



# IAVCEI *News* 2011 No: 4

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

## FROM THE PRESIDENT

Dear Colleagues,



*Ray Cas*  
*President of the*  
*IAVCEI*

Since the new IAVCEI Committee took office after the IUGG General Assembly in July this year, it has been addressing a number of the issues that I raised in the last IAVCEI News (2011: 1 – 3), released in August this year. In particular, we have been concerned with developing the best process for overcoming the shortfall in income resulting from the need to comply with an IUGG regulation that membership should be free. In addition, Vice-Presidents Steve Self and Hugo Delgado have been reviewing the status of IAVCEI Research Commissions and Working

Groups, and the guidelines that apply to them, and will report on this next year.

In this communication I will focus on the changes to membership conditions for 2012 and onwards, to explain why changes are necessary, how IAVCEI will overcome the shortfall in income resulting from the abolition of compulsory membership fees, and outline the many benefits of being a member of IAVCEI, especially of course, being part of a truly international research community.

### CHANGES TO IAVCEI MEMBERSHIP

#### – The reasons, implications and benefits

#### Ending of compulsory membership fees from 2012

From the beginning of 2012 compulsory IAVCEI membership fees will be abolished. One advantage of this will be to encourage many people who previously did not join IAVCEI for financial reasons, to now join, so increasing the size of the IAVCEI community. To put this into perspective, IAVCEI has about 800

paid-up members. However, many other people regularly attend IAVCEI conferences, but have not joined IAVCEI, and volcano-listserve, the email news service maintained by Arizona State University, has an international mailing list of about 2,800 people. This means that at least 2,000 volcanologists or interested people, who receive weekly information about volcanic matters, are not members of IAVCEI, which is disappointing given that we are the only international volcanological learned society.

IUGG, with which IAVCEI is affiliated (and through which IAVCEI was formed), has a policy that the eight member associations of IUGG cannot charge a compulsory membership fee. Other associations do not, but IAVCEI has done so to maintain its finances to be able support the large number of programs that it manages. However, we must now comply, and given the very difficult global financial situation, it is a good time to abolish the compulsory fees, helping those in difficulty to maintain their connection with IAVCEI. However, as a consequence we must now seek an alternative means of generating annual income for IAVCEI to compensate from the lost income from abolition of compulsory fees.

Most of IAVCEI's activities (e.g. providing seed money to organisers of IAVCEI conferences and workshops, commission activities, funding to support attendance at conferences for students and scientists in need, research grants, awards, maintaining its website, etc) depend on IAVCEI receiving an income. Presently, the two principal sources of IAVCEI's income are IAVCEI membership fees, and a grant from IUGG, which is dependent on the number of IAVCEI delegates who attend IUGG General Assemblies, (which are similar in diversity to AGU and EGU conferences). If IAVCEI loses income from compulsory membership fees, without finding an alternative source of income, we will no longer be able to support many of the activities that we currently do.

The executive committee has decided to replace the lost membership income in two ways. First, we will invite people in the IAVCEI community to become voluntary Donor Members, which will provide some personal benefits, as outlined below. We hope that all current IAVCEI members will continue to contribute

financially to IAVCEI in this way, considering it to be a worthwhile contribution to supporting the activities of our international learned society.

Secondly, as with most other international conferences, at future IAVCEI conferences an abstract fee will be charged. The fee will be about 30 Euros per abstract (depending of currency exchange rates) and this will be transferred to IAVCEI by the conference organisers. This is a small amount relative to the overall registration fees for conferences. For comparison, AGU charges an abstract fee of US\$70 per abstract (~ 54 Euros), and EGU a fee of 40 Euros per abstract. In this way the burden of supporting IAVCEI financially no longer falls only on those people who pay the membership fee, but on all people who attend IAVCEI conferences and benefit from them.

In addition, to boost IAVCEI membership, so making it more international and inclusive, in future, everyone attending a IAVCEI conference will automatically become a member of IAVCEI when they register for the conference, and will have the option of becoming a regular member (free membership) or a donor member. Unlike AGU conferences, which require all delegates to become members and pay a membership fee of US\$20, it will not be compulsory to pay a membership fee to become a member of IAVCEI, but the committee hopes that many people will decide to become Donor Members. For IAVCEI, this automatic membership will mean people become engaged with IAVCEI and its activities. Thereafter they will regularly receive information about all future IAVCEI activities, and enjoy the other benefits of being a IAVCEI member.

### **Benefits of being an IAVCEI member**

There are many benefits to being a member of IAVCEI because volcanology is a truly international and inter-disciplinary research field, and IAVCEI is the only international learned society or association for volcanology. It is a great vehicle for networking internationally with colleagues who have related interests, or if you are a research student or early career researcher, for beginning to develop your scientific network, and your international profile as a research scientist in one of the many volcanological disciplines.

Secondly, IAVCEI Scientific Assemblies, General Assemblies and Cities on Volcanoes conferences, and the workshops of its Research Commissions and Working Groups are truly international, attended by leading research scientists from all over the world. They are held at different international locations each time, always in proximity to important volcanic provinces. This allows members to participate in major conferences at fantastic locations all over the world, enjoying a great diversity of cutting edge research symposia and workshops by the world's leading scientists, but also to visit the nearby volcanic provinces and benefit from those field experiences.

### **In addition, regular members will:**

- receive a discounted personal annual subscription rate for Bulletin of Volcanology, the official journal of IAVCEI
- receive information about all IAVCEI activities regularly, conference circulars and registration forms
- have their name and address added to the membership list and IAVCEI home page

- have voting rights for elections and changes to IAVCEI Statutes and By-Laws (as long as their country is a member of IUGG, as required by IUGG regulations)
- be able to join any of the research commissions that operate through IAVCEI with specific research themes, and participate in their activities
- receive the four issues of the IAVCEI Newsletter per year, with all the latest volcanological news and information about meetings, workshops, and opportunities.
- be able to apply for conference grants to attend the various IAVCEI conferences and workshops. (This will only be available to IAVCEI members).

### **Donor members will receive all the above benefits, and in addition,**

- they will receive a significant discount on registration fees for all IAVCEI conferences and workshops
- they will receive discounts on the costs of all IAVCEI co-sponsored publications
- their status as donors will be acknowledged on the IAVCEI website, unless they nominate not to be so openly recognised.
- Donor members will be able to apply for seed money from IAVCEI to organize a meeting or workshop, on behalf of commissions, working groups or other focus groups.

In circumstances where focus groups that are not existing commissions or working groups, would like to organize a once-only meeting or workshop, and would like to apply for IAVCEI seed money, the leaders at least should first become IAVCEI members, or donor members, and if possible, seek involvement of one or more donor members in submitting their proposal to IAVCEI.

### **Membership categories from 2012 onwards**

From the beginning of 2012, the following categories of membership will apply. For clarification, the current IAVCEI Statutes and By-Laws (available from the IAVCEI website) refer to members as used here, as "affiliates". The Statutes will be changed in the future to use the more familiar term "members".

In the new structure, the committee has decided to include a specific "Young Researcher" membership category, to make it clear that research students and early career researchers are highly encouraged to become involved in IAVCEI, and that it is not just an association for older, established scientists.

For current members who have already paid for 4-year membership, or life membership, those payments will be valid in the new structure, but they become donor members. Life members are not expected to pay their life membership again, unless of course they feel magnanimous and they want to pay for more than one life membership!

