

IAVCEI *News* 2012 No: 1

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

FROM THE PRESIDENT

Dear Colleagues,



*Ray Cas
President of the
IAVCEI*

In this brief summary, I am updating members on matters that the IAVCEI Committee has been considering since the beginning of its term.

Response to Free Membership

I am pleased to announce that there has been a surge in new applications for membership of IAVCEI since it was announced that membership fees are no longer compulsory. The IAVCEI Committee will report in more detail on membership patterns later in the year when the picture is clearer. We encourage those who are

able, to continue to be Donor Members. All Donor Members will be acknowledged on the IAVCEI website.

Financial reporting

Those who attended the IAVCEI Business Meeting at the IUGG General Assembly in Melbourne, in July 2011, heard the report of IAVCEI's financial status for 2011 from Secretary General, Joan Marti. This financial summary, with explanations, is now presented in this Newsletter. Although IAVCEI's finances are healthy, the Committee is taking a conservative approach with expenditure until the impact of removing compulsory membership fees becomes apparent. This won't be until the end of this year, after the first year of the new membership scheme of free and donor membership options.

Financial support for IAVCEI meetings and workshops

Given the financial uncertainties facing IAVCEI, the Committee has decided that proposals for funding support for meetings and workshops can only be considered from IAVCEI Commissions. In the past, the Committee has favourably considered proposals from individual IAVCEI members and related organisations, however, we feel that priority must go to supporting IAVCEI sponsored activities and members, and that in the current circumstances IAVCEI can no longer support the activities of other organisations unless a IAVCEI Commission is officially involved in sponsoring the activity.

IAVCEI becomes a co-host of volcano listerv

Many who have been involved in the international volcanological community for some years will be familiar with the email volcanology news service provided for many years through the initiative of Jonathan Fink and the Arizona State University, and the Global Volcanism Program of the Smithsonian Institute, Museum of Natural History, Washington. Jonathan has now moved to Portland State University, which now also becomes a participating host. Since IAVCEI and many of its members have been using the volcano listerv service for a long time to disseminate information about its conferences, research commission workshops, conference support schemes, etc, I approached the foregoing organisations to seek agreement for IAVCEI to also become a formal co-host, which I am pleased was agreed to, and is now acknowledged in the footer to all volcano listerv email announcements. I invite those of you who are not listed to receive the news emails through the listerv to contact: volcano@asu.edu, requesting your email address be added to the email distribution list. This is free, and will help to keep you informed about global volcanological news items. You can also submit news items to volcano@asu.edu

Putting the Chemistry back into the IAVCEI

It has concerned me for some time that fewer geochemists participate in IAVCEI activities, including our major conferences.

Volcanology cannot be understood without understanding how and where magmas form, their chemical characteristics and the effects of magma chemistry on the physical properties of magmas and the way they erupt. Magma volatile chemistry is also crucial to understanding eruption processes, impacts of volcanism on global climate and the formation of many natural resources. Igneous geochemistry is therefore as important now as it was in the past.

The decline in participation in IAVCEI by many of the geochemical community has coincided with the advent and increasing popularity of the geochemically focused Goldschmidt conferences. Goldschmidt conferences are excellent, but I encourage the geochemistry community to renew engagement with IAVCEI as a fundamental construct in maintaining the connection between geochemistry with volcanology. Volcanology and geochemistry are intertwined, and many major research questions can only be adequately addressed with a combined, two pronged approach. I look forward to seeing our geochemical colleagues at future IAVCEI conferences, and I also invite the geochemistry community to initiate and renew geochemistry research commissions on geochemical themes. Vice Presidents Steve Self and Hugo Delgado are currently reviewing the commissions structure (see their report in this issue) and would be very interested in hearing from any group of researchers with a common research interest wanting to consider establishing a new IAVCEI research commission.

Best wishes,



Ray Cas,
President,
On behalf of the IAVCEI Executive Committee.
Monash University, Australia.

REPORT ON ATTENDANCE BY AN IAVCEI VICE PRESIDENT AT A ROUNDTABLE ON EXPLOSIVE VOLCANISM AND VOLCANIC HAZARDS

held by the Committee on Seismology and Geodynamics (COSG) of the Board on Earth Sciences and Resources of the National Research Council, US National Academy of Sciences.

This one-day meeting took place at Arizona State University (Tempe, AZ, USA) on 6 March 2012. In attendance were 25 representatives from US universities and institutions, US government agencies (including US Geological Survey Volcanic Hazards Program (VHP) and National Science Foundation (a federal source of research funds)), and COSG.

The purpose was to take stock of the state-of-the-art in volcanic eruption and related hazard studies in the USA, and have a brief look at some existing initiatives and facilities that support this work. This was followed by an initial brainstorming session for what might be needed to promote a future major research

initiative involving academic institutions and government agencies that would help a significant number of groups at universities and institutes nation-wide to develop a more resilient society when under threat from the products and effects of explosive volcanic eruptions.

There were presentations on the USGS VHP, volcanism-climate-and-related impacts, remote sensing and gas monitoring, large-scale computing in volcanology and VHub, NSF-supported volcanology research, and the current "visions and grand challenges". This was followed by the "roundtable" discussion, where participants strove to suggest initial ideas for improving our physical understanding of explosive volcanism and forming a strategy for enhancing observational capacity, as well as integrating computational and experimental facilities. Several areas of interest for further consideration were identified.

COSG and its predecessors are the forum where national initiatives such as IRIS (Incorporated Research Institutions for Seismology), UNAVCO (geodesy), and EarthScope (seismology and crustal structure) were incubated. After this roundtable discussion, a report (? white paper) will be produced, followed by perhaps further workshops with more attendees from diverse backgrounds in volcanology, where suggestions will be refined.

Stephen Self, 8 March, 2012.

BULLETIN OF VOLCANOLOGY Electronic Submission Site via Editorial Manager

Bulletin of Volcanology now operates an on-line submission tool such as Editorial Manager.

From now you have to submit your manuscript on-line via

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

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

IAVCEI EARLY CAREER VOLCANOLOGISTS

This public group is intended to be a forum for people in early stages of their careers in volcanology and related fields (including students). Topics include networking, sharing experiences that are common to early career researchers, and developing ideas for how IAVCEI can both support and engage with early career workers. Mechanisms for sharing information at this site include: discussion board, blog, wiki, and posting resources (e.g., documents, datasets).

