IAVCEI *News* 2019 No: 1

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

FROM THE PRESIDENT

Dear Colleagues,

Don Dingwell
President of the IAVCEI

The election platform for the 2019 election of officers of IAVCEI is now online! If you are a paid-up member then you should have received an email from info@e-ballot.cz inviting you to participate on 1 April 2019. After you vote you will receive a confirmation email. I cannot stress enough how important a high participation of the electorate is for the legitimacy of those elected, so please exercise your active electoral right and vote.

The centennial meeting of IUGG will soon be upon us and IAVCEI is represented with a host of sessions of interest to our community. Please register and participate in the IUGG Montreal meeting and be witness to the official centennial of it all.

We also begin to anticipate the Cities on Volcanoes 11 meeting to be held in Greece. Please contact the organisers to help guide and steer this meeting to a successful conclusion. The venue contains considerable potential for exploring the (pre)historic impact of volcanic catastrophes and there will certainly be something for everyone at the latest of what has become an extraordinarily broadly appealing meeting format.

Finally, the preparations for our next general assembly in New Zealand continue and we expect a highly successful gathering in what we all know to be a very welcoming land. Do not hesitate to contact the organisers to provide input, also from afar. I am sure that the program committee is very open to all legitimate suggestions and you can help to build the meeting.

Off to Montreal!

D. B. Dingwell,
Munich, 4 April 2019

REPORT ON THE IAVCEI 5TH VOLCANO GEOLOGY WORKSHOP, PALMERSTON NORTH, NEW ZEALAND

Between February 25th – March 4th 65 participants from 12 countries attended the 5th International Volcano Geology Workshop in New Zealand's North Island hosted by Massey University, Palmerston North, co-organized with the IAVCEI Commission on Volcano Geology. Starting in the evening of February 25th with a traditional open-air Hangi dinner and welcome party, then the participants enjoyed a well-organized and professionally extremely fruitful event during the next week.

Federico Lucchi gave a keynote seminar (photo: K Nemeth)

This edition of the Volcano Geology Workshops inaugurated in Madeira (Portugal) in 2014, continued during the 26th IUGG General Assembly in Prague (Czech Republic, 2015), then in Sicily-Aeolian Islands, Italy (2016), and Eastern Carpathians, Romania (2017), marked a change in both pace (i.e. every second year instead of every year) and style of the Commission's meetings as compared with the previous ones. It was thought as a field-focused workshop with a single, but quite busy and tiring, day of presentations. This first, indoor day of the workshop with a fully original format, included an Introduction by Károly Németh, a welcome speech by IAVCEI Secretary General Roberto Sulpizio, presentation of a "New stratigraphic Framework Document" by IAVCEI Commission on Volcano Geology cop-leader Gianluca Groppelli, 3 keynote lectures by Frederico Lucchi, Graham Leonard, Alan Palmer, a number of 31 short (5 minutes) presentations offered voluntarily by the participants followed by poster and/or laptop presentations of the same presenters for those interested in any more details of their contributions. Finally, Shane Cronin offered a welcome introduction to the field part of the workshop presenting the most relevant features of volcano geology of Ruapehu, Tongariro and Taranaki, the major targets of the outdoor workshop program, followed by a short plenary discussion session before a delicious and well-wetted dinner.

The workshop's 6-day field-trip benefited from an unexpectedly splendid late-summer weather allowing the participants to fully enjoy the volcanic landscape, even at far distances, and all the visited exposures alike.

The first two field workshop days were dedicated to the ring-plain facies of Ruapehu volcano where the record of its long-term evolution is best preserved in the form of lahar/debris flow deposits, debris avalanche deposits, fluvial and hyper-concentrated flow deposits, as well as intercalated thin pyroclastic fallout deposit from more or less distant volcanic sources.

Mt. Ruapehu as seen from the Tirorangi Marae (photo: A Szakacs)

The role of active tectonics was emphasized in the areal distribution of the ring-plain facies deposits around this typical andesitic stratovolcano. The fact that this active volcano represents a real threat for the lives and economic infrastructure of the people living in close proximity of Mt. Ruapehu, was thrillingly evocated during our visit at the Tangiwai Disaster memorial where New Zealand's last volcanic disaster occurred on Christmas eve, 1953, when the rail bridge, located ca. 42 km downstream from the Ruapehu crater lake, was destroyed by a lahar just before a train arrived and collapsed into raging river, and 151 passengers were killed. We learned that more lahars swept along the river several times more since then (e.g. in 1995, and more recently, in 2007), whose lahar deposits the workshop participants could examine on-site along the river banks.

At the 1953 Tangiwai lahar disaster memorial site (photo: A Szakacs)

The 2nd day was also our "Maori day", since our trip was partly conducted in a "Maori land" where we benefited from a spiritual guidance during which our maori guide introduced the participants in the subtle spiritual relationships between the aboriginal people of the country and the sacred mountains (all volcanoes!) they worship, in both maori language and English. That was really impressive. The day was finished with a dinner at a "marae" (a communal gathering place of local maori people) in Tirorangi, after obeying to a local welcome ceremony and speeches.

Being guests at a maori Marae (photo: A Szakacs)

The peripheral ring-plain around Ruapehu volcano also hosts mogenetic-type volcanic features such as the Ohakune Volcanic Complex located SSW of the stratovolcano, consisting of a Pleistocene tuff-ring – spatter/scoria cone assemblage, whose deposits are well exposed, and visited, in a scoria-exploiting quarry.

The third field day led us to more proximal (i.e. proximal, cone-facies) locations of both Ruapehu volcano – at the Whakapapa skifield – and Tongariro volcano's Ngauruhoe "super-cone" – along the Mangetepopo valley – where products of cone-building eruptive stages (lava flows, block-and-ash-flows and associated glacial deposits), as well as cone-cutting dykes, were seen and discussed on-site in breathtaking high-mountain landscape environments.

Approaching Tongariro's Ngauruhoe "supercone" (photo: A Szakacs)

The 4th day field-trip program was an unorthodox one, a premier in the Volcano Geology Workshops context. The participants could choose between three options according to their specific interests: 1) deposits of the southern and western ring-plain of Ruapehu volcano, focused mostly on debris avalanche deposits, led by Shane Cronin, 2) Central Taupo Volcanic zone, led by Károly Németh, and 3) Tongariro crossing, an ad-hoc offered option, not mentioned in the Field-guide, for the most fit of the participants, led by Gábor Kereszturi. Myself, I attended the Taupo trip, being strongly influenced by my previous literature lectures on its well-documented A.D. 232 caldera-forming eruption products. We visited relevant outcrops exposing 1) an accretionary lapilli-bearing ignimbrite section of the 25.4 Ka Oruanui eruption, 2) the Taupo Pumice Formation, and 3) lake terrace and post-eruptive lacustrine deposits near the actual Taupo lakeshore. The attendees of the trip option had the privilege to admire the courage of two brave Hungarians, János Szepesi and Zoltán Pécskay, swimming in the not quite warm waters of the Taupo lake at a site where a "Swimming not allowed" table was posted (photo document available at request) (-:

