webinars on ongoing/recent volcanic eruptions and emergencies

We decided to launch regular IAVCEI webinars on ongoing or recent volcanic eruptions and emergencies in order that the volcanological community be kept informed as much as possible in real time and directly by the staff of volcano Observatories/Institutions in charge of monitoring/managing these events. These webinars are primarily dedicated to IAVCEI members with due membership but are also opened for free to worldwide undergraduate students and, upon request, to local authorities

and/or local non-scientists when needed. Three webinars were held up to now:

- 1) Mt. ETNA, April 12: “*The 2021 paroxysmal activity of Mt. Etna: multidisciplinary insight and hazard mitigation*” (by scientists from INGV-Catania and INGV-Palermo, Italy), 180 attendees.
- 2) ICELAND, May 18: “*The 2021 Fagradalsfjall (Geldingadalir) eruption and its precursors*” (9 talks by scientists from Nordvulk, Institute of Earth Sciences, University of Iceland, Icelandic Meteorological Office, and the Iceland Civil Protection), 230 attendees.
- 3) St. VINCENT, June 17: “*Management, Monitoring & Impact of the 2020–21 La Soufriere St. Vincent Eruption*” (11 talks by scientists from UWI Seismic Research Centre, Montserrat Volcano Observatory and University of East Anglia, and one talk by the Director of St. Vincent's National Emergency Management Organization, NEMO), 190 attendees.

These webinars got a great success and encourage us to proceed ahead. Your suggestions are welcomed. Each webinar lasts about 2 hours, including a Q&A session managed by IAVCEI's president and SG. It is prepared and recorded with the technical assistance of Guarant. Video recordings can be post-accessed from our website by IAVCEI members (using your IAVCEI ID) or, on a case-by-case basis, by non-IAVCEI individuals.

IAVCEI Commissions

The IAVCEI currently hosts 27 Commissions and 2 Networks, distributed among 4 Liaison Committees. 20 of our Commissions are purely home ones, while 7 are joint Commissions or Working Groups with other IUGG's Associations. Reducing this number of Commissions, WGs and Networks to something more proportionated with the size of our Association has long been a request from IUGG and is an important duty of our current mandate. As highlighted two years ago, such a reduction is also a sane objective for all of us in order to increase the visibility of our active Commissions, facilitate their transversal (multidisciplinary) interactions, as well as simplify their management and financial support by the Exec. Committee.

Since December 2020 our two VPs, Jan Lindsay and Masato Iguchi, have conducted a broad survey of the activity of our Commissions over the past years. All Commission leaders were contacted and, in accordance with our Commission Guidelines, were requested to:

- Update a Google spreadsheet with key details for their Commission, including names and contact details of the current leaders and officers, link to their website and social media information.
- Fill in a report template summarizing 2019–2020 activities then describing the plan for 2021.
- Provide, in their report, a feedback regarding the Liaison Committees and suggestions on how the IAVCEI Exec could better support their Commission.

We've been pleased to see that, in general, our Commissions and Networks have been active over the past couple of years despite the challenges with the ongoing COVID-19 pandemic. Most have managed to host virtual workshops and meetings and to stay in touch with their members via newsletters, emails, websites and social media accounts. 20 Commissions and the two Networks had provided reports by early 2021. Based on the results of this survey the Exec Committee has agreed upon a series of decisions and recommendations:

a) Disestablishment of the Liaison Committees

15 years ago the Liaison Committees (LCs) had been created to stimulate interactions between IAVCEI Commissions. However, LCs were supposed to be self-run by representatives from each Commission, and that never really got off the ground. Moreover, the four Liaison Committees paradoxically introduced some kind of arbitrary disciplinary cutoffs. In their answer to our recent survey most Commission Leaders expressed an overwhelming NO as regards the utility of LCs, some of them even ignoring their existence..! Therefore, the IAVCEI Exec Committee has decided to disestablish the Liaison Committees. This change is already visible on our website and will be soon acted in an updated version of our Commission Guidelines.