Join the Group:
<https://vhub.org/groups/iavencearlycareer>

IAVCEI FINANCIAL REPORT FOR 2011

Prepared by Joan Marti, IAVCEI Secretary General

		Sub-total	7538
	Grants	IAVCEI Grant	0
		Sub-total	0
	Others	social events IUGG GA Melbourne (EC dinners, IAVCEI dinner, catering commissions workshops)	5031.52
		Sub-total	5031.52
	Total Expenditures	TOTAL	36970.86
Balance at December 16, 2011			
		Total Receipts	147861.26
		Total Expenditures	36970.86
		Total in IAVCEI account at December 16, 2011	110890.4

* Travel and accommodation expenses of Adelina Geyer (Deputy Secretary and Web master) and Joan Martí (Secretary General of IAVCEI) to attend the IUGG GA and IAVCEI GA, in Melbourne, Australia in June-July 2011. Travel and accommodation expenses of Adelina Geyer (Deputy Secretary and Web master) to attend the meeting of the IUGG commission on data management in Vienna, Austria, April 2011

PROVISIONAL BUDGET 2012

Total left in IAVCEI account at December 16, 2011: **110890.4 euros**

Foreseen incomes:

- Donations 10000.00 euros
- Annual payment from IUGG 20000.00 euros
- 30 € levy from CoV 10000.00 euros

Total (provisional): 150890.4 euros

Foreseen expenses:

- webserver (maintenance and software licence for email) 4500 euros
- SG, President and webmaster travels 4000 euros
- minor expenses (consumables, etc) 500 euros
- financial support to meetings and workshops 25000 euros

Total (provisional): 32000 euros

Total left in 2012 (provisional): 117890 euros

STATUS OF THE IAVCEI COMMISSIONS

Dear Colleagues,

The Scientific Commissions established within IAVCEI are devoted to the international promotion of research in any specialty of volcanology and chemistry of the Earth's interior. Task Groups, these days sometimes called Working Groups (WGs), are commissioned by the IAVCEI to conduct specific tasks of general interest for IAVCEI, while the Scientific Commissions are created when a group of people want to share ideas, work, and knowledge on a specific scientific topic related to igneous geology. Some commissions have WGs within their structure.

Commissions are the engines of IAVCEI. Unfortunately, not all currently listed IAVCEI commissions show the same degree of activity. The mandate to the new vice-presidents when they took over the post last year during the IUGG meeting in Melbourne, Australia, was to carry out a careful review of the commissions' activities in order to keep only those commissions that are really active, thereby reducing the number of commissions.

To that end, a letter and questionnaire was sent to 19 IAVCEI commissions, 3 joint commissions (with IASPEI, IAGA and IAPSO), and 3 non-commission-level groups; total 25 (i.e., all commissions and groups previously identified).

Twenty responses were obtained; there was no reply or communication from one "active" (Volcano Seismology), two "inactive" (Granites and Mitigation of Volcanic Disasters), and one joint-IASPEI commission (Heat Flow). One non-commission-level group (WG on Eruption Database) is not active but past representatives responded.

Below is a summary of the responses (highlighted) to the questions. Responses are separated into three groups: IAVCEI commissions (n=16), non-commission-level groups (n=2), and joint commissions with IASPEI (n=2).

Group1: IAVCEI Commissions [some are joint with other associations besides IASPEI]

Q1) Is the current leadership/organization (board) of the Commission listed on the IAVCEI Website up to date?

8 out of 16 required organizational information to be updated on the IAVCEI website.

Q2) Does the Commission fulfill the following requirements for Commissions, recently proposed by the Secretary General as future guidance. Y/N. If not, what is missing?

- o Has active leader and organizing committee
- o Organize a workshop or meeting (or equivalent activity) at least once every 4 years
- o Organize (or co-organize) sessions that contribute to IAVCEI General and Scientific Assemblies.
- o Report activity to IAVCEI EC at least once every 4 years.
- o Keep a webpage or site and an updated list of members. If the web address is different to that on the IAVCEI website, please give it.

11 out of 16 answered yes to all 5 requirements; 3 have 4/5 and 2 have < 4 (no active website or member list, most commonly).

Q3) Does the Commission have a Working Group (or groups) or other similar subgroups/sub commissions within its structure? If so, please list.

Only one commission, Cities and Volcanoes, has a WG; one has an equivalent group (an editorial board, Commission on Statistics in Volcanology), Commission on Chemistry of Volcanic Gases reports a future WG as part of an external proposal request; 3 more are planning for WGs in the future.

Q4) a) Has the Commission achieved the original goals for which it was originally created?

13 answered yes; 3 answered no or not yet.

b) Would the Commission consider combining with or absorbing another commission or working group(s)?

Yes = 5; no or possibly (and wish to consider closer collaborations) = 5; no = 6.

c) Can you indicate which commissions or working groups could effectively be combined with your commission?

- Commission on Volcanogenic Sediments/Commission on Monogenetic Volcanism/ + Commission on Volcano-Ice Interactions.
- Commission on Volcanic Lakes/Commission on Chemistry of Volcanic Gases + part of Commission on Remote Sensing + Volcanism and Earth's Atmosphere.
- Cities and Volcanoes/Mitigation of Volcanic Disasters.
- Commission on Statistics in Volcanology/Volcanic Eruption Database/Commission on Tephra Hazards Modelling/Cities and Volcanoes.
- Commission on Arcs Magmatism could combine with another commission (undefined).

Q 5) How long should a commission board be in place before an election is held within the commission to replace or return the board? 2 or 4 years.

13 favour 4 years; 2 favour 2 years; 3 suggest both or have another model (response includes 2 non-commission-level groups)

Q 6) If you could make change(s) to the Commission, or commissions in general, what would they be?

Q 7) Please provide other comments on your Commission, or commissions in general, aimed at improving the health of the IAVCEI commissions:

The answers to these two questions are summarized as the responses were interrelated. Several responders answered only one of these questions, but their answers are applicable to both.

- Cities and Volcanoes and International Volcanic Health Hazard Network are happy with their structure.
- Arcs Magmatism – needs new leaders and re-styling.
- Commission on Tephra Hazards Modelling suggests uniform web page, hosted at IAVCEI for all commissions. Partly echoed by Commission on Volcanic Lakes, Commission on Collapse Calderas and others – need to improve and update web

pages. Commission on Volcano-Ice Interactions suggests centralized web-hosting.