The full list of membership categories and the donation amounts that apply to the various donor membership categories are listed below:

- **Young Researcher Member (non-donor)**
  - Research students and early career researchers who were awarded their PhD no more than 3 years ago
  - No fee

• **Young Researcher Donor Member**

- Research students and early career researchers who were awarded their PhD no more than 3 years ago
- 15 Euros per year, or 50 Euros for a 4-year membership

• **Regular Member (non-donor)**

- Researchers who graduated more than 3 years ago, and members of the general public with an interest in volcanology
- No fee

• **Regular Donor Member**

- Researchers who graduated more than 3 years ago, and members of the general public who make a donation in proportion to their annual salary category, similar to the structure currently in place:
  - 50 Euros per year for those earning more than 16,000 Euros per year, or 175 Euros for a 4-year membership
  - 25 Euros per year for those earning between 8,000 to 16,000 Euros per year, or 80 Euros for a 4-year membership
  - 15 Euros per year for those earning less than 8,000 Euros per year, or 50 Euros for a 4-year membership

• **Life Donor Member**

- Researchers and other persons who donate 800 Euros to IAVCEI
- This is a once only payment, unless the donor decides to renew their donation

• **Benefactor and Life Donor Member**

- Researchers who donate more than 1,000 Euros to IAVCEI
- This is a once only payment, unless the donor decides to renew their donation, and it also entitles them to life membership.

• **Organisational Donor Member**

- Organisations which donate 4,000 Euros or more to IAVCEI
- This is a once only payment, unless the donor decides to renew their donation

The IAVCEI Committee hopes that the reasons for these changes are now clear to all members. We also hope that all current members will continue to be donor members to help IAVCEI maintain its spectrum of programs and activities that in the end help all IAVCEI members by helping IAVCEI to be a vibrant and appealing learned society to belong to.

Finally, we wish all IAVCEI members and your families a relaxing, happy and safe Christmas and New Year, wherever you may be around the world. We look forward to meeting you at future IAVCEI meetings.

Best wishes,



Ray Cas,  
President,

**On behalf of the IAVCEI Executive Committee.**  
Monash University, Australia.

## THE ROLE OF IAVCEI NATIONAL CORRESPONDENTS IN DISSEMINATING INFORMATION ABOUT IAVCEI IN THEIR OWN COUNTRIES

Dear Colleagues,

As part of its review of the functions of IAVCEI, the new Executive Committee has become aware of a valuable, and currently largely missed, opportunity to promote the activities of IAVCEI in many countries around the world, through its National Correspondents (NC). National correspondents are appointed for each of the eight associations of IUGG by the adhering scientific organization to IUGG in each country (e.g., a country's Academy of Science). These are the financial (paying) members of IUGG. At present there are 58 member countries of IUGG, which means that there are 58 named National Correspondents supposedly representing IAVCEI in those countries. This is probably news to many members of IAVCEI!

The NCs are nominated by their own countries to represent their country at relevant business meetings of each association at the IUGG General Assemblies, which are held every 4 years. For most NCs that is all they do, but it appears to the new IAVCEI Committee that those National Correspondents should also be working in reverse, representing and promoting the interests of IAVCEI, and disseminating news about IAVCEI's activities to the volcanological, geochemical and geophysical communities in their own countries. NCs could be a vital in attracting new members (affiliates) to IAVCEI.

Soon after taking up the position of President, I contacted all IAVCEI National Correspondents listed in the current IUGG Yearbook (downloadable from the IUGG website for anyone who would like to find out who is your country's National Correspondent) to discuss how they could contribute to IAVCEI in their own communities. I received only two 2 replies, one from the Australian and one from the Luxembourg NCs. Fifteen of the emails bounced back, indicating that the people listed were no longer active. There thus appears to be a major problem in this area. The following is the text of what was sent.

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“**THE ROLE OF NATIONAL CORRESPONDENTS** (from the perspective of IAVCEI)

What should the responsibilities of the IAVCEI National Correspondents be?

### **A. PROMOTING IAVCEI AND ITS ACTIVITIES AS THE FOREMOST INTERNATIONAL VOLCANOLOGICAL AND IGNEOUS GEOCHEMISTRY ASSOCIATION OR SOCIETY**

First, in your country you are asked to be proactive in disseminating information about IAVCEI and promoting its activities to all scientists, research students and organisations who have research interests in volcanology and igneous petrology and geochemistry. In some cases this is relatively simple because there may be a national volcanic studies or research society or specialist group that can be used to disseminate information. In other cases

you may need to build up your own email list of relevant researchers and organisations to do this.

Assembling information about IAVCEI and its activities (go to <http://www.iavcei.org>) may be time-consuming, so at the very least I ask you to circulate the regular IAVCEI Newsletter to your national volcanology community. Attached is the most recent edition of the IAVCEI Newsletter, released 6 weeks ago, and if you have not already done so, could you please now circulate it to your national volcanology community? And then could you please circulate all future editions? The next one will be released in December. They can be downloaded from the IAVCEI website.

Many scientists do not know what IAVCEI is or that it even exists. You can make your own national community aware of what IAVCEI is, what its range of activities is and the benefits of belonging to IAVCEI, even most simply by encouraging them to go to the IAVCEI website and surf through it. Why not write a news article for the newsletter of your national geological society explaining what IAVCEI is and the benefits of becoming a member? Such articles need to be repeated every few years to capture new research students who are just commencing their research careers.

### **B. A NATIONAL IAVCEI SUB-COMMITTEE?**

The IAVCEI Statutes recommend that each National Correspondent convenes a National IAVCEI Sub-committee, under the umbrella of your national IUGG enabling organisation. In some countries where there is a volcanology research group, the leaders of that research group could be nominated to constitute such a IAVCEI sub-committee. Alternatively, you could organise such a sub-committee through the national IUGG organisation. The role of such a sub-committee would be to promote the activities of IAVCEI and organise local national volcanology workshops, fieldtrips and meetings for local IAVCEI members and others who you think would be interested. They could be organised independently or perhaps in association with your national annual geoscience society/association conference. They could be organised with an affiliation to and under the auspices of IAVCEI, and they could be advertised on the IAVCEI website and in our newsletter.

### **C. PROMOTING IAVCEI MEMBERSHIP AND THE BENEFITS**

IAVCEI also asks you to promote the benefits of individual scientists and research students becoming members of IAVCEI. As we all know, there are enormous benefits in belonging to an international community of researchers, especially for young researchers who are trying to establish research networks and develop their career. IAVCEI has many research Commissions and Working Groups, which anyone can become a member of, it regularly organises General Assemblies and Scientific Assemblies, it provides limited funding support for some international workshops and meetings, for targeted research programs, and for young scientists (research students and early career scientists) and scientists from developing countries to attend its conferences.

As from 2012, membership of IAVCEI will not require payment of a compulsory fee, so anyone can join. However, for IAVCEI to be able to continue to provide financial support for the range of activities outlined in the previous paragraph we encourage all

IAVCEI members to make a donation to IAVCEI at a level that they can afford, as a Donor Member. In future, all IAVCEI (donor) members attending a IAVCEI conference will receive a discount in the conference registration fee, so the donation amount can be quickly recovered.

### **DO YOU WANT TO CONTINUE TO BE THE IAVCEI NATIONAL CORRESPONDENT FOR YOUR COUNTRY?**

I ask you to consider if you want to continue to be your country's National Correspondent. We hope that you are all enthusiastic to continue to be an ambassador for IAVCEI. As you can see from the above, if you do, IAVCEI asks you to be proactive on its behalf.

However, if you feel you do not have the time or if you have lost the commitment to fulfill the role we have set out, we ask you to consider finding someone new to replace you, someone with energy and commitment who you know will carry out the role conscientiously. To do this, you would need to contact the national IUGG enabling organisation in your country (i.e. the one that appointed you), inform them of your intention to stand down as the IAVCEI National Correspondent and suggest the name of the replacement. When this has all been done, could you then please inform me of the change.

Finally, I look forward to working with you all to promote the best interests of IAVCEI as the foremost international learned society for research in volcanology and igneous petrology and geochemistry. It is a great research community and we should all tell the world about it, not keep it a secret.”

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So, all known National Correspondents have been asked to become proactive in their own national communities in promoting the interests and activities of IAVCEI and to set-up a national IAVCEI sub-committee. If you have not heard anything from your national correspondent, I encourage you to contact them about setting up a national sub-committee and to discuss who should be your country's national correspondent in future, ensuring that it is someone proactive.

