



IAVCEI *News* 2017 No: 4

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

FROM THE PRESIDENT

Dear Colleagues,



Don Dingwell
President of the
IAVCEI

As 2017 draws to a close we can look back on a year of considerable activity for IAVCEI which culminated in the Scientific Assembly at Portland in August. Now, after the dust has settled and the bills have been paid, we can say with certainty that the choice of Portland, made by my predecessors, was infinite in its wisdom and the execution of the event meticulous and responsible. Thank you to all.

The year 2017 has also seen the initiation of a corporate cooperation of IAVCEI with a professional association company, GUARANT. The goal is the establishment of sufficient experience and resources for the increasingly needed professional running of our association. We hope in the months to come that you will 1) miss nothing of the identity and character of IAVCEI as you have come to know it in the past AND 2) be pleasantly surprised by the successive addition of professional and membership services to IAVCEI through this arrangement.

Do not hesitate to comment to any member of the executive committee regarding any of these issues or any other in the upcoming year.

Finally, our eyes turn to Naples for our largest scheduled event of 2018, Cities on Volcanoes. Returning to the birthplace of this

fabulously successful idea. Please make every effort to attend. You will not be disappointed.

If you are celebrating the end of the year and any associated holidays in the coming days then please accept the best wishes of all of those involved in IAVCEI for a calm and peaceful holiday time.

Don Dingwell

Munich 21 December 2017.

IAVCEI WEBSITE

From the Secretary General

Dear IAVCEI members, first of all I take the occasion for sending you the warmest Season Greetings. It is the end of a very important year for IAVCEI, which have seen the very successful Scientific Assembly in Portland and a number of fruitful workshops, meetings and schools co-sponsored by IAVCEI and organized by our Commissions and members.

We also started a collaboration with GUARANT, a service society that will help us in offering a better service to our members.

The new year will come with other important meetings (first of all the COV 10 in Naples, September 2018) and many improvements in our communication and support to the volcanological community. The most important step at the onset of 2018 will be the renovation of the website. It will be not a simple restyling, but a new structure that will allow to host new sections for our Commissions and more services to the members.

The new website will also change the URL. We are obliged by bureaucracy to abandon the old IAVCEI.org domain, and we welcome the www.IAVCEIvolcano.org. When we will communicate that change is operative, please update the URL in your preferred site list!

A warm thank for your support and fidelity in 2017

Roberto Sulpizio

IAVCEI SG

Conference statistics

WORKSHOP REPORT

4th International Volcano Geology Workshop held in Eastern Transylvania, Romania

The Workshop took place during October 8-14, 2017. It was scheduled according to the common agreement – obtained through an ad-hoc “plebiscite” – of the participants at the 3rd Volcano Geology Workshop in Etna-Aeolian Islands, July 3-10 2016.

The workshop was organized by the Institute of Geodynamics of the Romanian Academy and sponsored by IAVCEI, the Geological Society of Romania, the Geological Institute of Romania, and two companies, Decathlon and the National Company of Mineral Waters. The Geological Society of Romania (Societatea Geologică a României) considerably helped with offering its banking facility.

Thirty-five participants representing twenty countries attended the Workshop. For the first time, geologists from an exploration company, Dundee Precious Metals, Canada, were attracted to participate broadening the area of interest of the IAVCEI Commission on Volcano Geology. PhD students and early career scientists were also present, eight of them benefiting from financial support offered by IAVCEI.

The main purpose of the Workshop, as it was expressed in the “promo” presentation in Italy, was to broaden the scopes, subject area and breadth of the IAVCEI Commission on Volcano Geology towards ancient volcanic areas where the degree of exposure of volcanic formations is poor or very poor. Mapping in such areas needs complementary and new approaches and techniques as compared to recent/active volcanic areas.

The workshop was envisaged and organized as a five-days field-trip along the time-space-migrating Călimani-Gurghiu-Harghita (CGH) Miocene-Pleistocene volcanic range, starting at its youngest (< 1 Ma) southeastern end and finishing at its oldest (>10 Ma) northwestern end.

The program of the 1st day officially started after the workshop participants traveling from Bucharest and Cluj-Napoca met at the medieval castle of Rupea built on the top of a 6.8 Ma massive calc-alkaline basaltic-andesite cliff, which is spatially isolated from both the CGH range and the Perșani basaltic field. After a visit of the castle, the participants have examined and vividly discussed the origin and nature of the Rupea cliff (i.e., large debris avalanche block vs. local intrusion).



Figure 1 - Discussions at the outcrop of the basaltic andesite surrounded by the Rupea castle edifice (photo Viorel Mirea)

Next, the reunited group had the opportunity to be shortly introduced in the problematics of the Perșani Na-alkalic monogenetic volcanic field (1.2-0.65 Ma old) by visiting two quarries where typical effusive and explosive products were observed and appreciated.

The major focus of the workshop was to familiarize the participants with the major challenges of mapping in the CGH volcanic range where the exposure of volcanic formations are generally poor and extremely uneven. The volcanic evolution of the CGH range has been introduced by two presentations given by the organizers in the morning of the 2nd day. During days 2 and 3, extremely poorly exposed areas of the Harghita and Gurghiu Mts. were visited and exemplified with the Ciomadul volcano (South Harghita), the Vârghiș volcano (North Harghita), and a number of isolated outcrops belonging to other North Harghita and Gurghiu Mts. volcanoes.

Day 4 was dedicated to a scientific session, including five keynote and invited talks. These included the organizer’s presentations focusing on the problematic of the Călimani-Gurghiu-Harghita range, as well as talks by Károly Németh and his co-worker, Julie Palmer (on geological mapping issues), Jan Mrlina (on the geophysical mapping of volcanoes), Lyndsay Moore and her co-workers (on facies architecture of a very old volcano). Further three oral and ten poster presentations, all addressing various subjects related to volcano geology and mapping in volcanic areas around the world, contributed to the discussed topic.



Figure 2 – Presentation of János Szepesi on a Miocene pyroclastic sequence, Tokaj - Slanske Mountains, Carpathian-Pannonian region at Marion hotel in Reghin (photo Viorel Mirea)

An afternoon discussion session was dedicated to the problematics of mapping in poorly exposed area as seen during the previous two days of field visits. Two ideas resulting from the field experience and from the keynote presentation were vividly discussed and debated: 1) how the volcanic facies concept can be integrated with the lithostratigraphic approach in map representation of volcanic areas; 2) whether the newly proposed concept of MEBU (i.e. Master-Event-Bounded stratigraphic Unit) as a more general counterpart of UBU (Unconformity-Bounded stratigraphic Unit) can be applied as an useful tool in mapping poorly exposed volcanic areas. The second idea was triggered by the fact that in poorly exposed volcanic areas only products of major constructional and destructive events leave behind distinguishable geological records at the scale of outcrops. Only these can be directly examined and interpreted, making possible the segmentation of volcano evolution into major stages. However, such stages have not yet found a practical presentation on volcanological maps.

During day 5, the participants had the opportunity to appreciate a well-exposed area along the Mureş Valley where volcanoclastic and effusive deposits originating from volcanic edifices in the north (Rusca-Tihu volcano and Călimani caldera volcano in the Călimani Mts.) and in the south (Fâncel-Lăpuşna volcano, Gurghiu Mts.) interfinger their medial facies (i.e. ring-plain) products. The afternoon visit of a ca. 200 m thick section of medial-facies formations at the Răstoliţa Dam, including both volcanoclastics of various – primary and reworked, purely magmatic and phreatomagmatic – origin and effusive products, was (according to many workshop participants) the highlight of the workshop. However, it was emphasized that such exposures are only accidentally present in the area, and the formations recognized and described here cannot be correlated, traced and mapped elsewhere in the surrounding area where outcrops are rare and small. Károly Németh suggested that, despite these circumstances, such a lithologic section can be used as a “type locality” useful in understanding the lithological architecture of medial-facies/ring-plain parts of calc-alkaline composite volcanoes, at least in the CGH range.