- Commission on Monogenetic Volcanism suggests that all commissions use vHub to host IAVCEI activities.

- Commission on Volcano-Ice Interactions suggests an IAVCEI-supported portal for commission outputs (much like Pubvolc.net).

- Commission on Chemistry of Volcanic Gases (also involving World Organization of Volcano Observatories) suggests that IAVCEI host a new journal on observatory science.

- Several commissions (6) would like to see more inter-commission communications, including annual reports to the EC published on website, and also inter-commission sessions at IAVCEI Assemblies.

- Several commissions (4) would like more funds for website support, travel support for leaders to IAVCEI assemblies, and other “activities”.

- Several (3) responses commented that commissions should be able to act freely.

Other suggestions:

- Commissions support research-funding proposals by groups outside IAVCEI and work with those groups.

- Commissions seek involvement with other international groups (e.g., IVATF).

- Use commissions as a vehicle to support careers of young scientists.

Group2: Non-commission-level groups

These are working groups not formally part of a commission.

WG on Electromagnetic Studies of Earthquakes and Volcanoes (inter-association WG with IAGA and IASPEI: Answers yes to Q 1-2; Q3, has an international working group study within its structure (on Taal Volcano); Q4, seeks more collaboration with other WGs and Commissions; Q5, favours 4 year cycle; Q6/7, promote more inter-commission meetings at assemblies; increase inter-commission communications within IAVCEI by e-mail.

WG on Volcano Acoustics – response by a newly proposed leader (recommended by past leaders).

Q1 – there was little info on IAVCEI website; no description of WG. Q2, 3/5; Q3, N/A;

Q4, could combine with Volcano Seismology; Q5, prefer 4 year cycle; Q6, expand activities of commission.

Note: responses and goals of these two WGs are similar to commissions in Group 1.

WG on Eruption Database: Inactive and will be absorbed into the new Global Volcanism Model initiative; this, in turn, will become associated with an IAVCEI Commission.

Group3: Long-standing joint commissions (JC) with IASPEI and other associations, etc.

These are separated from regular commissions because their only apparent activity is to organize sessions at IUGG GAs. This focus may change in the future, but IAVCEI input into them has been lacking in recent years.

JC on Tsunami: past leader has responded, but present leader has not.

JC on Physics and Chemistry of Earth Materials: leader has responded; welcomes new IAVCEI representation; IAVCEI should nominate an individual.

JC on Heat Flow: Leader named on IASPEI website was sent questionnaire but has not responded. No apparent active IAVCEI representative.

Further actions:

We have suggested to the Executive Committee three broad options: 1) leave things more-or-less as they are, trying to revitalize some commissions, and close or merge a couple; 2) attempt a reorganization and regrouping, as outlined below; 3) attempt some other grouping and plan (the EC was invited to suggest different models). The next section deals with our ideas on 2).

Perhaps, the way the commissions are currently organized is a problem? Commission leaders are often well-established scientists who do not have the time for commission responsibilities. We should strive to involve more young scientists to energize all commissions together with the more senior scientists. One way to fix this is to suggest that commissions modify their rules to recycle the leadership every 4 years. But before this, perhaps IAVCEI should rearrange the current commission structure.

We have suggested a model of five groups, under which all current commissions and working groups can be organized according to common interests. A consequence of this rearrangement, which was indicated in the responses from some commissions, would be closer inter-commission collaboration.

This rearrangement would ensure more intense participation of the present IAVCEI commissions, attract more members, and help create “home commissions” for groups already working on matters that might form new commissions or working groups (e.g., those working on deformation or lava flows). The leaders of commissions can suggest the creation of new commissions or working groups as needed. This reorganization does not force a change in the internal organization of the existing commissions, but all commissions will be encouraged to adopt a 4-year cycle.

It is important to make IAVCEI a closer and more efficient organization to its members. We will shortly consult leaders of active commissions, sending an outline of the suggested rearrangement, to help us make the best decisions on reorganization of IAVCEI commission structure. At the same time, ideally, the leaders should consult their members to obtain their ideas.

Stephen Self and Hugo Delgado Granados
IAVCEI Vice Presidents

REPORT ON THE IAVCEI – IAS 4TH INTERNATIONAL MAAR CONFERENCE 20-24 February 2012, Auckland, New Zealand

In the spectrum of volcanological phenomena maars are a relatively minor feature. Nonetheless because of their often scenic attributes and because of their association with diatremes and the link to diamond pipes they have attracted sufficient interest to underpin a series of conferences known as the International Maar Conferences. The first such conference was held in the classic maar terrains of Germany, the second in Hungary. The third IMC, held in the Andean foothills at Malague in western Argentina saw a development toward the wider context in which maars occur, that of the small scale basaltic systems that often manifest themselves at the earth’s surface as fields of volcanic cones. Last February saw the 4th in the series held in Auckland New Zealand, a city almost

uniquely located in the centre of a potentially active basaltic volcanic system.



Participants on the 4IMC pre-conference field trip in front of the Pukekohe East maar in the South Auckland Volcanic Field.

The 4th IMC in Auckland attracted over 70 participants from many parts of the world to a workshop style format in which the various phenomena of small scale magmatic systems were discussed under five broad themes; magmatic systems, shallow subsurface processes, eruptive processes, environment and economy, and hazard. The great benefit of a workshop style format was illustrated by the participation of delegates from widely differing scientific persuasions in all of the diverse discussions that resulted. In particular the Auckland IMC broadened the scope of these 'maar conferences' to encompass a broader consideration of the nature and origin of small scale magmatic systems to address their nature, occurrence and the hazards they present to their adjacent communities.



Is that really true??? ...Our President, Ray Cas, and the "father of the phreatomagmatic maar model" Volker Lorenz may have another idea ...

Small scale basaltic systems represent the low volume of a wide spectrum of basaltic magmatic systems that at the largest end includes large igneous provinces. In recent years these have become a focus of many research groups and IAVCEI has recognized their importance in the establishment of the commission on monogenetic volcanism. A particular exciting development has been the recognition that very small batches of magma, if they make it to the surface, can carry the chemical signal of the source from which they came.