In addition to members from the 58 IUGG affiliated member countries, IAVCEI also has many members from non-IUGG member countries. Although they cannot formally have appointed “National Correspondents” I encourage those members to form their own national IAVCEI interest sub-committees (perhaps as a specialist group of your national geological societies, which may already exist in some countries) and for those groups to nominate a “National Corresponding Member”, who could work in the same way as IAVCEI has requested National Correspondents to work on behalf of IAVCEI.

Any groups interested in forming such IAVCEI interest groups and sub-committees should contact the IAVCEI Secretary General, Joan Marti and myself about this.

The IAVCEI Committee looks forward to working with you all to promote IAVCEI and its activities as a learned society in your own countries.

*Ray Cas on behalf of IAVCEI Executive Committee*  
President of IAVCEI.

email: [ray.cas@monash.edu](mailto:ray.cas@monash.edu); <http://www.iavcei.org/>

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**LATIN-AMERICAN ASSOCIATION OF  
VOLCANOLOGY (ASOCIACIÓN  
LATINOAMERICANA DE VOLCANOLOGÍA,  
ALVO)**



The Latin-American Association of Volcanology (Asociación Latinoamericana de Volcanología, ALVO) was formally founded on November 7, 2010, in Manizales, Colombia. The foundation of ALVO was announced during the commemoration of the 25th anniversary of the eruption of Nevado del Ruiz volcano. In a well-attended launching ceremony, the former president of IAVCEI Prof. Setsuya Nakada was present as well as participants from countries other than the Latin American region. Delegates from Mexico, Guatemala, El Salvador, Nicaragua, Costa Rica, Panama, Colombia, Ecuador, Peru, Argentina and Chile participated in the initial activities of ALVO.



*Poas Volcano, Costa Rica (April 2006 by Scott Robinson)*

The main purposes of ALVO are strength and promote the ties between Latin American volcanologists. ALVO also promotes international collaboration within and outside the Latin American region. Of particular interest is the collaboration with IAVCEI. Among the ALVO activities of 2011 are the building up of the webpage, participation in international workshops, online Volcanology Course 2011, Course on soil-diffuse CO<sub>2</sub>-emission measurements, the 18th Edition of the International Central Andes Volcanological Field Course, and collaborative work during the 2011 eruptions in the region.



*Turrialba, Costa Rica (July 2010 by Rodolfo van der Laet)*

The Pan-American Advanced Studies Institute's workshop titled "PASI: Volcanic Hazards and Remote Sensing in Pacific Latin America", funded by the National Science Foundation of the United States of America provided the opportunity to 63 participants from 13 countries to interchange experiences through training sessions and field trips to nearby volcanoes. This workshop was directed by Dr. William I. Rose from the Michigan Technological University, and Mauricio Mora Fernández from the University of Costa Rica held in San José, Costa Rica January 10 – 23, 2011. During this workshop the Latin American participants held meetings for the interchange of experiences and improvement of the regional volcanology under the umbrella of ALVO.



*Masaya, Nicaragua (28 November 2011 by Laura Leandro)*

Hugo Delgado Granados, Ramon Espinasa, Dante Moran, Denis Legrand, Dolors Ferrer (Universidad Nacional Autónoma de México, UNAM), Miguel A. Alatorre (University of Munich) and Jose Viramonte (Universidad Nacional de Salta, Argentina) taught the online Volcanology Course 2011. A total of 19 students from Mexico (2 from UNAM and 4 from CENAPRED), El Salvador (a student from SNET), and Nicaragua (12 students from INETER and UNAN) participated in this course. Classes were taught between February 8 and April 14, 2011 from the Graduate School at the Instituto de Geofísica (UNAM). This course opened the door for future development of training and teaching courses for the broad volcanological community of Latin America (<https://vhub.org/groups/alvo/wiki/ReportedelCursoenLneadeVulcanologia2011>).

The Observatorio Vulcanológico y Sismológico de Costa Rica – Universidad Nacional (OVSICORI-UNA) and ALVO, with the auspices of IAVCEI (through a research project), organized a training course in the use of portable CO<sub>2</sub> fluxmeters between May 16 - 20, 2011 at the OVSICORI-UNA, in Heredia Costa Rica. The course was taught by Davide Continanza and Matia Menichini (West Systems, Italy) with the participation of volcanologists from Mexico (UNAM), El Salvador (SNET), Nicaragua (INETER), Costa Rica (OVSICORI-UNA), and Ecuador (IG-EPN). The goal was to provide training in the use and exploitation of gas flow data through volcanic soils and water bodies using the fluxmeter for CO<sub>2</sub>/H<sub>2</sub>S diffuse emission that works based upon the gas accumulation chamber technique developed by West Systems. The course was an opportunity for

sharing experiences among participants on the use of these instruments and to develop a protocol for its use. This effort was a collaboration on specific topics of interest in the volcanological community of Latin America (<https://vhub.org/groups/alvo/wiki/CursodeUsoyCalibracindelFlujmetrodeWestSystem>).

The 18th Edition of the International Central Andes Volcanological Field Course sponsored by ALVO and IAVCEI took place in November 21 – 29, 2011. Forty-eight students from different American countries attended it. INENCO-GEONORTE-UNSA-CONICET Salta, Argentina, yearly organizes this traditional and well-known course ([www.unsa.edu.ar/~geonorte/cursos/curvol2011.htm](http://www.unsa.edu.ar/~geonorte/cursos/curvol2011.htm)).

During the eruptions of Cordón Caulle (Chile) and Telica (Nicaragua), ALVO played a role facilitating the collaboration among volcanologists of Argentina, Colombia, Nicaragua, Mexico and Spain in the frame of the Cenizas Project (Red Iberoamericana para el monitoreo y modelización de cenizas y aerosoles volcánicos y su impacto en infraestructuras y calidad del aire, thematic network CYTED 410RT0392). In the case of the eruption of Cordón Caulle (Chile), the use of the FALL3D code allowed the forecast of ash dispersal of use by aeronautic operations from the Buenos Aires VAAC (Argentina). At Telica volcano, ALVO facilitated the participation of a technician from SNET (El Salvador) to evaluate thermal anomalies and the microanalyses of ashes in Mexico. Web conferences between volcanologists of Nicaragua and Mexico helped in the evaluation of the eruptive event.

Activities of ALVO for the coming 2012 include the organization of a General Meeting of the association, new courses and expansion of activities to a larger number of members of the Latin American community and collaboration with the volcanological community worldwide.

#### **The executive board of ALVO is as follows:**

**President:** Hugo Delgado Granados (UNAM, México)

**Vice-President:** José Viramonte (UNSA-CONICET, Argentina)

**Secretary General:** Marta Calvache (Servicio Geológico Colombiano, former INGEOMINAS, Colombia)

**Treasurer:** Sofia Navarro (INGEOMINAS, Colombia)

#### **Regional Councils:**

- North America: Enrique Guevara (CENAPRED, México)
- Central America- Caribbean: María Martínez (OVSICORI, Costa Rica)
- Northern South-America: Gloria Patricia Cortés (Servicio Geológico Colombiano, Colombia)
- Southern South-America: Felipe Aguilera (Universidad de Atacama, Chile)

For further information and registration please contact Sofia Navarro (Observatorio Vulcanológico y Sismológico de Manizales, Servicio Geológico Colombiano, Colombia): [sofianavarro@yahoo.com](mailto:sofianavarro@yahoo.com)

The ALVO webpage can be found at: <https://vhub.org/groups/alvo>.