Figure 3 - Discussions in the lower part of the post-debris avalanche volcanoclastic sequence belonging to the Rusca-Tihu formation on the Răstoliţa Valley (photo Nobuo Geshi).

In the morning of Day 6 we visited debris-avalanche deposits of the Rusca-Tihu volcano (Călimani Mts) at the Colibiţa Dam and lake area and two sills of pre-volcanic intrusions belonging to the so-called “Subvolcanic Zone” underlying the volcanic formations of the Călimani and northern Gurghiu Mts.

An afternoon meeting on the same day, held at the Hotel Dracula Castle, was dedicated to final discussions and conclusions of the workshop in the light of those seen and discussed during field visits.



Figure 4 - Group photo on the top of an andesitic sill close to the Colibiţa Dam (photo Viorel Mirea).

Appreciations of the efforts made by the Organizers were expressed by some participants. Issues related to the IAVCEI Commission on Volcano Geology addressed under the convenorship of Gianluca Groppelli, included a unanimous decision regarding the location of the next International Volcano Geology Workshop. Based on a short teasing presentation by Károly Németh, the participants voted for organizing the next IVGW 2019 in New Zealand.

The workshop concluded, after dinner, with a Dracula Show including a 20 minutes performance of professional artists, which set a specific vampire atmosphere, a thrilling visit to the underground Tomb of Dracula, and a final late-evening open campfire barbecue in a friendly atmosphere, abundantly wetted by the local Transylvanian drink, palinka



Figure 5 – Dracula Castle ... (photo Viorel Mirea)



Figure 6 – Camp-fire barbecue at the Dracula Castle hotel (photo Viorel Mirea)

In conclusion, we the organizers consider that the 4th International Volcano Geology Workshop was successful because 1) it broadened the volcano geology subject area towards ancient poorly-exposed volcanic areas, 2) opened its audience toward mineral exploration geologists, 3) proposed new approaches (e.g. incorporation of the volcanic facies approach into the problematics of mapping of volcanic terrains) and new concepts (such as MEBU, extending and generalizing of the concept of UBU), 4) familiarized volcanologists and – in general, geologists – with the mapping issues in poorly-exposed ancient volcanic areas (here exemplified with then CGH range on Romania), 5) offered the opportunity to PhD students and early carrier scientist to learn about volcano features preserved in poorly exposed areas. Most Workshop materials, including the workshop's concept, an introduction to the workshop fieldtrip area (i.e. the Călimani-Gurghiu-Harghita volcanic range and its broader geodynamic and volcanological context), the detailed fieldtrip guide as well as all the abstracts of the contributions of workshop participants have been included in a Special Issue of the Romanian Journal of Earth Sciences (vol. 97, 2017, ISSN 2248-2563) edited by the Geological Institute of Romania.

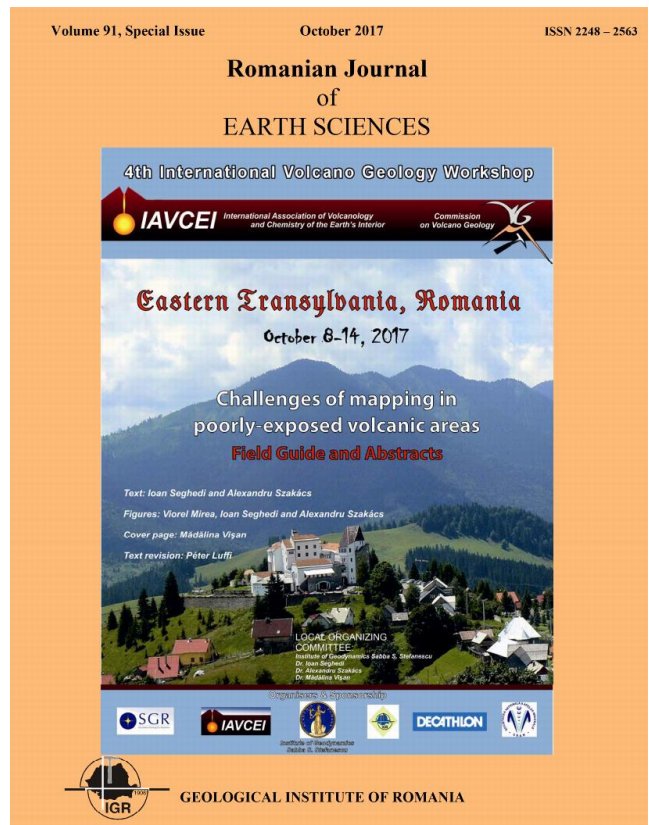


Figure 7 - The conference volume available at <http://www.geodin.ro/4th-international-volcano-geology-workshop/>.

In addition, as part of their registration package, workshop participants received a pen-drive with an exhaustive number of pdf copies of papers related to the CGH Range, published in various international and domestic journals.

Alexandru Szakács and Ioan Seghedi

Institute of Geodynamics, Romanian Academy of Sciences

5TH INTERNATIONAL VOLCANO GEOLOGY WORKSHOP

Ruapehu Volcano, New Zealand

February 2019

As it has been decided during the 4th Volcano Geology Workshop in Transylvania, the 5th meeting will be held in New Zealand's Ruapehu Volcano.

The workshop will be an event of the IAVCEI Commission on Volcano Geology and will take the participants to an active volcanic region where modern volcanic processes and their result in the sedimentary record can be observed.

The workshop will have limited participant numbers (about 50) and will be based on field observations of key sites the eruptive history can be unlocked around New Zealand's iconic active volcano of Ruapehu. The participants will have a great opportunity to see how geological mapping is conducted in an active volcanic system with multiple, closely spaced volcanoes

that evolved over long period of time.

The workshop will follow the same format already tested and liked by many in the past four volcano geology workshop. There will be a single day dedicated for presentations and round table discussions. The majority of the activity will focus on key sections on the field and allow extra time to develop discussions in situ in the outcrops. The workshop participants will be picked up at Auckland Airport (main airport in New Zealand) and transported to the Central Volcanic Plateau of the North Island of New Zealand. EN route several silicic volcanic sites will be introduced. The main part of the workshop will focus on the Tongariro Volcanic Complex and Ruapahu Volcano.

Website and further information will be available from end of March 2018.

If you have any questions you can contact

Karoly Nemeth (k.nemeth@massey.ac.nz)

Shane Cronin (s.cronin@auckland.ac.nz)

Chairmen of the IAVCEI 5VGW



Tongariro Volcanic Complex from the north (photo K. Nemeth).



Ruapehu Volcano from the north-east (photo K. Nemeth).

REPORT ON THE 13TH WORKSHOP OF THE COMMISSION ON THE CHEMISTRY OF VOLCANIC GASES



13th Gas Workshop

ECUADOR 2017



The 13th workshop of the Commission on the Chemistry of Volcanic Gases (CCVG) was held from September 24th to October 3rd, 2017, in Ecuador. The meeting was attended by 67 participants from 19 countries, and supported by the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI). The meeting consisted of a main conference session held in Baños (25-27 September) with up to 23 oral and 42 poster presentations, and field expeditions at (1) the main thermal spring sites at the foothill of Tungurahua volcano (28-29 September), (2) Guagua Pichincha volcano (2 October), (3) Pululahua caldera (2-3 October), and (4) Cotopaxi volcano (2-3 October). Optional field trips to El Reventador volcano (20-23 September; 16 participants) and Galápagos Islands (5-9 October; 20 participants) were also carried out, as well as half-day seminars on different measurement techniques and some social activities.

Scientific topics addressed in the oral and poster presentations represented a wide variety of volcanic gas studies, including regional studies, in-depth investigations of individual volcanic systems, new methodologies for gas studies and other topics related to volcanic gas emissions. The conference was opened by an overview presentation on volcanoes and gas monitoring in Ecuador, followed by oral presentations classified under four scientific sessions: (1) Observations and interpretations (8 oral, 18 poster); (2) Technical development (6 oral, 10 poster); (3) Volcanic gas impact (5 oral, 6 poster); (4) Multidisciplinary (4 oral, 8 poster). The full program with titles, abstracts and main authors is appended to this report.