The 4th IMC was preceded by a well attended field trip to the monogenetic volcanoes fields of northern New Zealand. The varied and

exciting geology of the South Auckland and Auckland Volcanic Fields was complemented by excellent (and for the 2012 southern 'summer' unusual) weather. Delegates were introduced to a great variety of deposits and landforms and there were excellent discussion on the role of water in eruptions and on the competition between the magmatic system and the surficial environment that is a feature of small scale volcanic systems.



Pre-conference field trip participants front of the crater of the Mangere scoria cone complex in the Auckland Volcanic Field.

The main conference as held at the University of Auckland city campus ably assisted by the conference organizer 'Absolutely Organised'. A feature of the week was an intra-conference excursion to Auckland's youngest volcano (last eruption 500-600 years ago). Another key occasion was 'dinner in a vineyard in a maar' when all of the themes of the conference were combined in a social occasion at the Villa Maria vineyard centre.



Intra-conference field trip to Rangitoto Island lead by Ian Smith (Auckland University)

Following the conference there was a 'to be envied' trip, which introduced delegates to the varied monogenetic fields of southern New Zealand.

As conveners, we would like to acknowledge the sponsorship from IAVCEI and IAS as well as support from the Geological Society of New Zealand., Massey University and the University of Auckland. We appreciate that many delegates traveled great distances to make this 4th IMC a scientifically exciting and socially rewarding event. Small scale magmatic systems have a great deal to tell us about the fundamental processes of the Earth and how humans may live with these. We immensely gratified that the series of IMC conferences looks set to continue with future meetings in **Mexico (2014)** and **China (2016)**.

Co-convenors

Karoly Nemeth (Massey University)

Ian Smith (The University of Auckland)



Time to celebrate ... Mexico will host the 5IMC in 2014. People from left to right: Miguel Haller from Argentina (Former Chairman of the 3IMC), Hugo Delgado-Granados from Mexico (IAVCEI Vice-President), Yishai Weinstein from Israel (Former participant of the 2IMC and 3IMC), Gerardo Carrasco-Núñez from Mexico (Proponent/Chairman of the 5IMC).

Publications of the 4IMC (they are available from the Commission on Monogenetic Volcanism vHub site, see links provided)

Arentsen, K., Németh, K., Smid, E. (Eds): 2012. Abstract Volume of the Fourth International Maar Conference A Multidisciplinary Congress on Monogenetic Volcanism. Auckland, New Zealand 20-24 February 2012. Geoscience Society of New Zealand Miscellaneous Publication 131A. [ISBN 978-1-877480-15-7; ISSN Online 2230-4495; ISSN Print 2230-4487], pp. 1-144.

LINK: <https://vhub.org/resources/1434>

Németh, K., Agustin-Flores, J., Briggs, R., Cronin, S.J., Kereszturi, G., Lindsay, J.M., Pittari, A., Smith, I.E.M.: 2012. Field Guide: Monogenetic Volcanism of the South Auckland and Auckland Volcanic Fields. 4IMC Auckland, New Zealand 20-24 February 2012. Geoscience Society of New Zealand Miscellaneous Publication 131B. [ISBN 978-1-877480-16-4; ISSN Online 2230-4495; ISSN Print 2230-4487], pp. 1-72.

LINK: <https://vhub.org/resources/1440>

Kaulfuss, U., Németh, K., White, J.D.L.: 2012. Field Guide: Miocene Subaerial to Subaqueous Monogenetic Volcanism in Otago, New Zealand. 4IMC Auckland, New Zealand 20-24 February 2012. Geoscience Society of New Zealand Miscellaneous Publication 131C. [ISBN 978-1-877480-17-1; ISSN Online 2230-4495; ISSN Print 2230-4487], pp. 1-58.

LINK: <https://vhub.org/resources/1436>

Smith, I.E.M., Lindsay, J.M., Németh, K., Cronin, S.J.: 2012. Program Book of the Fourth International Maar Conference: A Multidisciplinary Congress on Monogenetic Volcanism and Intra-Conference Field Guide: Rangitoto Island. Auckland, New Zealand 20-24 February 2012. Geoscience Society of New Zealand Miscellaneous Publication 131D. [ISBN 978-1-877480-18-8; ISSN Online 2230-4495; ISSN Print 2230-4487], pp. 1-34.

LINK: <https://vhub.org/resources/1438>

JIM LUHR AWARD - 2012

The IAVCEI-endorsed Jim Luhr Award is designated to be granted to scientists worked continuously with outstanding results on monogenetic volcanism with special relevance to understand phreatomagmatism and its role in the evolution of mafic explosive volcanism. Nominations are especially encouraged for researchers made their research widely available to both the scientific and public communities. Nomination packages for the Luhr Awards should include:

1. A formal nomination letter, not to exceed three pages,
2. A curriculum vitae of the nominated person, and
3. At least three supporting letters originating from different institutions.

Nomination packages are due 6 months before the actual IAVCEI-IAS International Maar/Monogenetic volcanism Conferences and should be directed to the actual Chairman of the IMC. They should be sent by e-mail (as PDF or DOC documents). A single hard copy of certificates and recommendation letters should also be sent by mail. The Award consists of an IAVCEI endorsed certificate, free or reduced registration for the actual IMC, a prize provided by the LOC of the actual IMC, and an invitation to present a plenary talk during the IMC. The first Jim Lhr Award in 2009 was given to **Roberto Sulpizio (University of Bari, Italy)**.

The **2012 Jim Luhr Award** been granted to **James DL White (University of Otago, New Zealand)**



James White (right) on the Rangitoto intra-conference fieldtrip of the 4IMC (2012 February)

NOMINATION LETTER

Dear Sirs,

Quebec City, December 13, 2011

Dr. James D.L. White has worked continuously, with outstanding results, on mafic explosive eruptions, monogenetic volcanism and magma-water interaction since the late 1980s. His PhD thesis at the University of California (Santa Barbara), supervised by R.V. Fisher, was on several maar-diatreme volcanoes of the Hopi Buttes volcanic field of NE Arizona. As I've had the chance to see for myself recently during a field trip with James, the Hopi Buttes volcanic field is one of the best places on Earth to study diatremes and maar deposits, given the superb exposures at various erosional levels. This allowed him, in his famous 1991 paper in

the Bulletin of Volcanology, to describe the evolution of maar-diatreme volcanoes of the Hopi Buttes field from top to bottom. Before his field-based work, “few studies (had) addressed in any detail the specific links between surface and subsurface processes during maar-diatreme or related types of phreatomagmatic eruptions”. In this paper he showed, among other things:

- that magma had interacted explosively with wet muddy sediment, instead of pure water, during the initial phases of phreatomagmatism;
- that during the late stage of the eruptions, “weakly explosive eruptions, and the depth of the vent at this stage, combine(d) to prevent much of (the) ejecta from escaping the vent”;
- that the lower diatreme deposits consist of a “well-mixed mass of tephra and wall rock fragments”, sometimes containing vertical columns, as is the case in some kimberlite pipes.