*Hugo Delgado Granados*  
UNAM, México

## Global Volcano Model Network (GVM).



*GVM is a major international effort to create an information platform on volcanic hazard and risk. GVM aims to provide systematic evidence, data and analysis of volcanic hazards and risk. The GVM project addresses hazards and risks on global, regional and local scales, and develops the capability to anticipate future volcanism and its consequences.*

The network aims to develop a major international effort to create a Global Volcano Model (GVM) that provides systematic evidence, data and analysis of volcanic hazards and risk. The GVM project addresses hazards and risks on global, regional and local scales, and develops the capability to anticipate future volcanism and its consequences.

The project builds on initiatives over the last several years to establish a global database of volcanic hazards (VOGRIPA) and to develop analysis and modelling tools to assess volcanic hazard and risk. The project also complements and interfaces with other major international initiatives, notably including the Global Volcanism Programme of the Smithsonian Institution, WOVODat, VHub, the Volcano Observatory Best Practices Programme and the International Volcanic Health Hazards Network.

The GVM project has parallels with the Global Earthquake Model in intention and scope of providing an authoritative source for assessing volcanic hazard and risk. There is a strong international consensus that GVM is an essential and timely undertaking.

#### **Volcanic Risk**

There are 50 or so volcanic eruptions a year worldwide with approximately 20 ongoing at any one time. Increased global volcanic risk derives from factors that are increasing exposure and vulnerability, such as population growth, environmental degradation, urbanization, inequality and increasing independencies in a globalised world. There is also a decrease in societal resilience arising from the way society is organized and the increasing complexities of systems required to respond to emergencies, especially where impacts extend beyond national boundaries.

#### **Global database system**

The GVM project will develop an integrated global database system on volcanic hazards, vulnerability and exposure, make this globally accessible and crucially involve the international volcanological community and users in a partnership to design, develop, analyse and maintain the database system. The main hazards include: explosive eruptions, pyroclastic flows, lava domes, lava flows, lahars, tephra fall

and ash dispersal, gas, flank collapse, debris flows and health hazards. New reliability indices and measures of uncertainty will be essential elements of the GVM. The GVM project will aim to establish new international metadata standards that will reduce ambiguity in the use of global volcanic datasets. Vulnerability and exposure data will be integrated into the GVM and again new methods of assessment and analysis will be investigated and tested. The integrated database system will be made available via an interactive web system with search engines using both spatial and text-based commands. The downloadable products (including maps, tables and text) and web system will be developed with end-users. Addition of data by users will be facilitated via an upload facility. New data or corrections will be validated by an editor before being incorporated.

### Hazards and risk assessment

The project also intends to establish methodologies for analysis of the evidence and data to inform risk assessment, to develop complementary volcanic hazards models, and create relevant hazards and risk assessment tools.

The research will provide the scientific basis for mitigation strategies, responses to ash in the atmosphere for the aviation industry, land-use planning, evacuation plans and management of volcanic emergencies.

Professor Steve Sparks (University of Bristol)  
Dr Sue Loughlin (British Geological Survey)

"GVM activities will replace IAVCEI commission activities on volcanic eruption databases, and will eventually be linked into one or more IAVCEI commissions (details to be decided during 2012)" – IAVCEI EC



### Planned Session at the IAVCEI 2013 Kagoshima conference

#### Global Volcano Model: databases; hazards and risk assessment tools; and volcano information

**Convenors:** Ben Andrews, Gill Jolly, Susan Loughlin, Chris Newhall, Paolo Papale, Steve Sparks, Greg Valentine

The Global Volcano Model is a new international collaborative platform to integrate information on volcanoes from the perspective of forecasting, hazard assessment and risk mapping. The platform includes: databases (e.g. VGP, WOVodat and VOGRIIPA); tools for forecasting; tools for assessment of hazard and risk; global, regional and local compilations of volcano information (e.g., vhub.org). Translation of volcano science into forms that are useful and accessible for the public, researchers, decision-makers, governments, international agencies, NGOs and commerce is a goal of GVM, which will build upon and take advantage of the volcanology community's growing online collaborative infrastructure

at vhub.org, as well as welcoming presentations in any of the aspects of the GVM, we would particularly invite contributions demonstrating successful transfer of volcano science to decision-making either during a crisis or for planning and preparedness between eruptions.

## OBITUARY

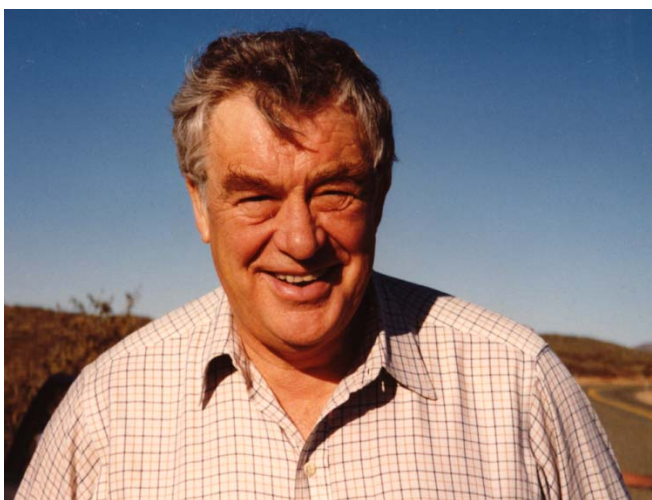
### Ian S. E. Carmichael (1930-2011)

The indomitable Ian S. E. Carmichael, who made such a deep and lasting impression on so many of us, with his highly imaginative research career and his legendary mentoring of graduate students, died in Berkeley on August 26th, 2011. Ian applied thermodynamic theory, experiment, and the ground truth of fieldwork to the study of magmatic rocks. Throughout the arc of his career at the University of California at Berkeley, he played a critical role in transforming igneous petrology from a discipline that was largely descriptive to one that is rigorously quantitative, and in the process, he inspired multiple generations of students. Although focused on petrology, much of Ian's research was critically dependent upon field observations and sampling of fresh volcanic rocks. With this background many of his students went on to make notable contributions in volcanology.

Ian Stuart Edward Carmichael was born on March 29th, 1930 and was raised in Haywards Heath, south of London. He began his education at the age of six at Westminster school in London. He continued there until his final year of high school when he made his first trip to the U.S. as an exchange student. Instead of returning home to England for college, he enrolled in the Colorado School of Mines, to the surprise and dismay of his parents, and began a lifetime fascination with the rugged terrain of the western United States. After one semester, he returned to England for a brief Christmas holiday with family, and was promptly drafted into the British army where he saw service in Egypt, Palestine and Sudan. This service lasted two years, after which he enrolled at Cambridge University, to the delight of his father (E. A. Carmichael, a well-known neurologist at the National Hospital in London). After obtaining his B.A. and M.A. in Geology (specializing in Mineralogy and Petrology) in 1954, Ian went to Canada to prospect for copper in northern Ontario, and then wintered in the Canadian arctic to help survey the Distant Early Warning (DEW) Line. Ian returned to England, and completed his Ph.D. in 1958 at the Imperial College of Science in the University of London under the supervision of George P. L. Walker. Ian was Walker's first research student and only four years younger. Walker had been mapping the geology and zeolite mineral zonation in the remote Tertiary volcanics of eastern Iceland, a region of ubiquitous clouds and wet summer weather. Already seasoned to the climate, George left his student Ian at the end of the road to study Thingmuli volcano. Although the wet, cold, and lonely summers soured Ian on field geology for some time, he used Thingmuli to address one of the most contentious issues in earth science at the time (before the days of isotope geochemistry and plate tectonics), namely the origin of silicic magma, and whether it could form solely by fractional crystallization of basalt, or whether assimilation of older continental crust was required. The problem went to the very heart of crustal evolution, and Iceland offered a superb opportunity to examine how basaltic magma evolves to rhyolite in the absence of continental crust. The papers from Ian's thesis on the Thingmuli volcanic suite are among his most highly cited among an impressive repertoire. Despite the hardships of Thingmuli summers, Ian retained a deep appreciation for

fieldwork and ultimately developed a keen interest in geologic mapping, which he expressed to Walker in an eloquent letter late in George's life.