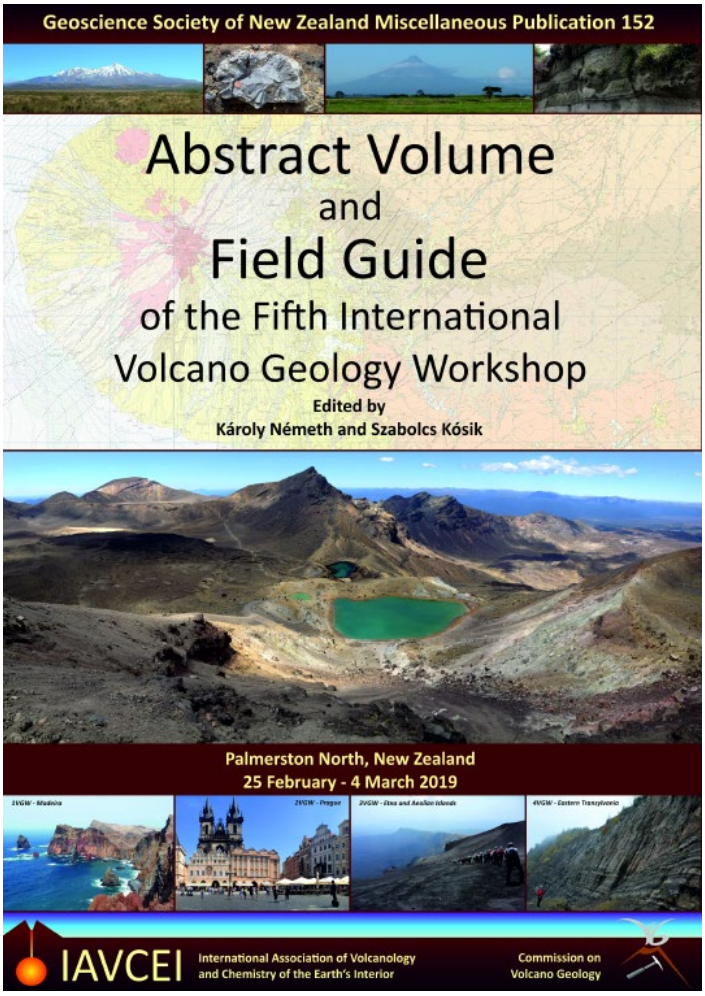
The 4th fieldtrip day was a long one, traveling to the Taranaki peninsula and changing accommodation site from Ohakune to New Plymouth. On that trip we crossed the North Island's highlands spotting from the bus a lot of outcrops of the most voluminous ca. 350 Ka old pre-Taupo welded Whakamaru ignimbrite. At the single before-lunch stop we appreciated a valley-ponded facies of the Taupo Pumice Formation reaching many tens of kms from source and the landscape response to ignimbrite deposition. After checking in our new accommodation, late afternoon we went to visit a fantastic seashore exposure of the Maitahi debris avalanche deposit at Oakura originating from the Pouakai volcano, Taranaki's closest, and older, north-western neighbor. However, the day's highlight was the ad-hoc organized football game between Eastern Europe (Hungary and Romania) and Italy (plus Chile!) gloriously lost by us (i.e. the Eastern Europeans) for 3:1.

The last evening together was spent at restaurant at Okurukuru, with a large terrace facing the Tasman Sea at sunset, including a wine-testing party, fine foods, farewell speeches and hearty thanks to the Organizers of this really great field-trip-based workshop: Massey University fellows Károly Németh, and Szabolcs Kósik for local logistics, organization and field-guiding, Shane Cronin and John Procter for their on-road and on-site presentations of volcanic features and outcrops.

The final, departure day, still benefited from more stops at exposures showing ringplain deposits of Taranaki volcano, including debris avalanches and various types of volcanic epiclastic deposits (lahar, hyperconcentrated flow, normal stream flow, in an intricate, still characteristic, medial-facies assemblage. A 206 page Abstract volume and Field Guide, edited by Károly Németh and Szabolcs Kósik was published by the Geoscience Society of New Zealand – Miscellaneous Publication 152, ISBN (print) 978-0-473-47041-8 and OSBN (online) 978-0-473-47042-5 – and is available for everyone interested.

http://www.massey.ac.nz/massey/learning/colleges/college-of-sciences/about/agriculture-environment/iavcei-volcanic-geology-workshop/iavcei-volcanic-geology-workshop_home.cfm

https://drive.google.com/open?id=17b2UL71xqq0fNJp3AH_pLHvdPNcgKVGn



The next two editions of the Volcano Geology workshops, as announced by IAVCEI Volcano Geology Commission co-leader Gianluca Groppelli at the first workshop day, will be organized at Santorini (Greece) in 2021 and in Columbia in 2023. Unfortunately, none of the local proponents of the next two upcoming workshops was present in person at this workshop, nor in the previous one, to present the concept of the workshop they are proposing.

My own only kind of frustration is related to the fact that no time was allocated to a final concluding discussion session at the end of this workshop, as was the case at the previous events, in order

to 1) summarize the progress obtained during the workshop towards the major goals of the Commission, namely the elaboration of a kind of Guidelines for mapping in volcanic areas, active, recent and ancient, and 2) discuss the next steps to be done in the same direction during the next events and/or in-between the workshops.

All in all, the 5th Volcano Geology Workshop was a really successful one thanks to the Organizers, IAVCEI through its Commission on Volcano Geology, and all the contributors. Thank you Károly, Szabolcs, John, Shane, Gábor and all the Massey students involved in the organization. See you all at again at Santorini in 2021!

Group photo in front of Ngauruhoe (photo: M Morgan)

Group photo in front of Ruapehu (photo: M Morgan)

Alexandru Szakacs
Sapientia University, Cluj, Romania

A TALE OF TWO CITIES
IAVCEI Shimane Peninsula Field Excursion

Located on the southwest tip of Honshu Island, Shimane Prefecture is home to Japan's old myths and legends. Shimane Peninsula, a striking landform of the prefecture, is connected to the mainland by Izumo and Matsue City. Two lakes, Shinji and Nakaumi, act as natural boundaries that separate the cities—as well as the peninsula from the mainland itself. The geologic and cultural narratives on the origin of the peninsula have become a melting pot for merging science and mysticism.

In August 2018, students, professors, and researchers from Japan Agency for Marine Earth Science and Technology (JAMSTEC), National Museum of Nature and Science (Japan), Queensland University of Technology in Brisbane, University of Tasmania, Tokai University, Gyeongsang National University, Akita University, Kyushu University, Shimane University, and Geological Survey of Japan participated in the field excursion in Shimane Peninsula. Kazuhiko Kano, an expert researcher from the Geological Survey of Japan, led the team in understanding the complex geology of the region.

A happy team exploring the beauty of subaqueous volcanism's eruptive products (photo: R Carey)

Several geologic sites and monuments were visited in Izumo and Matsue City. The field trip focused on igneous, pyroclastic, and related sedimentary deposits of syn-rift and post-rift Japan Sea. Opening of the Japan Sea in the Late Oligocene to Middle Miocene led to the formation of numerous sedimentary basins along the western coast of Japan. Continued rift significantly deepened the basins and the corresponding transition from non-marine to deep-marine sediments is preserved in the deposits. Corresponding Early Miocene-Middle Miocene volcanic activities are found throughout the exposures in Shimane Peninsula (Koura, Josoji, Ushikiri, Furue, Takashibiyama, and Matsue Formations) and northern foot of Chugoku Mountains.