However, in order to stimulate the interactions between our Commissions and strengthen the multidisciplinary potential of IAVCEI – the original aim of LCs – the following three actions are planned:

- a) Activation of a *live spreadsheet* on the IAVCEI website where Commission leaders could report on their Commission's activity, interact with other Commission leaders and provide regular information to the Exec Committee.
- b) Sharing of 4-yr (or 2-yr) Commission Reports amongst all Commission Leaders.
- c) Set up of a *Commission Leaders' workshop at every major IAVCEI Conference* (SA and GA).

Any required assistance and answer to Commission leaders will continue to be provided by the two IAVCEI VPs.

b) Recommendations on inactive or poorly active Commissions

Our survey received either no answer or very partial information from a few Commissions. Based on these results, the Exec Committee already acted discontinuation of one Commission (Geochemistry). For the other 5 Commissions (3 IAVCEI ones and 2 joint Commissions) the Exec agreed on an ultimate evaluation. Their board leaders were asked to provide the

required information and clarification before July 31, otherwise discontinuation could be decided in conformity with our Commission Guidelines.

c) Other decisions

- Upon request of its leaders, the Commission on Remote Sensing was renamed 'Commission on Volcanic Clouds'.
- The International Volcanic Health Hazard Network (IVHHN), as well as the World Organization of Volcano Observatories (WOVO, see below) were recommended to become categorized among our Networks, together with INVOLC (International Network for Volcanology Collaboration).
- Early-Career Researchers Network: a few years ago the ECR Network has been established as a permanent professional structure of the IAVCEI, thus intrinsically different from our thematic or disciplinary Commissions or other networks. Accordingly, on our website the ECR Network now appears under the IAVCEI heading "About Us".
- For our joint Commissions with other IUGG's Associations it was recommended to ask their leaders to determine their main host Association. More broadly, for enhanced clearness with respect to IUGG, and given that our Liaison Committees were disestablished, I personally recommend that under the 'Commissions' heading of our website we now list separately our purely IAVCEI Commissions then our joint Commissions with other IUGG Associations.

d) WOVO renewal

The WOVO webpage is now hosted on the IAVCEI website. Let me express our gratitude to both INGV-Catania and EOS in Singapore who helped us in temporarily hosting the WOVO webpage before this recent move.

As previously stated, a key priority of our mandate is to rejuvenate the WOVO, in order to make it a more professional and proactive international network for the benefit of both Volcano Observatories and the global volcanological community under the IAVCEI umbrella. Over the past year a think-tank was activated in order to propose the most appropriate directions in that perspective. Grounded on these exchanges, a questionnaire has been prepared to check the willing, expectations and recommendations of worldwide Volcano Observatories with respect to a rejuvenated WOVO. This questionnaire is ready to be sent and its results will then be analysed and communicated.

A renewed WOVO is expected to integrate the Volcano Observatory Best Practices defined during the past four VOBP Workshops, as well as a direct link with WOVODat and GVMID (the Global Volcano Monitoring Infrastructure Database; see our previous Newsletter 2021–1). It is also expected to become an efficient interface between IAVCEI and the international Organizations dealing with the regional or global effects of volcanic activity (UNISDR, ICAO, NASA, ESA, World Bank, etc.). The relationships between Volcano Observatories (VOs) and Civil Aviation Authorities, the improvement of communications strategies between VOs and Volcanic Ash Advisory Centers (VAACs), as well as a potential financial contribution from air companies, are among the sensitive matters that need to be discussed in this framework.

An international Volcanic Ash Workshop (IVAW) on these topics was planned in Iceland in October 2020 then October 2021 but had to be cancelled owing to the Covid-19 pandemic. During a brief visit in Iceland by early June I could have very useful discussions on those matters with Sara Barsotti, IAVW responsible and Coordinator for Volcanic Hazards Monitoring and Forecasting at the Icelandic Meteorological Office.

Finally, let me highlight a few other items.