On the completion of his thesis, Ian became a lecturer at Imperial College. Over the next five years, he advised several graduate students (Gloria Borley, Wally Johnson, Tony Beswick, Ian Baker, and Ian Ridley), and he developed an expertise on the crystallization path of feldspars in silicic magmas, an interest (along with motor racing) that he shared with Professor William S. MacKenzie ("Mac" to Ian). In 1963, Ian took a 6-month leave to visit the University of Chicago, where J.V. Smith was showcasing one of the very first electron microprobes. This instrument had enormous appeal to Ian, who was spending most of his time performing tedious mineral separations for wet chemical analysis. After six months at Chicago Ian did not have all the data he wanted, and so he submitted a request to Imperial College to extend his leave. The request was promptly denied, and he was ordered to return to England. Ian was so strongly motivated to obtain additional data that he quit his Imperial College faculty job. It was not long before he was invited to UC Berkeley to give a lecture, a trip that eventually translated into a tenured position as an associate professor.



*Ian S.E. Carmichael*  
1930 - 2011

When Ian arrived on the Berkeley campus in 1964, the study of magmatic rocks was largely descriptive. In contrast, the questions that he was posing, well before their time, were whether the crystals in erupted lavas could be used to reveal the temperature, pressure, dissolved water concentration, and oxidation state of magmas. These questions required a thermodynamic approach, which was a reasonably developed tool in metamorphic petrology, but nearly non-existent for igneous petrologists studying crystal-liquid equilibrium. The problem was the lack of information on the thermodynamic properties of magmatic liquids. Although Ian arrived at Berkeley with little training in thermodynamics, he soon educated himself by attending thermodynamics courses in the chemistry department, working on problem sets and exams with his graduate students (Jim Nicholls, Alan Smith, Barbara Nash, and Jay Stormer) and interacting with visitors such as Bernie Wood and Roger Powell. Even more influential for Ian was a course on high-temperature thermodynamics in the materials science department, which introduced him to the Berkeley Thermodynamic Center where there was an unused high-temperature drop calorimeter. There,

Ian and his student Charlie Bacon began some of the first measurements of the enthalpy of silicate glasses and liquids. It was not long before the calorimeter was moved into Ian's laboratory, and his student Jonathan Stebbins began to systematically obtain enthalpy and heat capacity data for high-temperature silicate liquids. Soon after, Ian pursued a parallel program (with students Steve Nelson, Mark Rivers, Dan Stein, Quentin Williams, Becky Lange, Victor Kress, and visiting scholar Xuanxue Mo) to measure the volumetric properties of silicate liquids, including their compressibility from sound speed measurements. Later, he worked with his student Don Snyder to measure the thermal conductivity of silicate liquids. Thus began a highly productive period throughout the 1970's and 80's where several papers on the thermodynamics of magmatic reactions and the properties of silicate melts were published.

A unique skill that Ian brought to his experimental work on the thermodynamic properties of liquids, as well as numerous field studies, was his classical training in "wet" chemical analysis, which he taught to several of his students. Before the days of the XRF, INAA, ICP-MS and electron microprobe, wet chemistry was the only method to obtain compositional analyses for bulk rocks and mineral separates. However, the quality of wet chemical analyses depended entirely on the skill of the practitioner, and Ian was a well-known virtuoso! Ian's skill was particularly useful when his research group developed general models for the calculation of density, heat capacity and other liquid properties as a function of composition. Because the precision and accuracy of Ian's wet chemical analyses for the major elements often exceeded what could be achieved by other methods, the errors on fitted partial molar thermodynamic quantities were substantially reduced. Ian also analyzed dozens of standards for UC Berkeley's electron microprobe.

In the 1980's, Ian made his only foray into the spectroscopy of silicate liquids. Prior to 1985, the only way to study the microscopic structure of silicate liquids was to apply spectroscopy to quenched glasses as a proxy model. However, the abrupt jump in heat capacity at the glass-liquid transition is a testament to the fundamental difference between glasses and liquids. In order to identify the configurational changes that occur as a glass is heated to a liquid, Ian worked with Jonathan Stebbins and post-doc Jim Murdoch to build an apparatus to measure the NMR (nuclear magnetic resonance) spectra of silicate liquids at high temperature. These measurements were the first to be performed under in-situ conditions and were critical for identifying the dynamic and continuous breaking of bonds that occurs in liquids, which led to a deeper understanding of why the thermodynamic properties of liquids differ from glasses and also provided insights into the mechanisms of viscous transport in melts.

For Ian, the thermodynamic property data were never a goal unto itself, and it was the application of these data to volcanic rocks through a thermodynamic model that fully captured his imagination. With his student, Mark Ghiorso, the first version of a crystal-liquid thermodynamic model applicable to magmatic systems was published in 1983. Mark Ghiorso has continued to develop this model over the ensuing decades into the widely used MELTS software package. Thus Ian's research efforts throughout the 1970's and 80's were critical to the development of subsequent thermodynamic models of crystal-liquid equilibrium, which are at the core of modern igneous petrology. They provide the only means to rigorously quantify a variety of magmatic reactions, including decompressional melting of the mantle under isentropic

conditions, the assimilation of a solid assemblage by a crystallizing magma, and the oxygen gain or loss in a cooling magma, just to name a few. Ian's students had analyzed volcanic rocks in his wet chemistry laboratory and their phenocryst and groundmass minerals with the electron probe. From the early 1970's, the ever-growing catalog of mineral analyses provided natural examples with which to test applications of thermodynamics to real magmatic systems.

Ian had a career-long interest in how ferric-ferrous ratios in magmatic liquids responded to oxygen fugacity, temperature, and pressure, as the  $fO_2$  of a magma can alter its crystallization path. This motivated experiments throughout the 1980's with post-doc Richard Sack, visiting professor Attila Kilinc, and graduate student Victor Kress, and once again Ian's wet chemical skills (this time in analyzing ferrous iron concentrations, distinct from total iron) were critical to success. From this effort has come the ability to calculate the oxidation state of any fresh volcanic rock. This led Ian to publish a landmark paper (Carmichael, 1991) in which he showed that the range in oxygen fugacity of mantle-derived magmas varies by several orders of magnitude. The most reduced magmas are those erupted at mid-ocean spreading ridges and the most oxidized are those erupted at subduction zones with the strongest enrichment in the arc geochemical signature, namely minettes. This range in the  $fO_2$  of mantle-derived lavas exceeds that observed in samples of spinel lherzolite, and this provided Ian with key evidence that if the mantle source region for minettes includes veins of phlogopite-pyroxenite in a lherzolite matrix, then these veins must be exceptionally oxidized, which in turn points to the highly oxidized nature of fluids that are derived from subducted slabs.

While Ian was making tremendous strides on the thermodynamics of magmatic systems, he was consistently pursuing field-based studies with his students. Ian always had a particular fascination with highly alkaline lavas, both because they are relatively rare and thus unusual, and also because of their diverse phenocryst assemblages, which lent themselves to Ian's earliest attempts to use thermodynamics to reveal the full range of silica activity in magmas. In the 1960's and 70's, Ian's field expeditions took him throughout the western U.S. with his students Jim Nicholls, Alan Smith, Barbara Nash, Jay Stormer and Frank Spera, as well as to far-flung locales (to Africa with Frank Brown, to the Aleutians with Bruce Marsh, and to New Guinea with Garry Lowder and Robert Heming). Ian also traveled to New Zealand, which in turn led Tony Ewart to spend a year at Berkeley in the mid-1970s. At this time, Ian began to work closer to home, as his student Wes Hildreth began his classic study of the Bishop Tuff in eastern California. Also in the 1970's, Ian's student Steve Nelson, chose fieldwork in Mexico, and was followed soon after by Gail Mahood. For the next 30 years, Ian's field-based research focused on the Mexican volcanic arc, where at least 8 more students had projects (Jim Luhr, Toshi Hasenaka, Jamie Allan, Becky Lange, Paul Wallace, Kevin Righter, Gordon Moore, Dawnika Blatter) and where he befriended several Mexican colleagues, including Hugo Delgado Granados. Ian brought nearly 40 UC Berkeley undergraduates to Mexico, who served as field assistants over the decades that Ian ran his field program there.