The general seminars were divided in three sessions, covering different aspects of direct sampling, diffuse degassing and remote sensing. They were presented by experts on different methodologies and were directed to both expert colleagues and new-comers to the techniques. Social activities included an ice-breaker ceremony and tour in Quito, a visit to the Tungurahua volcano observatory and the headquarters of the Instituto Geofísico in Quito, tours to natural cascades and volcano sighting places in Tungurahua, as well as a closing dinner and party.

At El Salado site nine groups sampled dry gas, namely: GNS Science (NZ), INVOLCAN (ES), University of Napoli 2 (IT), University of New Mexico (US), Babes-Bolyai University +

MTA-ELTE (RO/HU), CICESE (MX), INGV Palermo (IT), CNRS-IPGP (FR) and CEA-CNRS (FR). The University of New Mexico, INGV Palermo and University of Florence (IT) sampled soda flask and four sampled water (University of Perugia (IT), University of Napoli 2, Universidad de Buenos Aires (AR) and Babes-Bolyai University + MTA-ELTE).



Figure 1. Photographs of fieldwork conducted at Tungurahua volcano. Sampling of several thermal springs was carried out around this volcano. A. View of Tungurahua volcano; B. Sampling of noble gases by Philippe Jean-Baptiste (CEA-CNRS) and Artur Ionescu (Babes-Bolyai University); C. Sampling of gases in soda flask by Tobias Fisher at the El Salado thermal spring (University of New Mexico); D. View of Santa Ana spring; E. Jorge Córdova (Instituto Geofísico-Escuela Politécnica Nacional) measuring dissolved CO₂ content of the spring; F. Fatima Viveiros (IVAR) and Maria Clara Lamberti (University of Buenos Aires performing soil diffuse flux measurements; G. View of La Virgen spring; H. Sampling of dry gas in Exetainer tubes by Andrea Ricci (University of Bologna); I. Carlo Cardellini (University of Perugia) measuring carbonate concentration of the spring. (photos: Artur Ionescu, Andrea Rizzo, Dario Tedesco, Manuel Inostroza, Taryn Lopez)

At the Santa Ana site, five groups (University of Florence, INGV Palermo, University of Napoli 2, Babes-Bolyai University + MTA-ELTE and CICESE) sampled dry gas. The University of New Mexico only collected soda flask samples, while water samples were collected by University of Perugia, University of Napoli 2, CICESE, Babes-Bolyai University + MTA-ELTE, Universidad de Buenos Aires, and INVOLCAN. During the sampling of the spring IVAR (PT), INVOLCAN and the University of Perugia group conducted diffuse measurements along a transect in order to calibrate the detectors for the Pululahuca caldera campaign.

La Virgen was the last site where the various groups collected samples. GNS Science, INVOLCAN, Babes-Bolyai University + MTA-ELTE, CICESE, University of Florence + University of Bologna, INGV Palermo, University of New Mexico, and CEA-CNRS collected dry gas. Soda flask were collected by four groups namely: University of New Mexico, INGV Palermo, University of Napoli 2, University of Florence + University of Bologna; and water samples by Universidad de Buenos Aires, University of Perugia, CICESE, University of Napoli 2, INVOLCAN, and Babes-Bolyai University + MTA-ELTE.

The fieldwork at Guagua Pichincha was very challenging, with many participants suffering from altitude sickness and exhaustion (altitudes above 4500 m asl and technically difficult climbing). However, all the goals for direct sampling measurements at one fumarole, elected as the official CCVG fumarole, called “La Pichincha” (~89°C), were achieved. Various groups sampled Giggenbach-type flasks (Universidad de Buenos Aires, INGV Palermo, University of New Mexico and University of Napoli 2). Babes-Bolyai University + MTA-ELTE, GNS Science, INGV Palermo, CNRS-IPGP, CEA-CNRS, University of Napoli 2, and University of New Mexico sampled dry gases; while Babes-Bolyai University + MTA-ELTE, Institute of Volcanology and Seismology FEB (RU), University of Napoli 2, and INGV Palermo sampled condensates. The Johannes Gutenberg-University group (DE) and University of Colorado (US) in addition, collected samples from air affected by fumarole emission, with different sampling devices (e.g. denuders and alkaline traps). The field expeditions resulted in many fruitful discussions and ideas for future collaborations, as well as an opportunity for veterans in gas chemistry to share their extensive knowledge with young scientists.

Diffuse carbon dioxide gas measurements were conducted at the Pululahuca Caldera by five teams (University of Perugia, IVAR, INVOLCAN, Instituto Geofísico-Escuela Politécnica Nacional (EC) and Babes-Bolyai University + MTA-ELTE. Furthermore, samples of the soil gas were taken in order to study the isotopic composition of carbon (IVAR). In the caldera at the site named “Fuente del Pailón” bubbling pool, dry gas and water samples were collected by the following groups: INVOLCAN, Babes-Bolyai University + MTA-ELTE, University of Florence + University of Bologna, INGV Palermo, University of Perugia, and University of Napoli 2.

Although remote sensing activities were conducted at the pre-conference fieldwork in El Reventador and from the caldera of Guagua Pichincha, these were challenging targets due to difficult access to a suitable measurement location. The main target for remote sensing measurements was Cotopaxi volcano, which had an active, albeit weak plume. Successful remote sensing measurements were conducted in Volcán de Azufre during the second optional fieldwork held in Galápagos. The official fieldwork planning was done in Baños and followed by an inter calibration and preparation exercise with gas cells of SO₂, done two days before the work at Cotopaxi.

In the Cotopaxi fieldwork participated 20 people using UV SO₂ cameras (USGS (US), University of Heidelberg (DE), AIST (JP), University of Sheffield (UK), and EOS/NTU (SG); UV DOAS scanners: Chalmers University (SE), University of Heidelberg, AIST, University of Alaska/GI (US)) and DOAS/FLYSPEC mobile systems: USGS, Chalmers University, University of Heidelberg, University of Alaska/GI, and INGEMMET/OVI

(PE). The fieldwork started with a traverse in the ring-road inside Cotopaxi National Park to identify the position of the plume weak plume at ca. 10 km distance from the volcano in direction WNW, most groups deployed stationary camera and scanning instruments from a location NW of Cotopaxi at a distance of about five km from the plume and eight km from the crater. Weather conditions were good upon arrival with a magnificent view of the volcano, but soon afterwards turned cloudy, making remote sensing measurements challenging. The group attempted measurements between ca. 10:00 and 15:00 LT, during which a total of five complete traverses were simultaneously conducted from the inner routes on the W to N sides of the volcano. Preliminary flux evaluations indicate an SO₂ flux < 500 t/d, passively drifted by moderate winds at the altitude of the volcano's summit (5897 m asl). This is consistent with measurements conducted by the monitoring network of IG during the previous days.



Figure 2. Photographs of fieldwork conducted at Guagua Pichincha volcano. Extensive direct sampling of the workshop fumarole was achieved on this challenging target. A. View of the cristal dome from the crater rim; B. Remote sensing from the crater rim by Florian Dinger (Max-Planck Institute for Chemistry) and Ulrich Platt (Heidelberg University); C. Arriving at the fumaroles; D. Sampling lines for dry gas, soda flasks and condensate; E. In situ measurements above the fumaroles by Nicole Bobrowski (University of Heidelberg); F. Group photo at the cristal dome. (photos: Celine Mandon, Elena Maters, Francisco Vasconez, Manuel Inostroza, Allan Lerner)



Figure 3. Photographs of fieldwork conducted at Pululahua volcano. A dense mapping of diffuse soil emissions and direct sampling of thermal springs were done on this caldera. A. Sampling of soil gases by Fatima Viveiros (IVAR); B. Water sampling of the Fuente del Pailon by Dario Tedesco (University of Napoli 2) and Franco Tassi (University of Florence); C. Flux measurements by Artur Ionescu (Babes-Bolyai University) and direct sampling by Marco Liuzzo (INGV Palermo), Boglarka-Mercedesz Kis (MTA-ELTE) and Andrea Ricci (University of Bologna); D. Soil diffuse measurements lead by Fatima Viveiros (IVAR); E. Soil diffuse measurements lead by Carlo Cardellini (University of Perugia); F. Soil diffuse measurements performed by Boglarka-Mercedesz Kis (MTA-ELTE) and Artur Ionescu (Babes-Bolyai University) (photos: Taryn Lopez, Alexandra Gutmann, Francisco Vasconez)

At Guagua Pichincha, the University of Heidelberg, and AIST attempted remote sensing measurements from the caldera rim with SO₂ camera and DOAS traverses. At El Reventador, the University of Heidelberg, the University of Oregon, and the IG-EPN conducted measurements with MAX-DOAS, Flyspec and a thermal camera, respectively. At Volcán de Azufre, SO₂ camera measurements were conducted by University of Palermo and CNRS-IPGP, whereas scanning-DOAS was made by University of Heidelberg and Chalmers University, all from the same location on the floor of the caldera. Chalmers University and IG also conducted walking traverses with a mobile-DOAS system around the three active fumaroles. Weather and measurement location were favorable for remote and direct measurements of this fumarolic field.