One of many excellent outcrops of Shimane Peninsula (photo: R Carey)

The evolution from shallow marine to deep marine

environment—synchronous with the volcanic activities—is excellently exhibited by the formational change (i.e., shallow marine-coastal Koura Formation to shallow marine-middle bathyal Josoji Formation to bathyal Ushikiri and Furue Formations). Matsue Formation (11-12 Ma) represents the upward-coarsening sequences associated with later-stage uplift of the region (i.e., the return to shallow marine setting). The transition from Furue to Matsue formation is distinctly marked by the emergence of the shallow marine volcanic sequences of Takashibiyama Formation (10-13 Ma). Coastal exposures of these formations include andesite pillowed sills, rhyolite domes, lava and pumice cones, fall and density current deposits, and block-and-ash flow deposits. With majority of the exposures being interpreted as associated with submarine settings, the field trip provided a rare opportunity to observe and compare volcanic processes and deposits with those from subaerial settings.

Field trip participants (photo: R Carey)

The field excursion in Shimane Peninsula delivered an enriching experience to both young and experienced volcanologists of IAVCEI. The complex geologic history of the region—combined with the rich folklore that came with it—have certainly piqued the interest and curiosity of all participants to help in further advancing our scientific knowledge on volcanic processes and related deposits.

Rebecca Carey
UTAS, Tasmania, Australia

1ER CONGRESSO ASSOCIACIÓN LATIONOAMERICANA DE VOLCANOLOGÍA ALVO
3 – 7 NOVEMBER 2019
UNIVERSIDAD CATÓLICA DEL NORTE, ANTOFAGASTA, CHILE

For further information, please visit the site below:

https://www.1ercongresoalvo.com/

INVITACIÓN A PARTICIPAR

La Asociación Latinoamericana de Volcanología (ALVO) tiene el agrado de invitar a la comunidad científica nacional e internacional, profesionales y estudiantes ligados al área de volcanología Latinoamericana, autoridades y comunidad en general al 1er Congreso de la Asociación Latinoamericana de Volcanología (ALVO), el cual es organizado por el Núcleo de Investigación en Riesgo Volcánico de la Universidad Católica del Norte, y será realizado en dependencias de dicha Universidad en la ciudad de Antofagasta, Chile, entre el 3 y 7 de Noviembre de 2019.

OBJETIVO DEL CONGRESO

El objetivo del congreso es compartir y exponer los avances científicos, técnicos, metodológicos y políticas públicas desarrollados en los últimos años, los cuales llevarán a solucionar problemáticas específicas de los volcanes en Latinoamérica. Adicionalmente, se busca ampliar significativamente las redes de cooperación entre los distintos países de la Región.

IDIOMA
El idioma oficial del congreso es el Castellano.

EARLY CAREER RESEARCHERS NETWORK (ECR-NET) ACTIVITY REPORT AT CITIES ON VOLCANOES 10, NAPLES

The ECR-Net has been active since 2013 and has been officially recognized as a part of IAVCEI since 2017. The ECR-Net is dedicated to offer a portal for the ECRs across our community to gather and share experiences. In 2017 the Scientific Assembly in Portland, Oregon, USA, was the first occasion to test several ideas for ECR conference activities. It was very successful with many participants and a real interest from the community. Since then the ECR-Net has been highly active through social media, as well as in numerous conferences.

We provide here a special report of the activities that the ECR-Net working group (WG) organized at Cities on Volcanoes 10, held in September 2018 in Naples, Italy

Sunday September 2nd – Early-Career Workshop: Forming and enhancing partnerships between scientists and stakeholders

This one-day workshop focused on the roles and needs of scientists and stakeholders during crises and how to build working relationships and communication between scientists and stakeholders. It was mainly organized by Hannah Dietterich and supported by James Hickey, Rebecca Fitzgerald, Oryaëlle Chevrel, and Carina Fernley (early career representative on the IAVCEI Cities and Volcanoes Commission). Overall we had 37 ECR participants and six expert guest speakers.
The morning of the workshop covered examples and lessons learned from stakeholder engagement with 5–10 minute expert experience talks followed by discussion and stories from workshop participants. Highlights included an introductory talk by Stefano Ciolli (Dipartimento della Protezione Civile) entitled, "What does Civil Protection want to know from scientists?", as well as a panel discussion with Stefano and other guests from volcano observatories and academia. Guests included: Kristi Wallace (Alaska Volcano Observatory), Nico Fournier (GNS Science), Stefano Ciolli (Protezione Civile), David Damby (California Volcano Observatory), Graham Leonard (GNS Science) and Jan Lindsay (University of Auckland)
In the afternoon, we discussed guidelines, experiences, and strategies for communication with stakeholders. Guido Giordano (Università Roma Tre) presented on the IAVCEI crisis communication guidelines and Carina Fearnley provided an overview of the new book, "Observing the Volcano World". Then the guest speakers and participants discussed other experiences and best practices in communication with stakeholders, including social media, the press, and the public. The discussion ended with brief presentations on publishing applied volcanology research in scientific journals, including Journal of Applied Volcanology (Jan Lindsay), Bulletin of Volcanology (Hannah Dietterich), and Volcanica (Oryaëlle Chevrel).
The final portion of the workshop allowed the participants to apply their new knowledge of stakeholder engagement and communication in a simulation of the 2018 eruption of Kīlauea. Participants divided into groups representing scientists and different stakeholders (observatory scientists, local residents, civil defense, Met Office/VAAC/aviation authority, tourism, local industries, public works, public health, and the media). The simulation went through the stages of before, during, and after the eruption, during which the groups discussed the actions they were taking, their information needs, and their communication goals and strategies. Guest speakers, including some who participated in the eruption response, facilitated these discussions and everyone was very engaged and seemed to have a great time.

Monday September 3rd – Social event: pizza party

The traditional ECR-Net social event was organized as a pizza party: informal atmosphere over drinks and delicious Neapolitan pizzas. This event was mainly organized by Oryaëlle Chevrel and financed by the benefits of the t-shirt sell (500 euros, see below) and the IAVCEI budget for ECR-Net activities (720 euros). The event was held from 19 to 24 pm at the open-air pizzeria in front of the conference center. We offered tickets for a pizza + 1 drink (equivalent to 10 euros/person) at the entrance to all ECRs. A small number of non-ECRs came along but paid for their own pizza/drinks.

Attendance was well above expectation with about 150 participants, i.e. 140 pizzas were sold. We had conducted a survey on social media which had only 60 positive answers. As we did not have any sponsorship we decided to spend 1000 euros for this event (i.e., for 100 people) but because of the events popularity we decided to go over the budget. This decision was also motivated because we sold more than half of the T-shirts.
This event was a great occasion to meet the ECR community of Cities on Volcanoes. Many new connections were made between generations (from masters to post docs) and between nationalities (all continents were represented). The very positive feedbacks we received strengthened the idea that such activities are needed. In particular, many ECRs were grateful for the event because they got to know new people and realized they were not alone being at a conference for the first time. We used this opportunity also to reward Danielle Charlton, the winner of the ECR-Net logo Cup (See below).