Ian's research in the Mexican volcanic arc led him to begin a program throughout the 1990's to quantify the role of H<sub>2</sub>O in magmatic processes through experiments with an internally heated pressure vessel. With his students Kevin Righter, Gordon Moore, Dawnika Blatter, and post-doc, Jenni Barclay, he provided

fully characterized phase diagrams applicable to the upper crust for a range of arc magmas (basalt to andesite), and, with Gordon Moore, performed a systematic study of water solubility in natural liquids covering a wide compositional range, which led to the first general model of water solubility applicable to most magmatic compositions. In a paper that is rapidly becoming a classic (Carmichael, 2002), where the phrase "andesite aqueduct" is used in the title, Ian is among the earliest proponents of the concept that the crystallization of rapidly ascending arc magmas through the upper crust is driven largely by degassing and not by cooling, which at the time ran counter to conventional thinking. It was also at this time that he developed collaborations with Chuck DeMets and Joann Stock, encouraging them in their geophysical studies of the tectonics of western Mexico.

One of the most powerful aspects of Ian's approach to the study of magmatic rocks was the consistent interplay between theory, experiment, and field studies. This gave Ian insight into what are the most pressing experiments to perform and how they can be most effectively applied to examples in the rock record. This probably explains why Ian's numerous publications have a combined number of citations that exceeds 12,000 and why he has an h-index that exceeds 60, both of which demonstrate the depth and breadth of his impact. He has been widely recognized for his research achievements through the Bowen Award (American Geophysical Union), the Day Medal (Geological Society of America), the Murchison Medal (Geological Society of London), the Schlumberger Medal (Mineralogical Society of Great Britain), and the Roebling Medal (Mineralogical Society of America). He was a Fellow of the Royal Society of London, in addition to being a Fellow in the Geochemical Society, the Geological Society of America, the Mineralogical Society of America and the American Geophysical Union.

Ian Carmichael's research record and mentoring of students was achieved while he was deeply involved with university administration and editorial duties. Ian was surely the embodiment of the saying: If you want something done, give it to a busy person. For 15 years (1985-2000), he was both an Associate Dean and an Associate Provost of the University of California at Berkeley. Prior to that, he was twice (1972-76; 1980-82) Chair of the Department of Geology and Geophysics (now Earth and Planetary Science), plus two years (1976-78) as an Associate Dean in the Graduate Division. From 1973-1990, he was Editor-in-Chief of Contributions to Mineralogy and Petrology, and for another 14 years afterward he continued as an Associate Editor. In the early 1970's, Ian found the time to write a textbook, Igneous Petrology (Carmichael, Turner and Verhoogen, 1974), which remained a classic for decades. In 1996, while Ian was still an Associate Dean and Provost, he became Director of the Lawrence Hall of Science, UC Berkeley's public science education center, which he continued for seven years. During this same time period, from 1996-1998, he was also Acting Director of the Botanical Gardens at UC Berkeley. Throughout all of this intensive and consuming administration that spanned three decades, Ian maintained a continuous series of active research grants funded by the National Science Foundation (and for much of the time, by the U.S. Department of Energy as well).

Perhaps it was because Ian was so busy with administrative duties that his time spent with students — thinking about the rocks — was so treasured. Despite two fragile knees (derived from too many jumps during his paratrooping days in the British army), Ian often found the time to teach field geology ("summer field camp")

to Berkeley undergraduates. And I should mention that, at the time, Berkeley faculty were not compensated in any way, financially or otherwise, for teaching field camp. Ian particularly valued his time with graduate students, which often began with the long-standing tradition of morning coffee. A morning chat with Ian and his vast imagination, five days a week for 4-5 years, left its mark on his graduate students. The other tradition was Ian's evening seminars. When I was a student, these occurred every Tuesday: fall, winter, spring, summer. They knew no semester bounds, had no official course number, no credit hours. The event began with a 6 p.m. Chinese dinner across the street from the university, and then we would troop back to the department for a seminar that usually began by 7:30 p.m. and was known to run till 11 p.m. and beyond. If you were the speaker, there was no such thing as being "saved by the bell." Looking back, I have never known a more demanding and probing audience when giving a lecture.

There is no doubt that Ian's greatest reputation was as a graduate advisor, who produced an extraordinary number of successful Ph.D. students. And it is not just their success, but also the diversity of what each of them does, that is so striking. Just about every aspect of the study of magmatism was pursued by Ian's students: from igneous field geology and experimental petrology to magma physics and thermodynamic modeling of melts and minerals — the Ph.D. theses of Ian's students span the spectrum. So what was Ian's secret? One factor was surely his creative and fertile imagination, as well as his infectious enthusiasm for the thrill of discovery and achievement. He had a way of making the work we were engaged in seem deeply urgent, important, and exciting; a common refrain was, "If it's worth doing, it was worth doing yesterday!" But perhaps the key ingredient was Ian's intellectual generosity, where he continuously and freely shared his ideas with his students — thrilled to see them run with an idea and become the one identified with it.

For all of us who crossed paths with Ian, he left an indelible mark. None of us escaped being shaped, in some way, by the hurricane force of his personality. For many of us, not just those of us who were his students, his exuberant pushing and prodding forced us to stretch ourselves and realize potentials we never knew we had. For this, Ian will be sorely missed and never forgotten.

Ian is survived by many loved ones, including his brother Keith, his three children Deborah, Graham and Anthea, and his six grandchildren, Andrea, Colleen, Alexander, Olivia, Ian, and Calvin. His son, Alistair, predeceased him.

*Rebecca Lange (University of Michigan) with contributions from Charlie Bacon (U.S. Geological Survey)*

October 2011

#### **UC Berkeley Ph.D. students of Ian S. E. Carmichael (29):**

J Nicholls, 1969 (U. Calgary); AL Smith, 1969 (Cal State U., San Bernardino); GG Lowder, 1970 (Malachite Resources, Australia); FH Brown, 1971 (U. Utah); WP Nash, 1971 (U. Utah); JC Stormer, 1971 (Rice U., emeritus); RF Heming, 1973 (consultant); BD Marsh, 1974 (Johns Hopkins U.); CR Bacon, 1975 (USGS); EW Hildreth, 1977 (USGS); FJ Spera, 1977 (UC Santa Barbara); SA Nelson, 1979 (Tulane U.); GA Mahood, 1979 (Stanford U.); MS Ghiorso, 1979 (OFM Research); K Kyser, 1979 (Queen's U., Canada); D Bice, 1980 (consultant); D Kosco, 1980 (lawyer); JF Luhr, 1980 (Smithsonian; deceased); JF Stebbins, 1983 (Stanford

U.); ML Rivers, 1985 (U. Chicago); G Lux, 1985 (Charles Evans Inc.); T Hasenaka, 1986 (Kumamoto U., Japan); RA Lange, 1989 (U. Michigan); VC Kress, 1990 (U. Washington); D Snyder, 1991 (RAND Corporation); PJ Wallace, 1991 (U. Oregon); K Richter, 1994 (NASA Johnson Space Center); G Moore, 1997 (Arizona State U.); DL Blatter, 1998 (USGS)

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## **BULLETIN OF VOLCANOLOGY**

### ***Electronic Submission via Editorial Manager***

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Before submitting your manuscript you need to register then log in by your user name and password.