Figure 4. Photographs of fieldwork conducted at Cotopaxi volcano. Remote sensing with different stationary methods and traverses under the weak plume was attempted under non-ideal weather conditions. A. Calibration of remote sensing instruments at Quito; B. Cotopaxi summit; C. Remote sensing group with stationary cameras; D. Mounting of sensors on the bus for mobile measurements by Santiago Arellano (Chalmers University of Technology) and Fredy Apaza (INGEMMET OVD); E. UV-camera for mobile transect by Andrew McGonigle (University of Sheffield); F. Mounting of mini-DOAS on truck by Jan-Lucas Tirpitz (University of Heidelberg) and Simon Warnach (Max-Planck Institute for Chemistry); G. Mounted micro-DOAS (photos: Artur Ionescu, Patrick Allard, Manuel Inostroza, Taryn Lopez, Allan Lerner)

The field trip to Reventador volcano provided an additional opportunity to conduct measurements under challenging conditions. These mostly consisted of remote sensing SO₂ flux measurements. A camping was organized inside the Reventador caldera in a very remote and highly vegetated area. 16 participants were able to see the volcano during 2 complete days. Weather conditions, despite some cloudiness were quite nice considering that the region is characterized by a very high humidity and strong rain. Here, in addition to the remote sensing techniques used to measure the gas composition of the plume, water samples were collected from a blue-milky ravine flowing close to the camping site (University of Colorado and Babes-Bolyai University + MTA-ELTE). CO₂ dissolved in this stream was also measured by IG-EPN.

Fieldwork at Volcán de Azufre volcano was conducted by 20 participants on the 6 October. This started with a ca. 12 km long walk to reach the fumarolic field, under dry and hot conditions. At the sampling site three active fumaroles were studied with remote sensing (mainly SO₂ flux, see above) and direct sampling which included dry gas samples, condensates and Giggenbach-type flask were conducted by INGV Palermo, University of Napoli 2, Babes-Bolyai University + MTA-ELTE, GNS Science, CNRS-IPGP, CEA-CNRS, Institute of Volcanology and Seismology FEB (RU). The Johannes Gutenberg-University group (DE), and the University of Leeds (UK), in addition, collected samples from air affected by fumarole emission, with different sampling devices (e.g. denuders, alkaline traps and filter packs). Additional measurements were carried out on the next day by GNS Science

and the Institute of Volcanology and Seismology FEB, to complete the survey of all fumaroles.

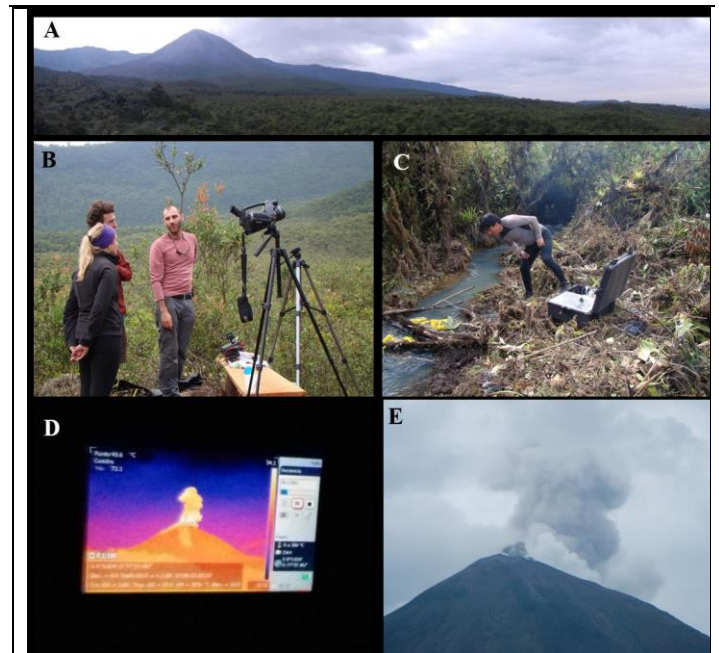


Figure 5. Photographs of fieldwork conducted at El Reventador volcano. Due to explosive activity and difficult access, only remote sensing was attempted from the caldera of this volcano. A. Panorama view of El Reventador; B. Allen Lerner (University of Oregon), Jonas Kuhn (Institute of Environmental Physics Heidelberg) and Julia Woitischek (University of Cambridge) performing remote sensing; C. Jorge Córdova (Instituto Geofísico-Escuela Politécnica Nacional) measuring dissolved CO₂ content of the stream; D. Snapshot of the thermal camera at night during an explosion; E. Small explosion and small visible plume of El Reventador (photos Artur Ionescu)

A final meeting ending the conference and was held in Quito. Here, the future direction of CCVG was discussed in terms of memberships to the commission and the relationship between CCVG and IAVCEI, and the interactions with other IAVCEI commissions. After a brief summary of the activities carried out by CCVG in the last three years (organization of scientific sessions at international meetings, fieldtrip activities, publications), new initiatives of the group were presented. This includes: (1) a summer school on geochemical techniques to investigate volcanic gases that will be held at Caviahue (Argentina) on February 2018; (2) a scientific session at the EGU General Assembly in Vienna on April 2018 (conveners N. Bobrowki, F. Viveros and F. Tassi.); (3) a summer meeting on volcanic lakes organized in collaboration with the IAVCEI Commission of Volcanic Lakes (leader D. Rouwet) at Monticchio Lakes (southern Italy) on June 2018; (4) the 3rd edition of the Etna International School of Geochemistry (Pizzi Deneri Volcanological Observatory, Etna volcano, southern Italy) on July 2018. In addition, announcements for special issues for the *Frontiers* and *G3* scientific journals on advances of volcanic gas studies and on Deep Carbon Observatory results, respectively; as well as for the 6th NOVAC workshop to be held in Peru on April 2018 were presented during the conference.