Through the week: Selling ECR-Net T-shirt

Through the last month before the conference we organized a logo contest which resulted in the election of the logo for the ECR-Net. With the help of the IAVCEI budget for ECR-Net activities, 800 euros were used to buy 100 T-shirts with our new logo. Through the conference we were selling those T-shirts. Half of the profit was used for the pizza party and the other half will be for future events. This was mainly organized by James Hickey.

Through the week: Networking

During the conference the ECRs were present in many workshops and sessions. In particular, we were present at the WOVO meeting (R. Fitzgerald was asked to take notes during the meeting). We were also present at the meeting of the commission of communication. Furthermore, we also helped Bulletin of Volcanology for their ECR award for the most highly-cited ECR (Leticia Freitas Guimarães was involved in this activity).

Friday September 7th – Informal small meeting

On the last day of the conference the ECR-Net WG had an informal meeting with some potential new members for the ECR-Net WG from Asia (China, Japan, India), Africa (DR Congo) and Caribbean islands.

Conclusions Bad points

Communication with the organizing committee at CoV was difficult (only a few emails were exchanged one week before the congress). We strongly suggest that the organizing committee of future IAVCEI-related conferences have someone in charge of the link with the ECR-Net.
Although we asked for sponsoring from Frontiers, Nature communication and Springer none were able to supply any funding.

Good points

Success of the workshop: positive feedback from ECRs as well as from the experts. In general, lots of interest in the ECR-Net initiative. We need to keep being active.
New contact with people from Asia (Japan, China, India), Africa (DR Congo) and the Caribbean.

Concluding remarks and future outlook

The activities were scaled down in comparison to the IAVCEI meeting, due to the smaller conference size. Nonetheless, they were very successful. We managed to be present and known from the ECR community as well as from the entire CoV-IAVCEI community.

The ECR-Net Working Group

Working Group members: Hannah Dietterich (Researcher, USA), Oryaëlle Chevrel (Post-doc, France), James Hickey (Researcher, UK), Rebecca Fitzerald (PhD student, NZ), Pablo Forte (PhD student, Germany), Leticia Freitas Guimarães (PhD student, Brazil), Sam Poppe (PhD student; Belgium), Lauriane Chardot (Post-doc, Singapore), James Mueller (PhD student, USA)

CURSO INTERNACIONAL DE VULCANOLOGÍA DE CAMPO AGOSTO 24 - 31, 2019. MANIZALES Y PROVINCIA VOLCANO TECTÓNICA SAN DIEGO - CERRO MACHÍN, COLOMBIA

Introducción

El Curso Internacional de Vulcanología de Campo, Cuarta edición, será llevado a cabo en los alrededores de la Provincia Volcano Tectónica San Diego - Cerro Machín (PVTSC), cadena volcánica norte de los Andes colombianos.
El presente curso está dirigido a estudiantes de geología e ingeniería geológica de último año de carrera, a estudiantes de posgrado y a profesionales interesados en el área de la vulcanología.
El curso está enfocado en el entendimiento de la dinámica de las erupciones que generan los depósitos que se observan en campo. De esta manera se pretende que los participantes desarrollen la capacidad de identificar e interpretar las características de las estructuras y/o depósitos observados con base en el entendimiento del proceso que las genera.
A su vez, el curso se desarrolla como un panel extendido de discusión entre estudiantes e investigadores acerca de la aplicabilidad de la geología básica en la vulcanología como herramienta para entender el comportamiento de los volcanes tanto en su actividad pasada como futura. Este hecho va en concordancia con los nuevos esfuerzos apoyados por la Asociación Internacional de Vulcanología y Química del Interior de la Tierra (IAVCEI por sus siglas en inglés) para acercar la geología básica a los estudios vulcanológicos (ver Madeira, IAVCEI, 2014).

Objetivo

El objetivo principal del curso es enseñar a reconocer las diferentes estructuras y depósitos volcánicos tomando como laboratorio natural las expresiones volcánicas que se encuentran en y alrededor de la PVTSC. Tales estructuras y depósitos incluyen productos asociados tanto a vulcanismo monogenético como poligenético y cubre el espectro completo de los depósitos volcánicos y volcaniclásticos: lavas y domos, depósitos de corrientes de densidad piroclástica (CDPs), depósitos de caída piroclástica, depósitos de avalanchas de escombros y depósitos de lahar.

Modalidad

El curso cuenta con dos días de componente teórico y seis días de excursión de campo. En total el curso dura ocho días. Adicionalmente, este año el curso contará con la posibilidad de asistir el día 23 de agosto en la mañana a una visita guiada al Centro de Museos (Geología, Arqueología e Historia Natural) de la Universidad de Caldas, y en la tarde a una visita guiada al Servicio Geológico Colombiano en su sede del Observatorio Vulcanológico y Sismológico de Manizales; en esta se ofrecerá un

recorrido explicativo acerca del sistema de monitoreo de los volcanes que comprenden la PVTSC, lugar donde se desarrollará la sesión práctica del curso.

Durante el campo, se cuenta con espacios para que los participantes que así lo deseen expongan sus inquietudes sobre sus trabajos de investigación y que de esta manera sean comentados por los expertos invitados. Esto da pie para una sesión de discusión interna con todos los asistentes.
Parte teórica

El componente teórico se desarrolla a manera de exposiciones en dos días intensivos de curso. El curso cuenta con expertos nacionales e internacionales en vulcanología.
Parte práctica

Las prácticas de campo tienen un componente de dificultad medio, con caminadas no mayores a tres horas en zonas con climas medianamente extremos. Las temperaturas pueden variar desde cerca a los 0° C hasta los 30 °C dependiendo del día y el lugar. Lluvias intensas son muy posibles.
Las prácticas se llevan a cabo en estructuras y depósitos asociados a los volcanes Cerro Bravo, Nevado del Ruiz, Paramillo de Santa Rosa, Paramillo del Quindío, Nevado del Tolima, Cerro Machín y Campo Volcánico Pijaos, todos ellos hacen parte de la PVTSC.

Fecha de realización del curso

Agosto 24 – 31, 2019

Lugar

Sesión teórica
Edificio Orlando Sierra, Bloque B, 2do piso, salón 208, sala de conferencias Thomas Van der Hammen - Instituto de Investigaciones en Estratigrafía (IIES). Sede Principal Universidad de Caldas, Calle 65 Nº 26 - 10, Manizales, Colombia.
Fecha: Agosto 24 - 25, 2019

Sesión práctica
Las estructuras y depósitos asociados a la PVTSC se visitan durante un recorrido que comprende el viaje completo pasando la Cordillera Central por el Páramo de Letras desde Manizales (Caldas) hacia Mariquita (Tolima) y regresando por Cajamarca (Tolima) hasta Salento (Quindío), finalizando nuevamente en Manizales.
Fecha: Agosto 26 - 31, 2019

Despedida
Cena y entrega de certificados: Agosto 31. Hora: 7:30 pm. Lugar: Por confirmar.