International Conferences and IAVCEI meetings

- **2021 Goldschmidt Conference** (July 4–9, Lyon, France), fully virtual. Several co-sponsored IAVCEI-EGA sessions in Theme 5 “Magmas and Volcanoes”.
- **11th Conference of Cities on Volcanoes (COV11) in Crete.** The Greek POC confirmed us the dates of the Conference: June 12–17, 2022. Pre-meeting field excursion at Methana will be on June 10–11 and post-conference field excursions (Santorini, Milos, Nisyros and Psiloritis) on June 18–20. See <https://pcoconvin.eventsair.com/volcanoes11/>.
- **IAVCEI Scientific Assembly in New Zealand (Rotorua).** As a remind, the new dates were fixed on January 30 to February 3, 2023.
- **28th IUGG/IAVCEI General Assembly** in Berlin (July 2023). Roberto Sulpizio and myself will participate on 15 and 16 September 2021 to the IUGG Executive Committee Meeting which will have to fix the overall organization of the 2023 Gen. Assembly.

A new MoU between IAVCEI and IAPS

As thereafter detailed by Roberto Sulpizio, we signed on May 26 a new MoU between the IAVCEI and IAPS, the *International Association of Physics Students*. IAVCEI and IAPS mutually agreed to promote networking and collaborations among members of both Associations, in particular through the common organization of online seminars, thematic lessons, and workshops at conferences.

Nominations

Nominations to IUGG ad-hoc sub-Committees

- **Nominating Committee** (Chair and 3 Members)
IAVCEI nomination of Hugo Delgado Granados, former IAVCEI VP
- **Gold Medal Committee** (Chair and 8 Members)
IAVCEI nomination of Jan Lindsay, current IAVCEI vice-president
- **Fellow Selection Committee** (Chair and 8 Members)
IAVCEI nomination of Roberto Sulpizio, IAVCEI SG
- **Early Career Scientist Award Committee** (Chair and 8 Members)
IAVCEI nomination of Julia Eycheenne, ECR representative in our current Exec

Nominations to 2021 International Science Council (ISC) Award Programme

The International Science Council (ISC), created in 2018, is the non-governmental world organization that brings together 40 international scientific Unions and Associations, among which IUGG. ISC launched a call for its 2021 Award Programme, to which 3 IAVCEI Candidatures were submitted then approved by the Bureau of IUGG:

- **Policy-for-Science Award (#3):**
Prof. Don Dingwell, Ludwig-Maximilians Universität, Germany
- **Scientific Freedom and Responsibility Award (#4):**
Prof. Ray Cas, Monash University, Australia
- **Early Career Scientist Award (#5):**
Dr. Santiago Arellano, Chalmers University, Sweden

Nomination to the EGU 2021 Krafft Award

Sarah Brown, Bristol University, UK (S. Sparks as chief nominator)

With my best wishes,



Patrick Allard

June 30, 2021



IAVCEI COMMUNICATION TEAM

Introducing the newly established IAVCEI Communication Team

It is my pleasure to introduce you the newly established IAVCEI Communication Team. In our increasingly connected digital society, having efficient and modern channels of communication is crucial for the life of an International Association such as IAVCEI. In that perspective, the main objective of the new Communication Team will be to regularly disseminate volcano-related news, articles and photos coming from IAVCEI members and Commissions on both our website and our social media accounts.

The Team has been formed after a call to IAVCEI members. At present, it is composed of 1 coordinator and 3 members from New Zealand, France and Italy, but we hope to soon complement it with volcanologists representing other continents (Africa, America, Asia).

Eugenio Nicotra (PhD, Università della Calabria, Italy) will coordinate the Communication Team and be the link with the IAVCEI Executive Committee and the Association's website. Alana Weir (Research Fellow at University of Canterbury), Audrey Michaud-Dubuy (PhD, France), and Silvia Massaro (PhD at CNR-Rome, Italy) will be in charge of collecting and spreading volcano information over Facebook, Instagram and Twitter, respectively.

Many thanks to the Team for this time dedicated to improving IAVCEI communication!