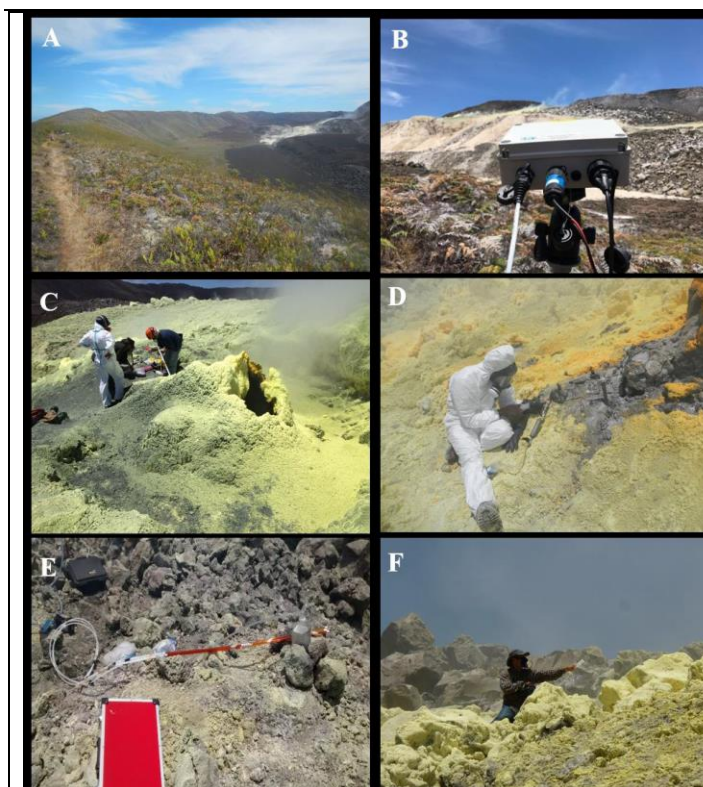


Figure 6. Photographs of fieldwork conducted at Volcán de Azufre/Sierra Negra, Galápagos. Several direct and remote sensing approaches were applied for a detailed characterization of the chemistry of volcanic gases in this basaltic volcano. A. View of Volcán de Azufre fumarolic field from the crater rim; B. UV-camera measurement; C. In-situ sampling with denuders; D. Sampling at fumarole A by Dario Tedesco (University of Napoli 2), Bruce Christenson (GNS Science) and Nataliya Malik (Institute of Volcanology and Seismology); E. Direct sampling at fumarole B by Marco Liuzzo (INGV Palermo); F. In-situ measurement with Multi-Gas by Patrick Allard (CNRS-IPGP) (photos: Artur Ionescu, Patrick Allard, Alexandra Gutmann, Celine Mandon)

A new board was elected, with Santiago Arellano and Franco Tassi as Leaders, Artur Ionescu as editor/webmaster, and Silvana Hidalgo as secretary. María Clara Lamberti was elected as editor of the Facebook page, in collaboration with Lizzette Rodriguez who constructed the Facebook CCVG group that was active in the past three years.

The site of the next workshop was also decided, with Japan, presented by Ryunosuke Kazahaya, as possible candidate. The CCVG participants enthusiastically accepted the invitation of Kazahaya to visit Japan for the 14th CCVG workshop on June 2020. Kazahaya was officially elected as Local Organizer, as a new member of the leading board.

The CCVG community would like to extend heartfelt thanks to the organizers of the 13th workshop, in particular Silvana Hidalgo and the staff of the Instituto Geofísico of Escuela Politécnica Nacional, including Marco Almeida, Benjamin Bernard, Jorge Córdova, Elizabeth Gaunt, Diego Narvaez, Patricio Ramón,

Daniel Sierra, Francisco Vásconez, and Freddy Vásconez for extraordinary preparations and support during the workshop. Also to Jonathan Hall from Ecuador Journeys for fantastic logistical organization of the workshop, and personalized assistance to the participants. Finally to the members of the scientific committee for preparation of the programme. This 13 Gas Workshop benefited from the financial support of the IAVCEI.

We would also like to thank the outgoing board members, Nicole Bobrowski (leader), Maarten de Moore (editor/webmaster) and Taryn Lopez (secretary) for their excellent service to the CCVG community.

7TH INTERNATIONAL MAAR CONFERENCE

21 TO 25 MAY, 2018
OLOT, CATALONIA, SPAIN

The Local Organizing Committee and the International Association of Volcanology and Chemistry of Earth's Interior (IAVCEI) are pleased to welcome you to the 7th International Maar Conference (IMC) in Olot (Spain) on May 21- 25, 2018. The conference will include four days of scientific sessions, which will combine keynote speakers, oral presentations and posters, and an intra-meeting field trip (one day). The conference will cover a wide spectrum of interesting topics related to maar-volcanoes including eruptive processes and depositional mechanisms, field and experimental studies, numerical and analogue modelling of volcanic processes, magmatic and petrogenetic aspects, geodynamic and tectonic constraints, environmental studies of maar lakes and therefore, contributions on biology, ecology, limnology, paleoclimate and lake sedimentation are welcome. Finally, aspects related to hazards and the geological and cultural heritage in monogenetic volcanoes will be also considered during the 7IMC.

Since the first "International Maar Conference" (IMC), these meetings have become one of the most successful discussion forums in volcanology, mainly because they provide a unique opportunity to bring together researchers from many different volcanological fields (physical volcanologists, sedimentologists, modellers, geophysicists, petrologists, etc.) and environmental and post-volcanic subjects.

The city of Olot, known as the city of volcanoes, is located at the foot of the Pyrenees Range, close to Barcelona. This volcanic region provides a unique location for hosting this multidisciplinary volcanological forum because it offers all logistic facilities for the participants. In Olot and its surroundings, volcanoes are very important so they are present in many aspects of the society, as its cultural heritage, local history, architecture, or even in the excellent cuisine.

We announce the extension to **January 20th 2018 of the deadline for the Abstracts submission**. On the Web Site: <http://maar2018.com/abstracts/> you will find the forms for the submission.

Early Bird Registration deadline: before February 10, 2018

On the Web Site you will also find the 7IMC Second Circular, which contains the main useful information on the scientific and logistic aspects of the Conference.
<http://maar2018.com/2017/11/06/circular-2/>

Scientific Sessions:

Session 1. Monogenetic volcanoes: eruption dynamics, growth, structure and physical modeling

Session 2. Geochemistry and petrology of monogenetic volcanism related magmas

Session 3. Lakes in maar volcanoes: the sedimentary record of paleontology, climate change and hydrochemistry

Session 4. Volcanic hazard and risk assessment in monogenetic volcanic fields

Session 5. Natural resources and geotourism development in volcanic areas

Registration Payment:

<https://fes.olot.cat/formulari-maar-2018/>

Call for nomination for the Jim Luhr Award 2014

Between **21 to 25 of May 2018, Olot, Catalonia** will host the IAVCEI –IAS 7th International Maar Conference (7IMC) – An interdisciplinary conference on monogenetic volcanism.

The 7IMC Local Organizing Committee calls nominations for the **Jim Luhr Award** given to a nominated person during the 7IMC Olot (Spain) for her/his **outstanding work on monogenetic volcanism research with special relevance understanding phreatomagmatism and its role in the evolution of monogenetic explosive volcanism**. Nominations are especially encouraged for researchers made their research widely available to both the scientific and public communities.

Each nomination should be emailed to the

Chairman of the 7IMC

Xavier Bolós – xavier.bolos@gmail.com

by **1st May 2018**.

The nominations should come from a nominating person based in a different country as the nominated person and accompanied with at least 2 supporting letter from people based in different institutions than the nominating and nominated person.

The nominating letter as well as, the supporting letters should outline briefly why the nominated person should be awarded the Jim Luhr Award.

Dr. Xavier de Bolós

Institute of Geophysics - Michoacan
UNAM - Mexico
xavier.bolos@gmail.com
www.xavierbolos.wordpress.com

2018 ICELAND VOLCANOLOGY FIELD CAMP

July 17 - August 10, 2018

4 semester credits, undergraduate or graduate
+1 credit with optional Greenland Trip

We are pleased to announce the seventh annual Iceland Volcanology Field Camp, offered by the South Dakota School of Mines & Technology through the Black Hills Natural Sciences Field Station. Registration is first-come first-served, so interested students are encouraged to register early.

4 credits, tentative dates July 17 - August 10, 2018, Fee: \$4,995 (\$5,495 for graduate credit)

-Fee includes tuition, transportation in Iceland, lodging, and most meals. Transportation to/from Iceland not included.

-Enrollment limited to 18 students

5 credits with optional Greenland Trip, tentative dates July 8 – August 10, 2018, Fee: \$7,865 (\$8,365 for graduate credit)

-Fee includes tuition, transportation in Iceland and Greenland, flights between Iceland and Greenland, lodging, and most meals. Transportation to/from Iceland not included.