This highly influential, precursor paper has been cited 91 times in Scopus, and 106 times in Google Scholar. Among the papers that describe diatremes from a volcanological point of view, only Volker Lorenz’s 1986 Bull. Volc. paper has more citations.

The third on this select list of highly cited diatreme papers is again by James, and is called “Impure coolants and interaction dynamics of phreatomagmatic eruptions”, published by JVGR in 1996. In this more theoretical contribution, he elaborates on the idea that although it is possible to reproduce some aspects of phreatomagmatic eruptions in the laboratory by mixing pure water and magma in a crucible, in nature, phreatomagmatism normally involves “dirty” coolants. He shows that wet sediment should mix better with magma than pure water, because of reduced density and viscosity contrasts. In this paper, James also stresses that “there is little reason to accept that generalized, environmental water-magma ratios control volcano morphology”. Specifically, he proposes that the interplay between factors such as (1) the exact site where magma encounters groundwater – influencing the degree of confining pressure, (2) the degree of clast and water recycling, (3) the possibility of reflecting shock waves in the vent, (4) the degree of wall rock collapse in the vent, and (5) the rate of, and variation in, magma supply, is the predominant control on phreatomagmatic landforms, rather than simply the availability of water. This is a very important message that I feel has not fully been heard yet, since diagrams showing water-magma ratios and volcanic landforms are still found in many textbooks, without the necessary words of caution to accompany them. One other contribution I would like to single out is another 1996 paper, this one on the Pahvant Butte mafic monogenetic volcano in Utah. This volcano is the product of a surtseyan eruption, but unlike at the type locality, we can see what is underneath the tuff cone. What is underneath the tuff cone at Pahvant Butte is a black juvenile-rich volcanoclastic platform built mostly by subaqueous eruption-fed density currents, and the deposits are documented and interpreted in great detail in this Bull. Volc. paper. A few years later, James went on to write the “Surtseyan and related eruptions” chapter in the Encyclopedia of Volcanoes in collaboration with Bruce Houghton. Especially over the last decade, many of James’ contributions to maar-diatreme and other phreatomagmatic research have been made in part through the supervision of graduate students at the University of Otago. In the field with students, James is a fine observer, is filled with exciting new ideas, and always takes the time to answer questions. Currently James’ team is using vesicles and microlites from phreatomagmatic pyroclasts to better understand what happens to magma before, during and after fragmentation in these eruptions. He has also come back to his first love, the Hopi Buttes volcanic field, where detailed studies of individual diatremes are

being performed by a student. In 2011, James and I published a review of maar-diatreme volcanoes, from top to bottom, in a special issue of JVGR on monogenetic volcanism. Being a co-author, I will not comment this review further, except to say that I think we make a number of important points in this paper and that it will serve as an entry point to the literature on maar-diatreme volcanoes for the foreseeable future. James has also reviewed and edited research on topics relevant to the Luhr award, mostly as a reviewer or editor of numerous papers at JVGR and Bull. Volc.; as one of the guest editors for the 2007 JVGR special issue on “Maar diatreme volcanism and associated processes”; and as an external examiner on a number of graduate theses. Since he has become the executive editor of Bull. Volc. since 2010, we can expect him to edit several more papers on these topics in the future! James was invited as a keynote speaker to the first International Maar Conference held in the Eifel volcanic field of Germany in 2000. His talk was entitled “Maars, maar-rim deposits and diatremes - an overview of volcanism and sedimentation in the Hopi Buttes volcanic field, Arizona USA”. He has also given talks on relevant topics at many international conferences. In addition, James has organized a number of field trips and workshops which helped to make his ideas more widely available and to educate students. In particular he has led the “Maar rims, crater deposits, diatremes and root zones: Hopi Buttes, Navajo Nation, Arizona” IAVCEI workshop in 2008, and the “Surtseyan volcanism: explosive subaqueous basaltic volcanism” IAVCEI workshop in 2007. He will also lead a fieldtrip called “Miocene subaerial to subaqueous monogenetic volcanism in Otago, New Zealand” after the 4th IMC. Given all these contributions I have no hesitation in recommending Dr. James D.L. White for the Luhr award to be given at the 4th IMC.

Yours truly,



Dr. Pierre-Simon Ross, professor
Institut national de la recherche scientifique



EXTRACTS FROM SUPPORT LETTERS

From Letter 1 by Greg Valentine

“Dr. White is the world’s leading expert in the geology of volcanoes related to magma-water interaction (phreatomagmatic), and is one of the top few volcanoclastic geologists in the world. His research on phreatomagmatic processes spans the scales from small individual volcanoes (maars, tuff cones) to extremely large phreatomagmatic complexes associated with large igneous provinces.”

“On the former topic (individual volcanoes and volcanic fields), White and his students have published many papers that set the standard for documenting and interpreting the complex field relationships associated with phreatomagmatic volcanoes. A quick search reveals that Dr. White’s papers have been cited over 1150 times, a remarkably high number given the relatively small size of the volcanology community and the subset of volcanologists who really specialize in phreatomagmatic activity.”

“Dr. White is fundamentally a field geologist and has an outstanding reputation for careful observations and documentation of field relationships, a skill that is becoming increasingly rare as upcoming students focus increasingly on theoretical and experimental studies.”

“To sum up, Dr. White is certainly deserving of the Jim Luhr Award, and I strongly support his nomination.”

Greg A. Valentine, Professor
Director, Center for GeoHazards Studies
University at Buffalo



From Letter 2 by Michael Ort

“James has shown an ability to work on young and old rocks in a variety of places, including Antarctica, South Africa, offshore Hawaii, United States, South Korea, Germany, Canary Islands, and New Zealand, quickly adapting to the differences in rock types and general geology, as well as logistical challenges, in each. He has developed a long-term collaboration with the experimental volcanologists associated with Bernd Zimanowski at the University of Würzburg in Germany. All of his work has centered on trying to understand how water and magma interact, both explosively and passively. I enjoy reviewing his manuscripts because I know I will always learn something, as he has one of the most creative minds in the field. He is a prolific author, so there are many articles to learn from too!”