Idioma del curso
El idioma oficial del curso es el castellano.

Participantes
Máximo 30 personas: 10 estudiantes de pregrado, 10 estudiantes de posgrado y 10 profesionales.

Costo
Estudiantes de pregrado: 1.000.000 $COP (370 $USD para pagos desde el extranjero) Estudiantes de posgrado: 1.400.000 $COP (500 $USD para pagos desde el extranjero) Profesionales: 1.800.000 $COP (630 $USD para pagos desde el extranjero)

El costo de la matrícula incluye:
1) Inscripción
2) Almuerzos y snacks de mañana y tarde durante los dos días de la sesión teórica (24-25 de agosto)
3) Alojamiento, alimentación (desayuno, almuerzo, cena) y transporte durante el viaje de campo (26 - 31 de agosto).
4) Cena de despedida

No incluye: Transporte hasta o desde Manizales, alojamiento en Manizales durante los días 24 y 25 de agosto (sesión teórica del curso), ni el alojamiento de la noche del día 31 - día de terminación del curso.

Los estudiantes aceptados deberán enviar una constancia ya sea carné vigente o carta del director de programa que certifique la calidad de estudiante.

Ayudas económicas
Para la presente edición, desafortunadamente no existen posibilidades de ayuda económica.

Pre-inscripción: Abril 01 - 21, 2019
Las personas que tengan intención de participar deberán enviar, antes del 21 de abril, un correo electrónico a curvolcolombia@gmail.com explicando el motivo de su interés y el por qué debería ser considerado para participar en el curso. El escrito debe contener máximo 800 palabras.

Inscripción: Hasta mayo 10, 2019
La aceptación para la participación en el curso será notificada antes del 23 de abril y el pago deberá ser realizado no posterior al 10 de mayo. La aceptación al curso será notificada vía correo electrónico como respuesta a la recepción del comprobante de pago. Posterior a esta fecha, los participantes seleccionados que no hayan enviado el comprobante serán removidos de la lista para dar la opción a aquellos participantes que no fueron admitidos; estos participantes serán informados el 13 de mayo y el pago deberá ser realizado antes del 17 de mayo. Posterior a esta fecha no habrán más admisiones. El número de cuenta para el respectivo pago será enviado a cada participante aceptado.

Organización del curso:
Coordinación
Hugo Murcia - PhD (Departamento de Ciencias Geológicas / Instituto de Investigaciones en Estratigrafía, Universidad de Caldas)
Contacto: hugo.murcia@ucaldas.edu.co

Colaboración técnica y administrativa
Laura Sánchez – MSc cand. (Maestría en Ciencias de la Tierra – Universidad de Caldas) Contacto: lsancheztorres15@gmail.com
Alvaro Botero – MSc cand. (Maestría en Ciencias de la Tierra – Universidad de Caldas) Contacto: lualbogo1993@hotmail.com
Daniel Piedrahita – MSc cand. (Maestría en Ciencias de la Tierra – Universidad de Caldas) Contacto: danielpt_93@hotmail.com

Investigadores invitados:
John Jairo Sánchez - PhD (Confirmado / Universidad Nacional de Colombia, Colombia) Susana Osorio – PhD cand. (Confirmado / Universidad Nacional Autónoma de México) Denis Avellán - PhD

(Confirmado / Universidad Nacional Autónoma de México, México) Marcelo Arnosio - PhD (Confirmado / Universidad de Salta, Argentina)

En la visita al Observatorio Vulcanológico y Sismológico de Manizales, se ofrecerá un recorrido explicativo acerca del sistema de monitoreo de los volcanes que comprenden la PVTSC, lugar donde se desarrollará la sesión práctica del curso.

Toda la información puede ser también encontrada en: https://curvolcolombia.wordpress.com/

REPORT ON THE ACTIVITY OF THE IAVCEI COMMISSION ON VOLCANIC AND IGNEOUS PLUMBING SYSTEMS (VIPS)

Commission chairs: Janine Kavanagh and Steffi Burchardt
ECR representative: Fiona Iddon (PhD student, representative until October 2018), new representatives: Emma Rhodes and Tobias Schmiedel

Goals and objectives of the commission:

VIPS comprise a network of structures that store magma in the crust and transport it to the surface to feed volcanic eruptions. These igneous structures include dykes, sills, laccoliths and larger magma bodies. VIPS assemble to form plutons and batholiths and are the building blocks of the continental crust. They also have strong associations with significant mineralisation and ore deposits around the world. The complex geometric structure of VIPS and the physical-chemical processes that control their development and evolution are key parameters controlling the magnitude and style of volcanism that occurs at the Earth's surface. Understanding VIPS therefore has significant social and economic implications, making the study of VIPS an integral discipline within volcanology.

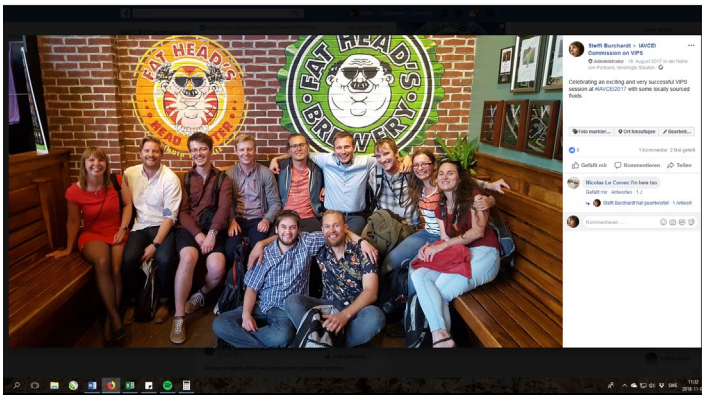
The study of VIPS requires a multidisciplinary approach. Diverse scientific disciplines have targeted the study of VIPS, including (1) volcano geodesy and seismology for studying active VIPS, (2) structural geology, igneous petrology, and geochemistry for studying fossil VIPS, and (3) analogue, mathematical, and petrological modelling to constrain the dynamics and evolution of VIPS. Although researchers in all of these disciplines aim to understand the same system, they traditionally operate independently, which frequently leads to contradictory and inconsistent views. This lack of communication between disciplines is problematic as method-based approaches alone are insufficient to fully understand VIPS. Moving towards a process-based approach by integrating various disciplines is key to derive a comprehensive understanding of VIPS.

The main goal of the new IAVCEI commission on VIPS is to provide a forum for VIPS research beyond disciplinary or methodological boundaries, bringing together expertise from across the global VIPS community to answer fundamental questions regarding magma transport and storage in the crust.

Blog and social media: The VIPS commission entertains a blog called Focus on VIPS (***https://focusonvips.wordpress.com/***) with regular blog posts highlighting ongoing and newly published VIPS research. The blog is written by guest bloggers who are mainly early-career researchers, and includes summaries of recent papers, accounts of recent meetings, and book reviews. A new blog post is published approximately every other week and spread on our social media channels Twitter (@VIPScommission), Facebook (***https://www.facebook.com/search/top/?q=iavcei%20commission%20on%20vips***), and Instagram (@focusonvips).