-Enrollment for Greenland trip limited to 8 students

This project-driven course in geologic mapping and volcanology will explore Iceland from the south coast where the Mid-Atlantic Ridge comes ashore to the highlands near the focus of the Iceland mantle plume. Students undertake two major mapping projects and a number of shorter physical volcanology-oriented projects. Subjects that will be considered include: basaltic and rhyolitic lava flows, tephra characterization, ignimbrites, phreatomagmatic features, subglacial volcanism, volcano monitoring, and geothermal power. Projects will be conducted on active volcanic systems, in Late Pleistocene and Holocene volcanic fields, and in the older Miocene volcanic stratigraphy exposed in glacial valleys and fjords of Iceland.

Optional Greenland trip adds a mapping project in Archean and Proterozoic metamorphic and plutonic rocks by the Sermilik Fjord in scenically spectacular East Greenland.

Additional information and registration form at:

<http://geologyfieldcamp.sdsmt.edu/IcelandVolcanologyCamp.htm>

<http://geologyfieldcamp.sdsmt.edu/Iceland-GreenlandVolcanologyCamp.htm>

Course/academic questions, please contact:

Iceland Volcanology Camp Coordinator: Brennan Jordan,
University of South Dakota, brennan.jordan@usd.edu

Registration/business questions, please contact:

Black Hills Natural Science Field Station Director: Nuri Uzunlar,
SDSM&T, Nuri.Uzunlar@sdsmt.edu

AOGS 2018 CONFERENCE

Session SE29- Understanding Active Volcanoes Using Multidisciplinary Approaches, AOGS 2018 (3-8 June 2018, Honolulu, USA)

We would like to draw your attention to Session SE29- Understanding Active Volcanoes Using Multidisciplinary Approaches, AOGS 2018 (3-8 June 2018, Honolulu, USA).

The session is a broad-subject one and focuses on studies which use a combined petrological/geochemical/geophysical approach to study the magmatic plumbing system structure and dynamics of active volcanoes.

For more information on the AOGS 2018 conference, please visit: <http://www.asiaoceania.org/aogs2018/public.asp?page=home.htm>

The conference will include 4 days of scientific sessions which will combine keynote speakers, oral presentations and posters. Several field trips are also planned (Pre and Post meeting field trips).

The deadline to submit abstracts is 19 January 2018. For further information about abstract submission please feel free to contact the convener.

Session description

Session SE29: Understanding Active Volcanoes Using Multidisciplinary Approaches

Convener: Clara Solaro

Co-Conveners: Helena Albert-Minguez, Fidel Costa, Paul Okubo, Yosuke Aoki

Asia and Oceania present regions with the highest concentration and number of active volcanoes on Earth. Many of them are capable of large explosive eruptions, producing high eruptive plumes or pyroclastic density currents. Tephra material can thus be spread over considerable distances and affect human settlements over large areas and/or long timescales, which makes studies of these volcanoes even more important.

A large panel of data and observations on the activity of these volcanoes should allow greater constraint of their eruptive systems. In particular, it is important to unravel the link between volcanic plumbing systems and the resulting eruption dynamics. Geophysical methods (seismology, deformation, infrasound), geochemical monitoring (gas emission, hydrothermalism), petrology/mineralogy studies and physical modelling are all valuable means for acquiring a better understanding of volcanic systems and processes. However, combining multiple areas of study on the same target (e.g. petrology with seismology or gas

emission data) is key to significantly improving our understanding of volcanic systems.

In this session, we will explore the state-of-the-art of on-going research focusing on studies of magmatic plumbing system structure and dynamics that use a multiple (e.g. petrological plus geophysical) approach. We appreciate contributions from volcanological field and lab observations, as well as modelling and experimental results. We aim to foster the use of interdisciplinary approaches for the study of volcanic processes, representing progress toward possible interpretations of signs of unrest in terms of causal subterranean plumbing system process.

We hope you consider submitting an abstract and attending the conference.

Dr. Clara Solaro

University of Hawaii at Manoa
School of Ocean and Earth Science and Technology, SOEST
1680 East-West Road POST 614
Honolulu, HI 96822
solaro@hawaii.edu

Dr. Helena Albert Minguez

Earth Observatory of Singapore
Nanyang Technological University
Singapore 639798
ahelena@ntu.edu.sg

Prof. Fidel Costa

Earth Observatory of Singapore
Nanyang Technological University
Singapore 639798
fcosta@ntu.edu.sg

Dr. Paul Okubo

United States Geological Survey
Volcano Science Center- Hawaiian Volcano Observatory
United States • Hawaii National Park, HI
pokubo@usgs.gov

Prof. Yosuke Aoki

Earthquake Research Institute, University of Tokyo
1-1 Yayoi 1, Bunkyo-ku, Tokyo 113-0032, Japan
yaoki@eri.u-tokyo.ac.jp

WORKSHOP

Multidisciplinary Volcano Hazards Experiments

24-27 July 2018

Buffalo, NY

An open workshop will be hosted by the University at Buffalo (Buffalo, New York) on 24-27 July 2018. The workshop will include a day of experiments related to explosive eruptions. Preliminary plans call for four experiments, each with carefully timed and spaced sequences of buried chemical explosives, generating blast waves, debris-laden jets and plumes, small-scale density currents, and resulting craters and ejecta deposits. Participants are encouraged to participate in data collection using any approach. This could include, for example: high-speed video, acoustic sensors, seismic sensors, thermal infrared video, Doppler

radar, ejecta and fallout sampling, and photogrammetry to establish quantitative morphology of explosion products.

Preliminary schedule for the workshop:

- Day 1 – afternoon presentations and discussions by participants on data collection techniques to be deployed and potential integration of the techniques.
- Day 2 – setup at the field station.
- Day 3 – four experiments
- Day 4 – data archiving for shared access, working session where participants present and discuss data from the experiments and future directions for multidisciplinary experimentation, and begin development of a report on the workshop.

Participation is open to any interested researcher. There is no registration fee, however, registration is required at <http://geohazards.buffalo.edu/conferences-and-workshops/>.

Limited funds are available to offset travel expenses for graduate students and postdoctoral researchers (Please indicate whether you are requesting funds when you register; a more detailed request for information will be provided to requesters at a later date.). Participants will be responsible for their own travel and lodging arrangements (the hosts will provide guidance at a later date).

This workshop is sponsored by the U.S. National Science Foundation.

Hosts: Greg Valentine, Ingo Sonder (University at Buffalo)

Scientific Committee:

Ben Andrews (Smithsonian Institution)

Costanza Bonadonna (Université de Genève)

Joe Dufek (Georgia Tech)

Greg Waite (Michigan Technological University)

SUMMER MEETING MONTICCHIO LAKES ITALY, 25-29 June 2018

SOGEI and the IAVCEI-Commission on Volcanic Lakes would like to invite you to participate to the SUMMER MEETING at the Monticchio Lakes, Vulture Volcano, Basilicata, Southern Italy, from 25 to 29 June 2018.

Further information on this exciting workshop can be found on: <https://iavcei-cvl.org/>

We hope to meet next June at the shores of the Monticchio Lakes.

All best,

Dmitri Rouwet

INGV-Bologna, Italy

FRONTIERS RESEARCH TOPIC

Subaqueous Volcanism, from Ancient Successions to Modern Volcanoes and Modelling

We would like to draw your attention to the Frontiers Research Topic - *Subaqueous Volcanism, from Ancient Successions to Modern Volcanoes and Modelling*

The physical and chemical properties of water make subaqueous volcanic eruptions significantly different from similar eruptions occurring in subaerial environments. Processes like magma fragmentation, transport and deposition are controlled by a number of parameters that are different for water and air. Water density, heat capacity of water and water depth, among many others, provide distinctive features to subaqueous eruptions. Instability and mass wasting of subaqueous volcanoes and remobilization of volcanic deposits are common processes of syn-eruptive and post-eruptive scenarios.

Field-based research on subaqueous volcanism has been traditionally undertaken by the study of ancient volcanic successions. However, an increasing number of field-based studies devoted to modern sea-floor volcanoes have challenged many of the paradigms of subaqueous volcanism. Hydrothermal processes, sulfur deposition and biotic communities in sea-floor volcanoes and related structures have changed our current understanding of sea-floor volcanism. On the other hand, experiments and modeling of magma-water interaction processes have notably contributed to the understanding of the physics of subaqueous eruptions.