Best regards,

*James White*  
Executive Editor, Bulletin of Volcanology

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## **LASI V WORKSHOP**

***on the physical geology of subvolcanic systems (laccoliths, sills and dykes)***

**25. October to 3. November 2012 Port Elizabeth, South Africa**

We are pleased to announce the LASI V workshop on the physical geology of subvolcanic systems (laccoliths, sills and dykes) from 25. October to 3. November 2012 in Port Elizabeth, South Africa.



*Aerial view of the Golden Valley Sill Complex.*

The main topics of the two-day conference are magma emplacement processes (field studies, experiments, and modeling), magma-sediment interaction (contact aureoles, magma contamination, and climate implications), and economic geology of subvolcanic systems (hydrocarbons, water, and ore deposits). In addition to oral and poster sessions, field trips are an important part of the LASI conferences. Prof. Grant Cawthorn

will lead the three-day pre-conference field trip to the Eastern Lobe of the Bushveld Complex. The main post-conference field trip will be to the Karoo Basin with visits to the Golden Valley Sill Complex and to the Witkop III Hydrothermal Vent Complex.



Witkop III Hydrothermal Vent Complex.

Details about the conference, field trips, organizing committee, abstract submission deadline and contact details are online at [www.lasi5.com](http://www.lasi5.com).

*Stéphane Polteau*  
Chairman of LASI 5

Senior Geologist  
Volcanic Basin Petroleum Research AS  
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### **SPECIAL VOLUMES for IAVCEI member interest**

You can see the table of content of the following recently published special volumes via the publisher websites (<http://www.sciencedirect.com/science/journal/03770273>) or you can request a copy of the published papers via PubVolc (<http://www.pubvolc.net/>)

#### **Published**

Siebert, L, Peslier, A, Macías, JL, Varekamp, JC (Eds) 2010. Continental Margin Volcanism - A volume in memory of James F. Luhr *Journal of Volcanology and Geothermal Research* 197(1-4): 1-328 (30 November 2010)

Wyszczanski, RJ, Rowland, JR, Baker, J, Wilson, CJN (Eds) 2010. Making and Breaking the Arc: a volume in honour of Professor John Gamble. *Journal of Volcanology and geothermal Research* 190(1-2): 1-248. (1 February 2010)

Németh, K, Pécskay, Z (Eds) 2010. New advances of understanding physical volcanology processes in the Carpathian-Balkan Region from a global perspective. *Central European Journal of Geosciences* 2(3): 200-432.

Roman, DC, Moran, SC, Newhall (Eds) 2011. Failed eruptions: Late-stage cessation of magma ascent. *Bulletin of Volcanology* 73(2): 115-204.

Inguaggiato, S, Shinohara, H, Fischer, T (Eds) 2011. *Geochemistry of Volcanic Fluids: A Special Issue in Honor of Yuri A. Taran*. *Bulletin of Volcanology* 73(4): 369-469.

Cas, RAF, Cashman, K (Eds) 2011. The Cerro Galan Ignimbrite and Caldera: characteristics and origins of a very large volume ignimbrite and its magma system. *Bulletin of Volcanology* 73(10): 1425-1609.

Németh, K, Haller, MJ, Siebe, C (Eds) 2011. From maars to scoria cones: the enigma of monogenetic volcanic fields. *Journal of Volcanology and Geothermal Research* 201(1-4): 1-412 (15 April 2011)

Cas RAF, Russell JK, Sparks RSJ (Eds), 2011. Advances in Kimberlite Volcanology and Geology. *Bulletin of Volcanology* 73(8): 939-940.

Thouret, J-C., Németh, K. (Eds), 2012. *Volcano Geomorphology: landforms, processes and hazards*. *Geomorphology* 136(1): 1-176 (1 January 2012)

### **NEW JOURNAL - Journal of Applied Volcanology (Springer)**

Sponsored by  **Cities and Volcanoes Commission**

**Journal of Applied Volcanology** is an international journal with a focus on multi-disciplinary applied research and the societal impacts related to active volcanism. The journal aims for rapid publication of research papers at a high scientific level.

Research topics covered by the journal include; understanding the impacts of volcanoes on communities, improving risk management and enhancing community mitigation, preparedness, response to and recovery from volcanic hazard events; development of analytical instruments and methods; new proxies and lab techniques; methods of observation; and tools and techniques for remote sensing.

The journal welcomes proposals for special issues reflecting the trends in volcanology and other related disciplines.

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## CALL FOR BOOK REVIEW ITEMS

Bulletin of Volcanology publishes high quality and informative book review articles. If you come across any interesting newly published books (also if it is published in languages other than English!) that could be an interesting read for IAVCEI members. Book review articles have to be submitted by the Authors via the on-line submission site of Bulletin of Volcanology:

<http://buvo.edmgr.com/>

If you are not registered yet, you need to register first and then use your user name and password to access the BV Online Submission site. Please choose Book Review Articles as article style and K Nemeth as Handling Editor.

Wiley-Blackwell offers a 20% discount on books reviewed for Bulletin of Volcanology for IAVCEI members. As such a Promotional Code will be provided that members can use to order the reviewed item from Wiley-Blackwell's website.

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## IAVCEI COMMISSIONS' NEWS:

### Outline procedure (5-Step Plan) and goals for checking the health of IAVCEI Commissions

At the first meeting of the new IAVCEI EC in July 2011 (Melbourne), the EC decided to review the state of IAVCEI Commissions (see last IAVCEI News, 2011: No. 1-3). Below is the procedure that the EC are following to complete this task.

#### POSSIBLE GOALS:

1) Keep number of commissions to 12 – 15? (current number of active ones = 16; inactive = 9. With the stated aim (by Secretary General; attachment to IAVCEI Internal Norms message, early August) of every commission holding a meeting or workshop every 4 years, this implies ~ 4 meetings per year which seems a sufficient number.

2) Keep Working Groups (WG) within Commissions and Task Groups (TG) outside commissions. TG has a very specific task and lifetime; can evolve into a commission. WGs exist within a commission. New WGs and TGs require EC approval.

3) Suggest a four-year duration\* for Commissions and a simple renewal procedure that requires EC approval mid-term at a Scientific Assembly EC meeting (e.g., next one will be Kagoshima in 2013; this will be an action item for the EC at the 2013 meeting) or by EC without meeting. If approved, a continuing Commission will begin its next 4-year period of activity mid-term of the IAVCEI quadrennium. Commissions will produce a brief "health" report before the IUGG/IAVCEI General Assembly, and a more extensive report (as presently required). An earlier theme in IAVCEI Commissions was that they had limited lifetimes.

[\* This could cause complexities with suggestion by Secretary General (IAVCEI Internal Norms message, early August) that Commission leaders are appointed for a 2-year term; commission could decide whether to adopt the 2-year plan internally?]

For existing Commission WGs - also suggest a 4-yr term, with

renewal decided within commission.

4) Complete review before 2013 Scientific Assembly in Kagoshima.

#### PROCEDURE:

1) Identify all commissions via list from Secretary General and IAVCEI website, with leaders and contact info. (Examine available information on commission activity.

2) Contact each commission leader - ask for a response to a short check-list; include Working Groups  
- ask for suggestions for future improvements, methods of operation,

3) Consider inactive commissions; close or combine with another.

4) Consider active commissions: examine Working Groups, need to expand or simplify, future meetings.

5) Consider newly proposed commissions – how to fit in; combine with existing one or start new one?

**End:** Write short report to EC on commissions: – take suggestions on future plans for commissions.

*S. Self & H. Delgado G*

Members of the IAVCEI Executive Committee

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## CALL FOR MANUSCRIPTS:

**GSL Special Publication series: Understanding Mixed Siliciclastic-Volcaniclastic Depositional Systems.**

**M. Sacchi, K. Németh, de Vita, Di Vito, F. Molisso (eds)**

Electronic submission of manuscripts is still open for a special volume on

*“Understanding Mixed Siliciclastic-Volcaniclastic Depositional Systems”*

in the **Geological Society of London Special Publication** series via the following link:

<http://gslspecpubs.allentrack.net>

If you consider to submit a manuscript to this book, you still can do it until March 2012.