Conference activities:

At the *IAVCEI General Assembly in Portland 2017*, the VIPS commission hosted a session with the title "Structure and Evolution of Magmatic Plumbing Systems." The session received 48 oral and 59 poster presentations, which made it the largest session at the conference. The scope of the session was to foster a multidisciplinary approach to studying magma plumbing systems, which was very well received. The contributions of the session covered a wide range of scales (crystal to global) and disciplines; many of them were in fact multi-disciplinary. Among the oral presenters, 35% were female and 27% were early career researchers.



A similar session is now being advertised for the IAVCEI/IUGG conference in Montreal 2019.

Workshops and field activities:

The VIPS commission is organising the 6th LASI (LAccoliths, SIlls and dykes) conference in Mendoza, Argentina which will be held during November 2019 ***(http://lasi6.org/)***. Previous LASI conferences have been pivotal for the formation of the VIPS community, bringing together researchers working on different aspects of magma plumbing systems. The organising committee, chaired by Olivier Galland from the University of Oslo, is currently looking for additional funding. The scientific committee has outlined the following sessions:
1. Emplacement processes of dykes, sills, laccoliths, plutons
2. Volcanic plumbing systems in active volcanic areas
3. Field observations, geophysics, laboratory, numerical and theoretical modelling
4. Magma-sediment interactions: contact aureoles, magma contamination, phreatomagmatic activity and hydrothermal venting, and climate implications
5. Economic geology of subvolcanic systems: hydrocarbons, shale gas, water and ore deposits
6. The plumbing systems of mud volcanoes and their analogies to igneous plumbing systems

The meeting will take place over 5 days and include contributions from leading VIPS researchers. A highlight of the workshop will be 3 days in the field to visit the intrusions and volcanoes of the Neuquén basin. Follow updates at ***http://lasi6.org/***, in ResearchGate and on Facebook.

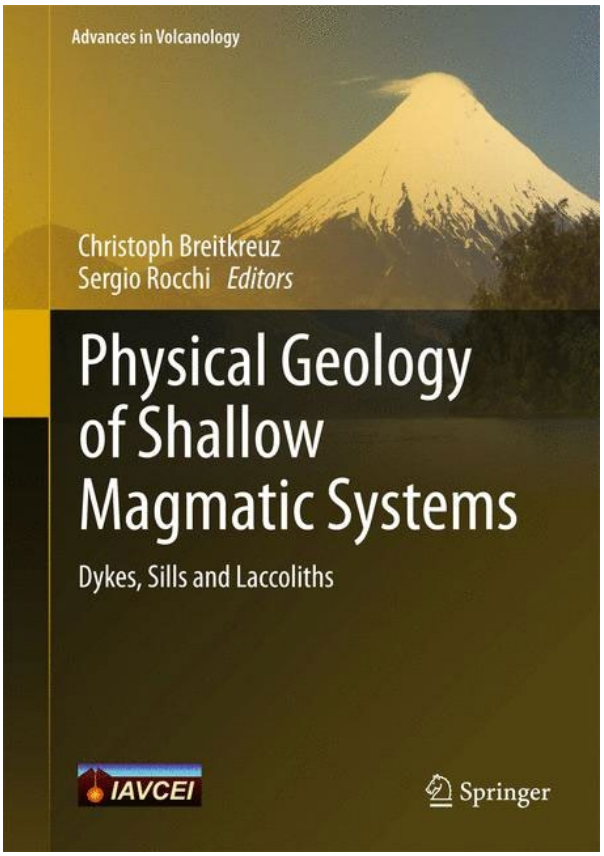
Books:

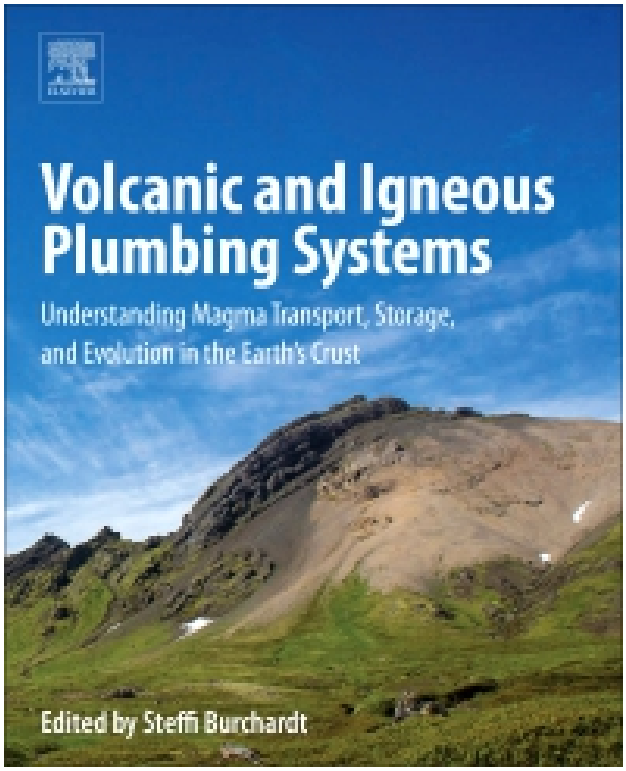
2018 has seen the publication of two new books dedicated to the subject of volcanic and igneous plumbing systems:

Breitkreuz, C. & Rocchi, S. (Eds.): Physical Geology of Shallow Magmatic Systems. Dykes, Sills and Laccoliths. Springer.

Burchardt, S. (Ed.): Volcanic and Igneous Plumbing Systems. Understanding Magma Transport, Storage, and Evolution in the Earth's Crust. Elsevier.

Both books are intended to give graduate students a broad overview of the state of the art of research on magma storage and transport.