This special issue aims to characterize the state of the art of subaqueous volcanism by bringing together contributions from field-based studies, either from ancient and modern volcanoes, experiments and modelling. Reviews, historical perspectives and theoretical studies on the broad topics of subaqueous volcanic eruptions, magma-water interaction and sea-floor volcanoes are welcome

We please ask you to consider submitting a contribution to this special issue.

For more information on submission procedure and deadlines please visit

<http://journal.frontiersin.org/researchtopic/7352>

With best regards,

Coeditors:

Carles Soriano

Institute of Earth Sciences Jaume Almera CSIC, Barcelona, Spain
csoriano@ictja.csic.es

Nancy Riggs

Northern Arizona University, Flagstaff, USA
nancy.riggs@nau.edu

Guido Giordano

Roma Tre University, Rome, Italy
guido.giordano@uniroma3.it

INTERNATIONAL VOLCANOLOGICAL FIELD SCHOOL

We would like to invite you to our annual field trips at active volcanoes of Alaska and Kamchatka, part of the International Volcanological Field School. The trips are scheduled for the following dates.

Katmai, Alaska: June 3-16, 2018
Mutnovsky & Gorely, Kamchatka: August 6-20, 2018

The trips are best suited for graduate and undergraduate students interested in volcanology and prepared for strenuous field works in harsh environment. Detailed information and application forms are available at

<http://www.uaf.edu/geology/academics/international-volcanology/>

Additional information can be found at our Facebook page
<https://www.facebook.com/volcanoschool/>

Applications are accepted on the continuous basis until all vacancies are filled. Please share this information with students, who might be interested in joining us.

US students coming with us to Kamchatka will be able to take an advantage of the direct flight between Alaska and Kamchatka. Students may also choose to participate in the 2018 JKASP meeting, which will be conducted immediately after our return to Petropavlovsk-Kamchatsky from Mutnovsky & Gorely Volcanoes (<http://www.kscnet.ru/ivs/eng/index.php>).

Thank you!

Pavel Izbekov

Commission on Volcanogenic Sediments of IAVCEI

We wish to announce the re-launch of the **Commission on Volcanogenic Sediments of IAVCEI**. We are taking over the leadership in the commission from **Gert Lube** and **Richard Brown**. The new leaders of the commission are:

Gabor Kereszturi (Massey University, New Zealand)
Eric Breard (Georgia Tech, USA)

We have compiled some of the core aims and scopes of the commission:

(1) **Past and present:** The Commission on Volcanogenic Sediments is one of the oldest commissions of the IAVCEI. However, this commission that was once very active has been fading over the last few years. We wish to embrace this tradition and revitalize this commission by revising its objectives.

(2) **Objectives:** The commission's aim is to understand volcano-related sediments and their processes through multidisciplinary approaches, such as sedimentology, stratigraphy, lab-based and experimental studies, numerical modelling, petrology and imaging techniques. This improved understanding of volcanogenic processes through their deposits gives us the opportunity to better quantify natural hazards from volcanoes locally and globally.

(3) **Terms:** We propose to operate the commission on a 4-years-term, announcing the new elected leaders at every IAVCEI general assembly. The leadership (1-3 leaders) will be passed onto the next team through email voting.

(4) **Communication:** Our preferred communication channel remains the Volcano-list. Through this forum we will post news, conferences, workshops and other activities relevant to the commission members.

(5) **Members:** For administrative purposes, we want to maintain a list of members with basic information (name, country, email). This will be used to elect the next generation of leaders of the community.

(6) **Website:** We have already required a website space on the IAVCEI's website (<http://iavcei.org/>). This will provide alternative and additional space to promote research relevant to the commission. Our current plan is to launch the website in early 2018.

If you are working in this field or interested in, please email us your name, university/country to g.kereszturi@massey.ac.nz or eric.breard@eas.gatech.edu email address. If you are already a member, please still indicate your interest. We especially encourage young researchers to join to our community.

Thanks for your time and effort, much helpful to develop this commission, and hope that we can meet in person at the next meetings.

Regards,
Gabor and Eric

LAUNCH OF VOLCANICA

The world's first free open access volcanology journal

www.jvolcanica.org

"Free to discover" is the credo of the newly launched diamond open access volcanology journal VOLCANICA, which is devoted to making scientific research in volcanology free to publish for researchers and free to read for everyone.

VOLCANICA, the first diamond open access journal for volcanology launches today, providing open access to scientific volcanology research for both, authors and readers, and free to share.

VOLCANICA is a broad-scope open-access international journal

promoting research into all aspects of volcanology, including physical phenomena and their impact on society, health, and the environment.

Based on the idea that knowledge should be easily, and foremost freely, accessible, researchers from top international universities joined forces to create this free-for-all online volcanology journal. As well as removing barriers to submission and access in the scholarly community, this innovative project will allow this research to become freely available to the public: the taxpayers, the policy-makers, the civil protection authorities, the interested lay-people.

While there are inherent costs involved in academic publishing, financial endorsement from an institutional publishing house (Presses universitaires de Strasbourg) facilitates these costs, ensuring that they are not passed on to authors or subscribers. All publications are subject to a stringent peer review system to assure impartial assessment of quality scientific research.

VOLCANICA also encourages readers to sign up for the publishing notification service for this journal, which requires registering on their homepage. This registration will result in the reader receiving regular updates by email for each new issue of the journal. This list will also enable the journal to claim a certain level of support or readership.

VOLCANICA invites researchers who are interested in submitting to this journal to visit the website www.jvolcanica.org to learn more about the journals policies and authors guidelines.

About the journal

VOLCANICA is committed to establishing a publication system that allows free open access to published content, whilst also removing publication fees and article processing charges.

In practice, this means that submitting a manuscript is completely free for authors, and accessing content is completely free for readers. Moreover, authors retain copyright to their work, so your work can be shared freely and openly. More information is available on our Policies page.

VOLCANICA accepts original research in Research article, Short communication and Report format. For more information, check out the Author Guidelines page. Articles may be submitted in Microsoft Word, Open Office, or LaTeX format. VOLCANICA provides templates for Word and Latex on the website.

About the Team

We are a group of dedicated volcano scientists from universities in France, Germany, Mexico, Switzerland, New Zealand, the United Kingdom and the United States of America with a diversified background. Our intention is to make the first step towards making scientific research available for everyone.

Keep up-to-date on our twitter page: @WeAreVolcanica

Press Contact

Rebecca Coats & Jenny Schaueroth

Outreach and Social Media
outreach@jvolcanica.org

IAVCEI SECRETARIAT

Dear IAVCEI Members,

As you were already informed by Professor Dingwell via the IAVCEI Newsletter No.3, the IAVCEI has signed a contract with the Association House on services related to the association management.

The Association House is based in Prague, the Czech Republic and will help the IAVCEI with membership management and further development. To learn more about the company please visit the websites www.associationhouse.cz.

From now on, we would like to keep you informed on any actual changes or improvements via this E-RUPT. It does not substitute the IAVCEI Newsletter that is issued regularly and available on the IAVCEI website. We are glad to announce that the first step of our co-operation will be implementation of the new membership software. It is called CLAUDiN and the current member data will be automatically downloaded into the system. Once it is ready you will be able to check your profile, make changes, prolong your membership etc. We are working on it and we will send you more detailed information by the end of this year.

Thank you very much for your attention and please do not hesitate to contact us if you have any comments or questions.

Kind regards,
IAVCEI Secretariat
iavcei@associationhouse.cz

Mailing address is:
IAVCEI Secretariat
Na Pankráci 17
Prague 140 00
Czech Republic

LOOKING FORWARD TO IAVCEI 2021 SCIENTIFIC ASSEMBLY

Preparations for the IAVCEI 2021 Scientific Assembly in Rotorua (New Zealand) have begun. Many of the initial agreements and bookings are still in progress and we have penciled **in a week in February, 2021** for the conference.

We will announce the official dates once they are finalized. The late New Zealand summer is a perfect time to experience our volcanic scenery and local culture at its best.