## ANNOUNCEMENT

### IAVCEI 2013 Scientific Assembly

#### Forecasting Volcanic Activity:

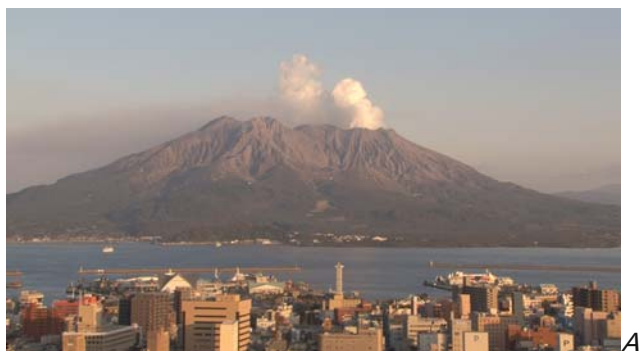
*Reading and Translating the Messages of Nature for Society*

July 20-24, 2013, Kagoshima (Japan)

<http://www.iavcei2013.com>



It's our pleasure to invite you to the IAVCEI Scientific Assembly in Kagoshima, Japan from July 20th (Sat) to 24th (Wed) July, 2013. The IAVCEI Scientific Assembly provides a unique opportunity for volcanologists to gather and exchange ideas and experiences. The main theme of the conference will be "Forecasting Volcanic Activity: Reading and Translating the Messages of Nature for Society." The conference will cover the complete range of IAVCEI research interests, ranging from planetary volcanology and chemistry of the Earth's interior to eruption dynamics to a practical understanding of the environmental and social impact of eruptions.



*view of Sakurajima volcano from the Kagoshima city.*

The conference consists of 4 full days scientific sessions with keynote lectures and oral/poster sessions, and one-day mid-conference field trips to Sakurajima, Kirishima and other nearby volcanoes. Sakurajima volcano is currently exhibiting repeated vulcanian eruptions while degassing continuously. Shinmoedake of Kirishima volcano reactivated with sub-plinian eruptions in January 2011 and continues repeating vulcanian eruptions. We will also provide occasions to visit a variety of volcanoes and volcanic fields in Japan and in other parts of Asian as pre- and post-conference field trips.

Kagoshima city has 600,000 inhabitants who are living with volcanoes, locating only several km from Sakurajima volcano. The main conference venue will be held at the Kagoshima Prefectural Citizens Exchange Center, which is within walking distance from the city center. Participants will be able to see the erupting volcano from there. Kagoshima is also proud of its unique culture, historical sites, food and hospitality. We are looking forward to seeing you in Kagoshima to talk about, culture

and volcanoes.



*Sub-plinian eruption of Shinmoedake (Kirishima volcano) on January 27<sup>th</sup>, 2011 (photo by S. Takarada),*



*Main conference venue: the Kagoshima Prefectural Citizens Exchange Center*

**E-mail:** [info@iavcei2013.com](mailto:info@iavcei2013.com)

**Web:** <http://www.iavcei2013.com>

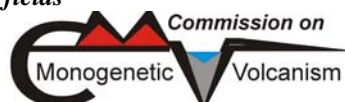
*Toshitsugu FUJII*

Chair of the IAVCEI 2013 Organizing Committee.

## FUTURE EVENTS for IAVCEI member's interest

### Seventh Gulf Seismic Forum Seismology and Earthquake Engineering in the Arabian Gulf Region

*Session sponsored by the IAVCEI Commission on Monogenetic Volcanism: "Volcanism and seismicity in monogenetic lava fields"*



January 22-25, 2012, Saudi Geological Survey, Jeddah, KSA  
[www.sgs.org.sa](http://www.sgs.org.sa); <http://7gsf.info/>

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### 10th International Kimberlite Conference

6-11 February, 2012, Bangalore, India  
Web: <http://www.10ikcbangalore.com/>

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**IAVCEI – IAS 4th International Maar Conference:** a multidisciplinary congress on monogenetic volcanism  
*Sponsored by the IAVCEI Commission on Monogenetic Volcanism and Volcanogenic Sediments*



20 – 24 February 2012, Auckland, New Zealand  
Web: <http://www.4imc.org.nz>

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### 1st International Congress on management and awareness in protected volcanic landscapes

21 – 25 May 2012, Olot, Spain  
E-mail: [info@volcandpark1.com](mailto:info@volcandpark1.com)

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### Volcano-Ice Interactions on Earth & Other Planets Conference III

Fairbanks, Alaska, 18-22 June  
15 February 2012  
Web:

[http://volcanoes.dickinson.edu/iavcei\\_iacs\\_viic/pdfs/vii3\\_first\\_circular.pdf](http://volcanoes.dickinson.edu/iavcei_iacs_viic/pdfs/vii3_first_circular.pdf)

Contacts: Chris Waythomas, Alaska Volcano Observatory, USGS, Anchorage: [cwaythomas@usgs.gov](mailto:cwaythomas@usgs.gov)  
Christian Huggel, University of Zurich: [christian.huggel@geo.uzh.ch](mailto:christian.huggel@geo.uzh.ch)

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**Geomorphic Processes and Geoarchaeology:** From Landscape Archaeology to Archaeotourism (Moscow-Smolensk, Russia) - 27-31 August, 2012

<http://geomorphology.ru/images/upload/newsfond156/180.pdf>

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**29th IAS Meeting of Sedimentology** (Schladming, Austria) - 10-13 September 2012

Web: <http://www.sedimentologists.org/ims-2012>

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**Hopi Butte Maar-Diatreme Field Workshop** (Winslow, Arizona) – October - November 2012 (date is pending, 1 week long field workshop style meeting for about 50 participants)

Contact: James DL White – [james.white@stonebow.otago.ac.nz](mailto:james.white@stonebow.otago.ac.nz)

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**4th International Workshop on Collapse Calderas** (Vulsini, Italy) - 23 – 29 September 2012

E-mail: [acocella@uniroma3.it](mailto:acocella@uniroma3.it), [ageyertraver@gmail.com](mailto:ageyertraver@gmail.com)

Website: <http://www.gvb-csic.es/CCC.htm>

*Sponsored by the IAVCEI Commission on Collapse Calderas*



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### 2012 GSA Annual Meeting & Exposition:

Investing in the Future (Charlotte, NC) - 4–7 November 2012  
Web: <http://www.geosociety.org/meetings/2012/>

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### Cities on Volcanoes 7 (Colima, Mexico) - 18-23 November 2012

E-mail: [cov7@citiesonvolcanoes7.com](mailto:cov7@citiesonvolcanoes7.com)  
Website: <http://www.citiesonvolcanoes7.com>

*Sponsored by the IAVCEI Cities and Volcanoes Commission*



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**Link between rift, tectonism and intracontinental volcanism –**  
May 2013, Saxony, Germany

E-mail: [Joerg.Buechner@senckenberg.de](mailto:Joerg.Buechner@senckenberg.de) [Joerg Buechel]

Website: will be announced

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**IAVCEI Scientific Assembly - 2013:** Forecasting Volcanic Activity (Kagoshima, Japan)

July 20-24, 2013

Web: <http://www.iavcei2013.com/>

**IAVCEI 2013**



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**IUGG 2015 General Assembly**, Prague, Czech Republic. Suggestions for IAVCEI symposia scientific themes are invited. Ideas from IAVCEI Commissions are especially welcomed. Please send your ideas to any of the IAVCEI Executive Committee members and/or Commission leaders.

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Next Issue of the **IAVCEI News** will be published on **15<sup>th</sup> April 2012**. Articles, notes, news or any items relevant to the IAVCEI community must be submitted by **1<sup>st</sup> April 2012** to be published in the next Issue.

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**Editor-in-Chief:** Dr Károly Németh (Massey University)

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