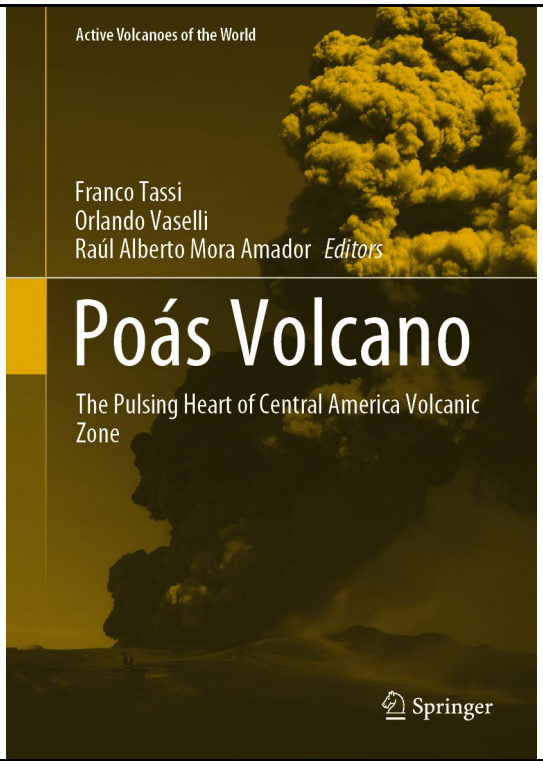




Contact

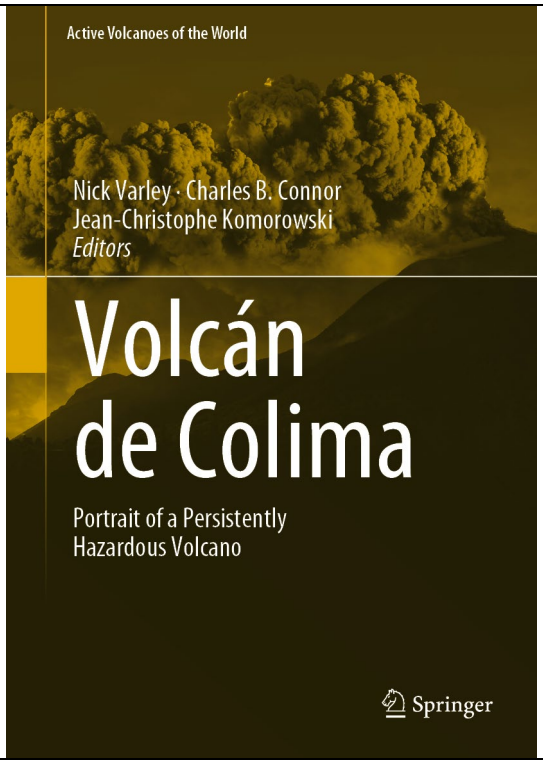
vipscommission@gmail.com
Janine.Kavanagh@liverpool.ac.uk
Steffi.Burchardt@geo.uu.se

NEW BOOKS



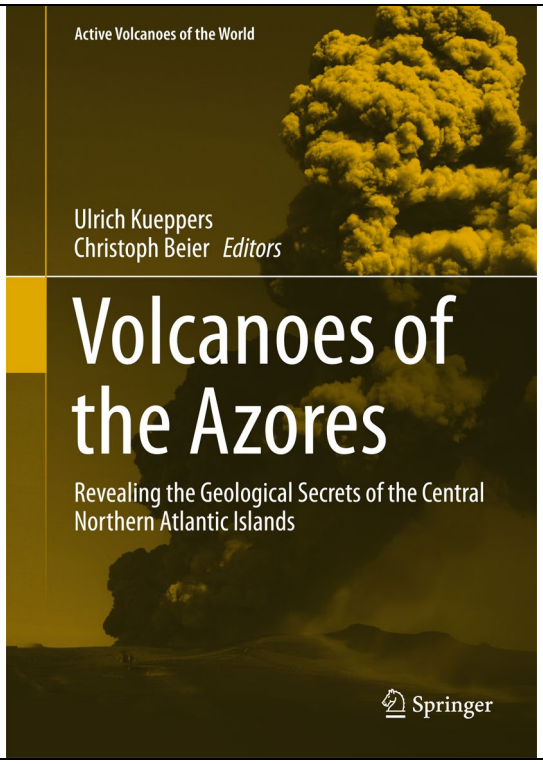
This book provides a comprehensive description of the volcanological, petrological and geochemical features of the Poás Volcano (Costa Rica), one of the most active volcanic systems in Central America and part of the Central America Volcanic Arc (CAVA). Poás Volcano hosts a unique sulfur lake, which actually is one of the world's most acidic lakes, and has experienced molten sulfur eruptions. Past investigations, current monitoring activities and planned programs of investigation into lessening of the volcanic hazard are reported here. Specific sections of the monograph will be devoted to the impact of this volcano on the social, agricultural and industrial activities in the area. Legends and popular traditions related to this volcano will be described in the last chapter to round up a complete scientific review on this unique volcanic system.

You can access the book via
https://www.springer.com/gp/book/9783319021553



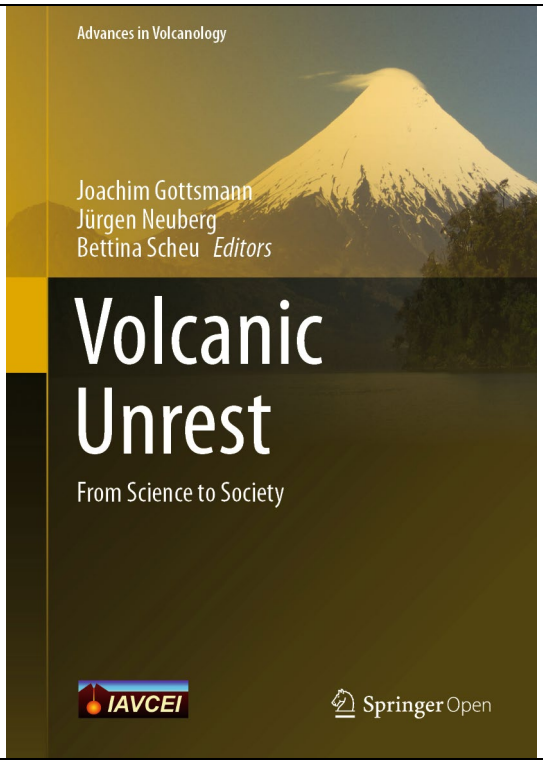
This book represents a comprehensive coverage of the current state of knowledge of Volcán de Colima: its history, its eruptive mechanism, the generation and interpretation of monitoring data, and the risk presented to the local population. The volume pulls together the results of the most important studies of recent years from many areas of volcanology: the geology of its eruptive products; geophysical and geochemical studies of the signals measured that relate to the generation and movement of magma; experimental analysis of its internal processes and the social complexities relating to the risk imposed by future eruptions.
Volcán de Colima is an important volcano: it has frequent large Plinian or sub-Plinian eruptions; its activity frequently switches between various regimes, which provides the opportunity to study these transitions from their cause to their impact; and it is a volcano which poses a significant threat to a large population.

You can access the book via
https://www.springer.com/gp/book/9783642259104



The Azores archipelago consists of nine islands that emerge from the Azores Plateau in the Central Northern Atlantic, situated within the triple junction of the American, Eurasian and African lithosphere plates. Subaerial volcanic activity has been well known since the Pliocene and continues today, with several well-documented eruptions since the settlement of the islands in the fifteenth century. The origin of the Azores Plateau has been a matter of scientific debate and thus this book provides the first comprehensive overview of geological features in the Azores from volcanological, geochemical, petrological, paleontological, structural and hydrological perspectives