“In addition to his excellent professional record detailed above, he also embodies another trait that Jim Luhr had: a natural ability to encourage others to carry on their own research. He has advised many top-notch scientists through their own graduate work, people now at the tops of their professions, and he also encourages professional colleagues with their own work. He is also quick to point out the shortcomings in his own work (these are typically very minor!), but uses that to show that we don't really know very much and so all ideas and studies are needed. Jim was famous for encouraging junior scientists – James is also developing a similar reputation.”

“I recommend James to you highly and without reservation.”

Michael Ort, Professor
NORTHERN ARIZONA
UNIVERSITY
College of Engineering, Forestry & Natural Sciences

From Letter 3 by Peter Suhr

“James D.L. White is an outstanding scientist in many fields of geology. His volcanological papers, first of all his contributions to the volcanology of maars, are very important for the development of understanding how works phreatomagmatic volcanoes. The basically papers about the Hopi Buttes in Arizona are the beginning of a new sight of the development of maars and their underlying diatremes.”

Peter Suhr,



Sächsisches Landesamt
für Umwelt, Landwirtschaft und Geologie

From Letter 4 by Stephan Kurszlaukis

„It came to my attention that Dr. James White was nominated for the Luhr award that is granted at the 4th International Maar Conference. I fully support this award for Dr White, since I believe he is an outstanding scientist that moved the research on maar diatremes in a very influential way.”

“Dr White has always impressed me with his detailed knowledge in the physical volcanology of maardiatreme volcanoes. He inspired me a lot in our conversations on kimberlite pipe formation, and the link back to his insights into non-kimberlite monogenetic volcanism enabled me to improve our way to interpret kimberlite pipes. His publications testify of his distinct scientific achievements and his leadership role in maar-diatreme research. I believe that Dr White is a worthy recipient of the Luhr award.”

Stephan Kurszlaukis, Manager, Kimberlite Petrology Unit
De Beers Canada Inc, Exploration Division
Toronto, Ontario, M3C 3G8



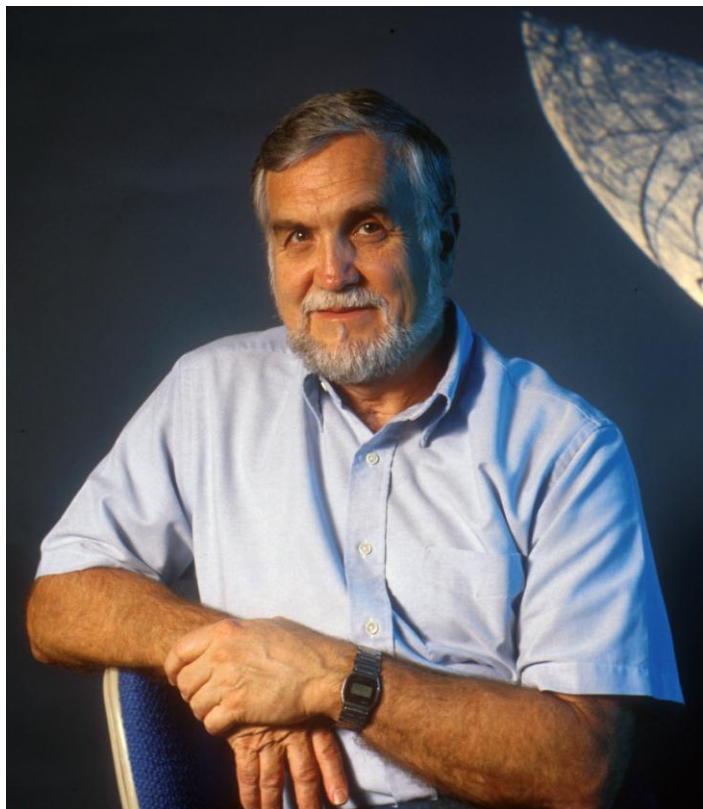
Congratulations James!
After a hard day to see some new diatremes and eroded monogenetic volcanoes in Hungary and Slovakia some refreshment is always a good idea

OBITUARY

Ronald Greeley, 1939 – 2011

Pioneering Planetary Geologist

The IAVCEI Executive Committee is sad to recognize the passing last year of an important contributor to research in basaltic volcanism and planetary sciences, and a dedicated instructor at many levels.



In a remarkable career that spanned over four decades, Ron Greeley was acknowledged as a founder of the field of modern-day planetary science. He was a Regents' Professor in the School of Earth and Space Exploration at Arizona State University, and he contributed significantly to the scientific exploration of planetary bodies throughout the solar system. He passed away at his home in Tempe, Arizona, on October 27, 2011.

Greeley earned undergraduate and graduate degrees in geology from Mississippi State University and his doctorate in geology at the University of Missouri in Rolla in 1966. He worked for Standard Oil Company of California as a paleontologist before military duty assigned him to NASA's Ames Research Center at Moffett Field, California, in 1967. He continued work at Ames in a civilian capacity, studying impact cratering processes in preparation for the Apollo missions to the Moon, as well as the early Mariner investigations of Mars.

Greeley began teaching geology at Arizona State University in 1977 while continuing to conduct research related to volcanism, wind-surface interactions, and the photogeological mapping of planets and their satellites. He was a pioneer in the combination of interpretation of planetary image data with both laboratory experiments and field studies of terrestrial analogs, in order to

understand the processes that contributed to the geologic history of planetary surfaces. Greeley also taught a variety of subjects and advised many post-graduate students. Through the numerous students he influenced so considerably, the legacy of his work will continue to impact the field of planetary science well into the future.

Greeley was a member of several science teams for robotic spacecraft missions to Mars, Venus, and the moons orbiting the giant outer planets. He was a Fellow of the American Geophysical Union and the American Association for the Advancement of Science, and a Life Member of IAVCEI. In 1997, he was awarded the G. K. Gilbert Award by the Planetary Geology Division of the Geological Society of America. He authored or co-authored 16 books and more than 400 scientific papers.