Roberto Sulpizio
IAVCEI SG



Eugenio Nicotra (Italy)
team coordinator



Alana Weir
(New Zealand)



Audrey Michaud-Dubuy
(France)



Silvia Massaro
(Italy)

Dear IAVCEI members,

The newly established IAVCEI Communication Team asks for your help in order to rapidly disseminate info about volcanic matters.

We are looking for short abstracts (<500 words, spaces included) of recently published peer reviewed scientific papers of relevant interest for the general community. The text should be accompanied by 1–4 figures, tables or a graphical abstract. An introductory text (<320 characters) may be included, in order to explain the relevance of the paper in volcanology and/or chemistry of the Earth.

The abstracts will be published on a dedicated section of the IAVCEI website. Most relevant papers (at only discretion of the Communication Team) will be also announced on social media once a week.

We are waiting for your contributions!

The IAVCEI Communication Team
Eugenio, Alana, Audrey and Silvia

IVESPA

A new community-maintained database of 130+ modern eruptions

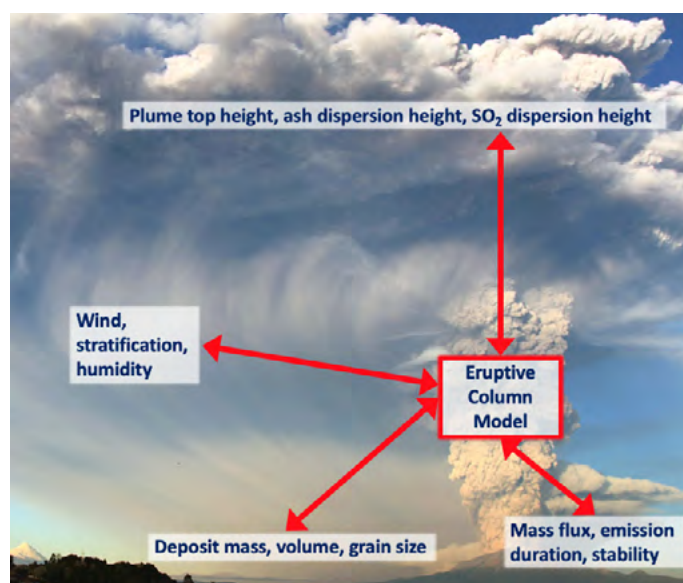
The IAVCEI Tephra Hazard Modeling Commission's working group on eruption source parameters is delighted to announce a new database to support plume model development and related studies of eruption dynamics.

The Independent Volcanic Eruption Source Parameter Archive (IVESPA), <http://www.ivespa.co.uk/>, includes eruption source parameters (e.g., erupted mass, duration, plume top height, SO₂ height, total grain size distributions) and atmospheric conditions for 134 eruptive events since 1900. The dataset is restricted to modern eruptions to include only those with robust measurements of plume height independent of plume models or isopleths. Source parameters and uncertainties were derived from published literature and cross-checked by at least two members of the working group. Overall, the database represents an extension of the original source parameter archive (which can still be found in its original form on the IAVCEI commission website <https://thm.iavceivolcano.org/repository/datasets.html>).

These efforts are coordinated by Thomas Aubry (ta460@cam.ac.uk) and Samantha Engwell (sameng@bgs.ac.uk), with the British Geological Survey providing resources to create the database and ensure its initial maintenance. The online database will be updated at least annually – thus, feedback and suggestions of new entries to add to database are strongly encouraged.

A full description of IVESPA can be found in an open-access article recently published in the Journal of Volcanology and Geothermal Research: <https://doi.org/10.1016/j.jvolgeores.2021.107295>

We hope you enjoy this product and look forward to including your contributions in the coming months and years.



WORKSHOP

1st Virtual Workshop of the IAVCEI Commission on Volcanic Gases 24–26 May 2021



Organizing committee: *Santiago Arellano (Ecuador/Sweden)*, *Tobias Fischer (United States/Germany)*, *Silvana Hidalgo (Ecuador)*, *Artur Ionescu (Romania)*, *Ryu Kazahaya (Japan)*, *Maria-Clara Lamberti (Argentina)*, *Séverine Moune (France)*, *Lizette Rodriguez (Puerto Rico)*, *Franco Tassi (Italy)*

Since 1982 the IAVCEI Commission on Volcanic Gases has held joint Field Workshops every three years on various active volcanoes in different countries, allowing to exchange the results of new researches and to conduct simultaneous gas measurements using different instrumental techniques (direct sampling and remote sensing).