You can access the book via
https://www.springer.com/gp/book/9783642322259

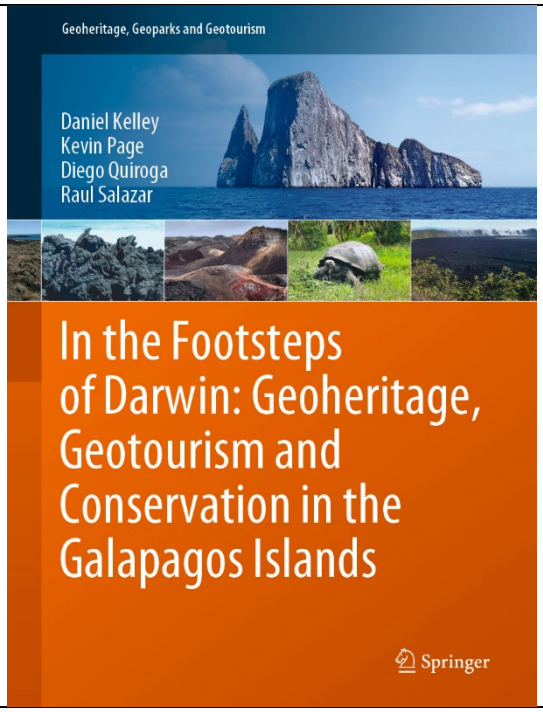


This open access book summarizes the findings of the VUELCO project, a multi-disciplinary and cross-boundary research funded by the European Commission's 7th framework program. It comprises four broad topics:

1. The global significance of volcanic unrest
2. Geophysical and geochemical fingerprints of unrest and precursory activity
3. Magma dynamics leading to unrest phenomena
4. Bridging the gap between science and decision-making

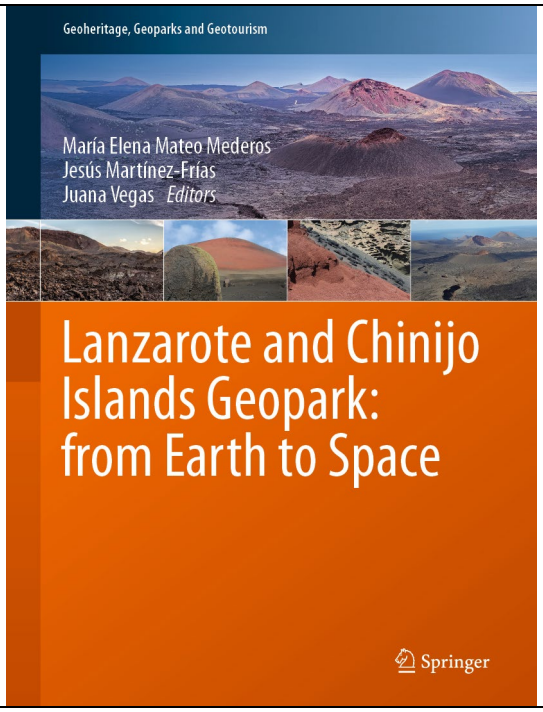
Volcanic unrest is a complex multi-hazard phenomenon. The fact that unrest may, or may not lead to an imminent eruption contributes significant uncertainty to short-term volcanic hazard and risk assessment. Although it is reasonable to assume that all eruptions are associated with precursory activity of some sort, the understanding of the causative links between subsurface processes, resulting unrest signals and imminent eruption is incomplete. When a volcano evolves from dormancy into a phase of unrest, important scientific, political and social questions need to be addressed. This book is aimed at graduate students, researchers of volcanic phenomena, professionals in volcanic hazard and risk assessment, observatory personnel, as well as emergency managers who wish to learn about the complex nature of volcanic unrest and how to utilize new findings to deal with unrest phenomena at scientific and emergency managing levels.

You can access the book via
https://www.springer.com/gp/book/9783319584119#



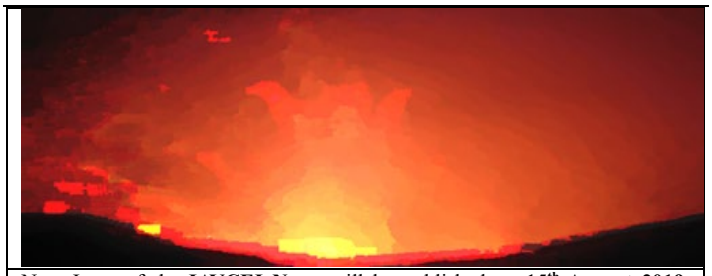
This book provides the first-ever overview of and guide to the geological setting and related features of the famous, volcanically active Galapagos Islands, as well as an in-depth analysis of the setting's relationship to the region's unique and iconic ecology, and its conservation. Further, it provides an introduction to human settlement and activity on the islands, including the transition from subsistence to a fishing economy and more recently tourism, all in the context of increasingly restrictive conservation regulations. Importantly, the book also explores the development of the concept and practice of sustainable development across the islands as a framework for future economic development, pursuing an approach that reconciles the needs of the resident population with conservation of this fragile environment.
The book is intended for a broad readership, from those engaged in geological and ecological studies, college and university educators and conservation practitioners, to more general visitors to the islands.

You can access the book via
https://www.springer.com/gp/book/9783030059149



This volume comprises a selection of papers describing the main features of the Lanzarote and Chinijo Islands Geopark (Canary Archipelago, Spain). Of all the Global Geoparks worldwide, it is the only one that has officially evaluated and characterized specific areas as analogues for the geological and astrobiological exploration of Mars. The identification and characterization of terrestrial sites that can be used as planetary analogues are currently considered vital study areas of planetary geology and astrobiology. Written by experts in the various fields, this multidisciplinary book is a unique resource for graduate students and professionals alike.

You can access the book via
https://www.springer.com/gp/book/9783030131296



Next Issue of the **IAVCEI News** will be published on 15th **August 2019**. Articles, notes, news or any items relevant to the IAVCEI community must be submitted by **1th August 2019** 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-stie 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

FUTURE EVENTS for IAVCEI member's interest

Further Information:
https://gallery.mailchimp.com/d92aca24c376df2651c860c82/files/101dcd14-c7cb-49f0-bd19-af8008db61c2/Volc11_1st_Circular_v1.pdf

IAVCEI Scientific Assembly

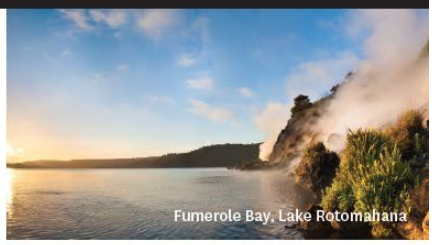
15–19 FEBRUARY 2021
ROTORUA, NEW ZEALAND
www.iavcei2021.org

IAVCEI

Meet in ROTORUA

100% PURE NEW ZEALAND
newzealand.com


Geothermal Valley, Rotorua


Fumerole Bay, Lake Rotomahana


Red Crater,Tongariro Alpine Crossing


Tarawera, Bay of Plenty

IAVCEI 2021 will be an inclusive and accessible conference for ECRs. The ECR community will have key roles in the scientific program, with an ECR chair and highlighted ECR contributions for each session, among other initiatives. Watch this space for more ways to get involved!

KEY DATES:

NOVEMBER 2019	JULY 2020	SEPTEMBER 2020	FEBRUARY 2021
Call for workshop proposals	Call for abstracts submissions opens	Abstracts submissions close	IAVCEI Scientific Assembly Rotorua, New Zealand

Rotorua, Bay of Plenty

For more information contact: iavcei2021@confer.co.nz or visit www.iavcei2021.org
To discover more things to see and do in Rotorua and New Zealand, go to newzealand.com