Provided by Jim Zimbelman, Center for Earth and Planetary Studies, National Air and Space Museum, Smithsonian Institution, Washington DC, USA

INTERNATIONAL CONFERENCE

"BASALT 2013"

24.04. - 28.04.2013 in Görlitz, Germany

email: basalt2013@senckenberg.de

web: www.senckenberg.de/basalt2013



Co-sponsored by the IAVCEI Commissions on Monogenetic Volcanism AND Volcanogenic Sediments

We would like to invite you to the international conference „Basalt 2013“ will be held from April 24th to April 28th 2013 and hosted by the Senckenberg Museum of Natural History Görlitz, in Germany.

This Conference will focus on Cenozoic magmatism in Central Europe dealing with multifarious aspects of igneous systems. A main intention will be the communication between scientists with different scientific approach to Cenozoic magmatism.

The scientific program will be subdivided into three major features:

- (1) physical, mineralogical and chemical characteristics of the magma source and melt generation processes,
- (2) physical, chemical, mineralogical and textural composition of the lithosphere and its interaction with ascending magmas and fluids as well as the development of the fluids itself and
- (3) volcanism, eruption styles, crystallisation, alteration and morphology of volcanic edifices.

The meeting should highlight the process-oriented and material aspects of magmatism. All disciplines of geosciences ranging from geology and physical volcanology, through petrology, mineralogy and geochemistry up to geophysics will be employed. Furthermore, we invite contributions to active magmatic processes, landscape evolution and impact of volcanoes on society (resources, hazards) as well as to the outreach of volcanological sciences to the public (geotourism). In honour of

Prof. K.H. Scheumann (1881-1964) a special attention will be devoted to the 100th anniversary of his polzenite definition. Contributions to melilitic rocks and new sights of the type localities in Northern Bohemia will be welcome.

Field trips:

One field trip will visit volcanoes of the German part of Lusatian volcanic field. Additionally a trip to active quarries of Luban (Poland) with its abundant mantle xenoliths in lava flows is planned.

A second excursion will be offered to the type localities of polzenites in the Osečná complex in Northern Bohemia (Czech Republic).

Workshops:

Microtextures of volcanic rocks

(Prof. Christoph Breitschneider, Freiberg)

From the rock to the date – The U/Pb La-ICP-MS method

(Prof. Ulf Linnemann, Dresden)

Contact:

Olaf Tietz & Jörg Büchner

Senckenberg Museum of Natural History Görlitz

Mailto: basalt2013@senckenberg.de



Lusatian volcanic field (D): The Landeskronen Hill – a remnant of a huge nephelinitic lava lake is a landmark for the whole area of the Lusatian Volcanic Field (Germany)



Luban lava flow (Poland): Mantle xenoliths in nephelinitic lava in Luban (Poland)



Osečná complex in Northern Bohemia (Czech Republic): So called “Devils Dyke” in the Osečna Complex (Czech Republic). One of the Type localities of polzenite.

**BULLETIN of VOLCANOLOGY
SPECIAL VOLUME – Call for Manuscripts**

Monogenetic volcanism and its relevance to the evolution of volcanic fields

Guest Editors: Ian EM Smith, Károly Németh, Pierre-Simon Ross

As it was announced during the 4th International Maar Conference in Auckland, New Zealand, we are planning to prepare a Special Issue on monogenetic volcanism to be published in the Bulletin of Volcanology entitled tentatively as:

“Monogenetic volcanism and its relevance to the evolution of volcanic fields”

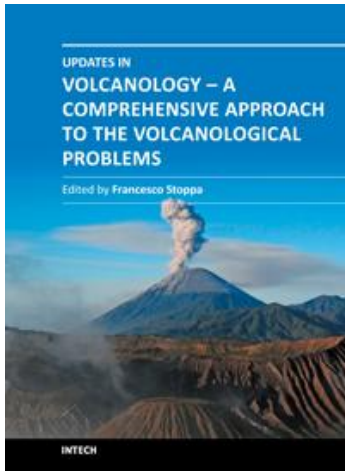
Bulletin of Volcanology Special Issue

Edited by Ian EM Smith, Karoly Nemeth, Pierre-Simon Ross

To get the final approval from Springer and BV, could you please provide a tentative title and list of authors of your proposed manuscript(s).

Please note that this special issue will be arranged in a slightly different way than previous special issues. A link will be opened by the end of May 2012 in the Bulletin of Volcanology Editorial Manager electronic submission site (<http://buvo.edmgr.com/>) and it will be open for 6 months. Before you submit your work, you must register yourself on Editorial Manager. During submission you will need to choose the Special Issue: Monogenetic as article type then you need to follow the usual submission steps. Please also note that there won't be a printed single issue from this special issue. Each paper will be published in the next normal issue of the Bulletin. This means that papers go through the review-revision-editorial process quicker and won't need to wait for papers taking a longer time to be accepted. To maintain the special issue character of the submitted papers, each of the published paper will be clearly marked and electronically linked together later in spite that few papers may appear in different printed issues.

NEW BOOK – Updates in Volcanology - A Comprehensive Approach to Volcanological Problems [Francesco Stoppa Ed.] – InTech Open Access (2012)



This book ranges from the geologic-petrologic description of world-wide major volcanic fields unfamiliar to international literature, to the discussion and interpretation of the results in light of geophysical techniques. It focuses on several situations that represent large-scale volcanism on Earth, related both with intra-plate or active margins. Many large volcanic complexes of Eastern countries are presented, including Japan, Siberian Russia, and Mongolia. A detailed account of the European volcanic province of the Pannonia basin and Central-Southern Spain is given. Southern hemisphere areas of Antarctica and Polynesia are considered as well. The chapters are very informative for those who wish for a guide to visiting, or are curious about main characteristics of the above volcanic areas, some of which are remote and not easily accessible.