Rotorua is a major New Zealand tourist destination, famous for its geothermal activity, volcanic history and local Maori culture. The city is situated inside a caldera and surrounded by the diverse volcanic landscape of the Taupo Volcanic Zone.



Rotorua is the geothermal capital of the World as in downtown hot springs and mud pools are everywhere such as in the Kuirau Park (photo: K. Nemeth)

The local organizing committee is keen and fully engaged. Members include representatives from all six New Zealand universities that undertake volcanological research and teaching, and national geoscience research and funding organizations (GNS Science, EQC). We recently met at the end of November during New Zealand's annual geoscience conference and began to establish specific committee roles and structure. Wider engagement with the New Zealand volcanological community is achieved through LAVA NZ – a volcanological special interest group of the Geoscience Society of NZ, which is affiliated with its sibling group (LAVA) under the Geological Society of Australia. Through these networks we have received strong local support and an abundance of ideas for making IAVCEI 2021 a memorable event.



Mount Tarawera is the site of the 1886 basaltic fissure eruption, a potential daytrip location during IAVCEI 2021 (photo: K Nemeth)

Dr Adrian Pittari
Chair of IAVCEI 2021

NEW BOOKS

A Photographic Atlas of Flood Basalt Volcanism Hetu Sheth

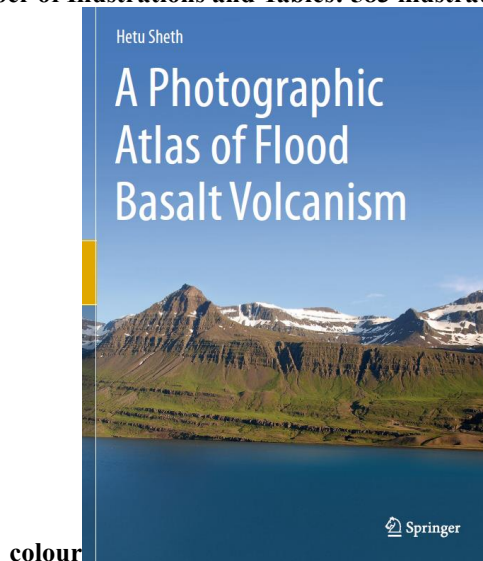
Springer International Publishing 2018

eBook ISBN: 978-3-319-67705-7

Hardcover ISBN: 978-3-319-67704-0

Number of Pages: XVIII, 363

Number of Illustrations and Tables: 583 illustrations in



This unique book presents hundreds of spectacular photographs of large-scale to small-scale field geological features of flood basalt volcanism from around the world. Major flood basalt provinces covered in this book include the British Palaeogene, Central Atlantic Magmatic Province, Columbia River, Deccan, East Greenland, Emeishan, Ethiopian, Ferrar-Karoo-Tasmania, Iceland, Indo-Madagascar, Paraná, Siberian, West Greenland, and others. Intermediate- to small-sized flood basalts (such as Saudi Arabia and South Caucasus) are also included.

Different chapters of the book illustrate varied features of flood basalts, including landscapes, lava flow morphology and stacking, structures formed during lava flow transport, inflation and degassing, structures produced during lava solidification, subaqueous volcanism and volcanosedimentary associations, explosive volcanism, intrusions, igneous processes and magmatic diversity, tectonic deformation, secondary mineralization, and weathering and erosion.

This book will be valuable for a large audience: specialists studying flood basalt volcanology, petrology, geochemistry, geochronology, geophysics, and environmental impact and mass extinction links; nonspecialists who want to know more about flood basalts; field geologists (such as those working in geological surveys); students of volcanology and igneous petrology, and even people employed in the industry, such as those working on flood basalt-hosted groundwater or petroleum reservoirs.

You can access the book via

<http://www.springer.com/gp/book/9783319677040>

Doubly Stochastic Models for Volcanic Hazard Assessment at Campi Flegrei Caldera

Andrea Bevilacqua

Theses (Scuola Normale Superiore)

Series Volume 21 (2016)

Edizioni della Normale (Scuola Normale Superiore Pisa)

eBook ISBN: 978-88-7642-577-6

Softcover ISBN: 978-88-7642-556-1



This study provides innovative mathematical models for assessing the eruption probability and associated volcanic hazards, and applies them to the Campi Flegrei caldera in Italy. Throughout the book, significant attention is devoted to quantifying the sources of uncertainty affecting the forecast estimates.

The Campi Flegrei caldera is certainly one of the world's highest-risk volcanoes, with more than 70 eruptions over the last 15,000 years, prevalently explosive ones of varying magnitude, intensity and vent location. In the second half of the twentieth century the volcano apparently once again entered a phase of unrest that continues to the present. Hundreds of thousands of people live inside the caldera and over a million more in the nearby city of Naples, making a future eruption of Campi Flegrei an event with potentially catastrophic consequences at the national and European levels.

You can access the book via

<http://www.springer.com/gp/book/9788876425561>

FUTURE EVENTS

for IAVCEI member's interest

Volcanic and Magmatic Studies Group meeting

Location: Leeds, UK

Date: 3rd -5th January 2018

Link: Abstract submission, venue and programme details are on our new website: <https://vmsg2018.leeds.ac.uk> and all updates will be announced on twitter, so please follow: @VMSGLeeds18

Early, discounted registration is open until 31/10/2017, and registration closes on 1/12/2017.

Please register here: vmsg2018.leeds.ac.uk/register

7th International Maar Conference

Olot, Spain

21-25 May, 2018

The conference is supported by the IAVCEI Commissions on Monogenetic Volcanism, Volcanic Lakes and Volcanogenic Sediments

Contact: Joan Martí Molist joanmartimolist@gmail.com

In the summer of 2018, the Center for the Study of Active Volcanoes at the University of Hawaii at Hilo, in cooperation with the USGS Volcano Disaster Assistance Program, will offer the International Training Course in Volcano Hazards Monitoring that will begin Sunday May 27 and extend through Friday July 20.

Link: If you are interested in attending the course, please submit, no later than January 1, 2018, an International Application Form (which can be downloaded from our web page <http://hilo.hawaii.edu/~csav/international/>) along with your curriculum vitae to Ms. Darcy Bevens at <<mailto:bevens@hawaii.edu>> bevens@hawaii.edu or by mail to: CSAV, 200 W. Kawili St., Hilo, HI 96720.

The 2018 annual AOGS (Asia Oceania Geoscience Society) Honolulu, Hawaii,

Date: June 3-8, 2018

Link: www.asiaoceania.org/aogs2018/

20th International Sedimentological Congress (ISC)

Date: August 13 to 17, 2018

Where: Québec City

Link: <http://www.isc2018.org/abstract-guidelines-paper-submission>

Cities on Volcanoes 10

Date: 2-7 September 2018

Location, Naples, Italy

Link: <https://www.citiesonvolcanoes10.com/>

XXI International Congress of the Carpathian-Balkan Geological Association

Date: 10 - 13 September, 2018,

Location: Salzburg, Austria

Link: <http://cbga.sbg.ac.at/>

The 7th Workshop on Collapse Caldera

Date: 21st - 27th September, 2018,

Location: at Toba Caldera, Sumatra, Indonesia

Supported by the IAVCEI Commission on Collapse Calderas

Link: <https://staff.aist.go.jp/geshi-nob/CCC/webs/main.htm>



Next Issue of the IAVCEI News will be published on 15th April 2018. Articles, notes, news or any items relevant to the IAVCEI community must be submitted by 5th April 2018 to be published in the next Issue.

Editor-in-Chief

Károly Németh

Massey University, Palmerston North

Any correspondence, news items could be sent to:

k.nemeth@massey.ac.nz

vHub Coordinator: Greg Valentine (SUNY, Buffalo)

Any correspondence, news items could be sent to

gav4@buffalo.edu

IAVCEI Web-site Coordinator (University of Bari)

Eugenio Nicotra – email: eugenio.nicotra@unict.it

If you have any idea or plan to have IAVCEI involved in the IUGG Outreach Programs please contact Karoly Nemeth via k.nemeth@massey.ac.nz