The 14th CCVG workshop, planned in May-June 2020 in Japan (Hokkaido), unfortunately had to be cancelled owing to the Covid-19 pandemic. Even though far from replacing personal and field exchanges, the CCVG board substitute it in organizing the very first online Workshop of the Commission. This virtual workshop happened on 24–26 May 2021 and focused on the

following broad theme: “A new decade of volcanic gas research”. It has been dedicated to stimulate discussions on research trends, open questions, and how can the research community on volcanic gases coordinate its actions to face important challenges in the coming years. The Workshop involved 46 presentations, including keynote presentations, short scientific talks, poster pitches/publication, and general discussion sessions.

Special thanks also to our colleagues in the **Scientific Committee** of the First CCVG Virtual Workshop: *Mariano Augusto*, *Mike Burton*, *Tobias Fischer*, *Ryu Kazahaya*, *Andrea Luca Rizzo*, *Tjarda Roberts*, *Maria Fátima Viveiros*, and *Muga Yaguchi*.

The CCVG webpage is now hosted on the new IAVCEI website at: <https://ccvg.iavceivolcano.org/>

The CCVG regularly communicate with its members through the “Telegram from Earth’s Interior”.

	Duration (min)	Day 1 Passive Degassing	Day 2 Geochemistry	Day 3 Eruptions/Instrumentation
Opening	5			
Special talk	15	Allard	Taran/Zelenski I	Taran/Zelenski II
Session 1	10	Moune	Chiodini	Aiuppa
	10	Aguilera	de Moor	Nadeau
	10	Campion	Ricci	Agusto
	10	Jácome	Ohba	Salerno
	10	Varley	Tassi	Apaza (Sabancaya)
Session discussion	10			
Break	5			
Poster pitches	2	Arellano	Fischer	Kern
	2	Hidalgo	Malik	Apaza (Ubinas)
	2	Fernández	Moreno	Lelli
	2	González	Werner	Matias
	2	Viveiros		
Session 2	10	Lages	Kelly	Caudron
	10	Layana	Kuhn	Barrington
	10	Bini	Inostroza	Fuchs
	10	Cardellini	Mick	Rüth
	10	Kis	Ionescu	Salas
Session discussion	10			
General discussion	30	Grand Challenges in Gas Geochemistry	Linking Multiparametric Time Series	General (field works, board announcements)

IAPS

Memorandum of Understanding

Dear IAVCEI members, we are glad to announce a new Memorandum of Understanding (MOU) with the International Association of Physics Students (IAPS).

The International Association of Physics Students (IAPS) is an association of physics students and student societies from around the globe, working to promote peaceful collaborations amongst them. Since 1987, IAPS has worked continuously to support friendly relations and collaboration between physics students, supporting its members in their academic and professional work. IAPS is a recognised non-governmental organisation run entirely by students from around the world with a spirit of mutual understanding and equality. IAPS runs an annual International Conference for Physics Students (ICPS); an annual physics competition, Physics League Across Numerous Countries for Kick-ass Students (PLANCKS); visits to global

research institutions, summer schools, exchange programs, outreach activities, and multinational meetings all over the world.

The MOU establishes mutual advantages for IAVCEI and IAPS members who will wish to participate to the meetings and workshops organized by the two societies, and foresees collaborations in organizing scientific and social initiatives in common ambits.

The photo below shows the virtual meeting organized for the MOU signature, with the participations of Roberto Sulpizio (IAVCEI SG), Duarte Graça (IAPS President), Anna Varsted (IAPS Vice-President), and Joao Azevedo (Member of Executive Committee)

Lets drink a toast to the new collaboration!