Book chapters:

- 1) Hydrovolcanic vs Magmatic Processes in Forming Maars and Associated Pyroclasts: The Calatrava -Spain- Case History by F. Stoppa, G. Rosatelli, M. Schiazza and A. Tranquilli
- 2) An Overview of the Monogenetic Volcanic Fields of the Western Pannonian Basin: Their Field Characteristics and Outlook for Future Research from a Global Perspective by Károly Németh
- 3) Quaternary Volcanism Along the Volcanic Front in Northeast Japan by Koji Umeda and Masao Ban
- 4) Origin, Distribution and Evolution of Plume Magmatism in East Antarctica by Nadezhda M. Sushchevskaya, Boris V. Belyatsky and Anatoly A. Laiba
- 5) Bimodal Volcano-Plutonic Complexes in the Frame of Eastern Member of Mongol-Okhotsk Orogenic Belt, as a Proof of the Time of Final Closure of Mongol-Okhotsk Basin by I. M. Derbeko
- 6) Hotspot Concept: The French Polynesia Complexity by

Claudia Adam

- 7) Magmatic Zonation of Italy: A Tool to Understanding Mediterranean Geodynamics by Giusy Lavecchia and Keith Bell
- 8) Identification of Paleo-Volcanic Rocks on Seismic Data by Sabine Klarner and Olaf Klarner
- 9) Multiscale Seismic Tomography Imaging of Volcanic Complexes by Ivan Koulakov

Visit:

<http://www.intechopen.com/books/updates-in-volcanology-a-comprehensive-approach-to-volcanological-problems>

Updates in Volcanology 2 is due to be published by the end of year 2012.

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.

IAVCEI COMMISSIONS' NEWS:

Remote sensing content on VHub

Colleagues,

We would like to draw your attention to an expanding portfolio of resources related to volcano remote sensing and volcanic clouds hosted on VHub (<http://vhub.org>). These include:

Lecture materials and presentations from recent volcano remote sensing workshops:

PASI: Volcanic Hazards and Remote Sensing in Pacific Latin America (<http://vhub.org/resources/303>)

IUGG 2011: Ground-based and remote sensing of volcanic unrest (<http://vhub.org/resources/828>)

IUGG 2011: Eyjafjallajökull, volcanic clouds and aviation - one year on (<https://vhub.org/resources/1009>)

A wiki page on the use of satellite data for volcano monitoring:

responsibility of monitoring volcanic activities and alerting volcanic disasters in Japan (<http://www.seisvol.kishou.go.jp/tokyo/STOCK/kaisetsu/English/level.html>).

5. Volcanic hazard maps

The Volcanic Disaster Prevention Committee in the Volcanological Society of Japan made a database of active volcanoes hazard maps in Japan covering 38 active volcanoes. A total of 125 hazard maps were issued from 1983 to 2007. The database on volcanic hazard maps and reference material (http://dil.bosai.go.jp/documents/v-hazard/index_eng.html) of the National Research Institute for Earth Science and Disaster Prevention, (NIED) is available online.

6. Satellite data of major volcanoes

The current volcanic monitoring activities using satellite data in Japan can be seen in the following websites:

- Near Realtime Monitoring of Active Volcanoes in East Asia using Satellite Data, (REALVOLC) of the Earthquake Research Institute (ERI, Univ. of Tokyo) provides monitoring data in East Asia from MODIS and MTSAT satellites.

<http://vrsserv.eri.u-tokyo.ac.jp/REALVOLC/>

- Image Database for Volcanoes (<http://igg01.gsj.jp/vsldb/image/index-E.html>) of the Geological Survey of Japan (GSJ), AIST provides ASTER image data of major volcanoes in the world. You can see ASTER VNIR image of Sakurajima volcano in this site:

http://igg01.gsj.jp/vsldb/image/Sakura-jima/aster/120129_112/p_fc_vnir.png

7. Travel information in Kyusyu

Useful travel information in the Kyushu area can be checked on the following sites:

Kyushu Tourism Information

<http://www.welcomekyushu.com/>

Kyushu Travel Guide

<http://www.japan-guide.com/list/e1108.html>

Wiki Travel, Kyusyu

<http://wikitravel.org/en/Kyushu>

Japan Information Net, Kyusyu Travel Guide

<http://jin.jcic.or.jp/en/travel/kyushu/>

You can send your questions and comments to the Organizing Committee of IAVCEI 2013 (info@iavcei2013.com).

E-mail: info@iavcei2013.com

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

Shinji Takarada (IAVCEI 2013 Organizing Committee).

FUTURE EVENTS for IAVCEI member's interest

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

21 – 25 May 2012, Olot, Spain

E-mail: info@volcandpark1.com

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

Contacts: Chris Waythomas, Alaska Volcano Observatory, USGS, Anchorage: cwaythomas@usgs.gov

Christian Huggel, University of Zurich: christian.huggel@geo.uzh.ch

Sponsored by the IAVCEI Commission on Volcano-Ice Interaction



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

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

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

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

Hopi Butte Maar-Diatreme Field Workshop (Winslow, Arizona) – 21 – 27 October 2012 (1 week long field workshop style meeting for about 50 participants)

Web:

http://www.otago.ac.nz/geology/calendar/hopi_buttas_2012/index.html

Contact: James DL White – james.white@otago.ac.nz

Sponsored by the IAVCEI Commission on Monogenetic Volcanism and Volcanogenic Sediments



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

E-mail: acocella@uniroma3.it, ageytraver@gmail.com

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

Sponsored by the IAVCEI Commission on Collapse Calderas



2012 GSA Annual Meeting & Exposition:

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

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

E-mail: cov7@citiesonvolcanoes7.com

Website: <http://www.citiesonvolcanoes7.com>

Sponsored by the IAVCEI Cities and Volcanoes Commission



**Cities and Volcanoes
Commission**

Basalt 2013 - Cenozoic Magmatism in Central Europe

basalt 2013
Cenozoic Magmatism of Central Europe

24 - 28 April 2013, Goerlitz, Germany

email: basalt2013@senckenberg.de

web: www.senckenberg.de/basalt2013

Sponsored by the IAVCEI Commission on Monogenetic
Volcanism and Volcanogenic Sediments



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

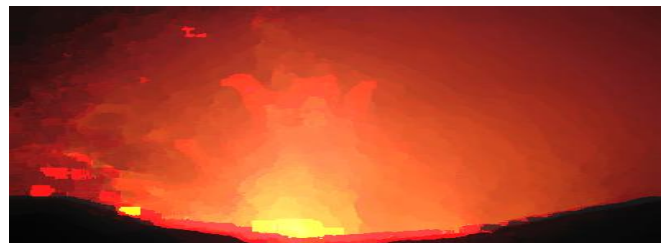
July 20-24, 2013

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

IAVCEI 2013



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.



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

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

Any correspondence, news items could be sent to:

iavcei_news@yahoo.co.nz

k.nemeth@massey.ac.nz

vHub Coordinator: Shana DiCamillo (University of Buffalo)

Any correspondence, news items could be sent to

shanadic@buffalo.edu
