

Portland 14-18 August 2017, IAVCEI Scientific Assembly

Claudia Principe

Istituto di Geoscienze e Georisorse CNR-Pisa

c.principe@igg.cnr.it

From 14 to 18 August was held in Portland, Oregon, the Scientific Assembly of IAVCEI (International Association of Volcanology and Chemistry of the Earth Interior). In connection with the Conference some Workshops (devote to the young researchers) was planned and numerous Field Trips. Intended to hallow the participants to the Conference to share directly on the field the state of the art of the knowledges on volcanic deposits and mechanisms.

The IAVCEI Conference takes place every 4 years and represents the most important meeting of the international volcanological community. It is the place where reached level of understanding of the volcanic phenomena is measured and where the directions are defined that must characterize the next quadrennial. In this meeting, volcanologists renovate the charges inside the community, future meetings are planned, and the 22 Committee, in which the IAVCEI articulates, meet.

Despite the political moment, the affluence to the meeting was strong with a prevalence of delegates coming from the various states of America, but also a good representation of South-Americans and Europeans, above all German and Spanish. The Italian delegates has been of around 50 in spite more than 300 contributions involving Italian scientists.

Future Events

The first and more important event to be definite has been the assignment to the New Zealand of the next IAVCEI Conference. The next IAVCEI Scientific Assembly will be held therefore at Rotorua in the 2021. The IAVCEI Conference come back to New Zealand after more than 30 years (from 1986).

The decision more attended by the Italian delegates was the official announcement of the next Cities on Volcanoes Conference, that will be held in Naples in the first week of September 2018 (<https://www.citiesonvolcanoes10.com/?lang=it>).

The presentation in Italy of this tenth edition of Cities on Volcanoes took place on 18 July, but its formalization took place during the IAVCEI in Portland, where all the organizational aspects of the event were defined. Cities on Volcanoes come back in Italy after many years: in fact, the first Cities on Volcanoes took place in Naples in 1990. Much is the expectation for this new edition of Cities on Volcanoes, whose organization was entrusted by IAVCEI to the INGV (Istituto Nazionale di Geofisica e Vulcanologia).

The 4th International Volcano Geology Workshop will be held in Eastern Transylvania (Romania) from 8 to 14 October 2017 under the auspices of the IAVCEI Commission on Volcano Geology (of which are now Joan Martí of CSIC Spanish and our CNR-IDPA Gianluca Gropelli). This initiative is the result of the strong commitment of the IAVCEI Commission on Volcano Geology, which has so far been able to bear the weight of organizing a Workshop annually since its foundation four years ago.

This result is even more significant if we consider that IAVCEI is currently trying to limit the number of Commissions through audits on the number of subscribers, but even more on the number and level of initiatives and activities from each of them being promoted. The primary objective of the Volcano Geology Commission is to support field-based volcanic practices as indispensable for any kind of processing or modelling of volcanic activity. This effort occurs at a time when the international volcanologist community clearly perceives the risk of a detachment of young volcanologist from field activities, in favor of faster and more profitable (also in terms of ISI publications) numerical practices. A risk also fueled by economic factors induced worldwide (including USA) from a recession in research funding.

The next event sponsored by IAVCEI will be the "Explosive eruptions and the Mediterranean civilizations through prehistory and history" workshop that will be held in Ustica from 12 to 16 September 2017.

One of the reasons for this flowering of volcanological events in Italy is the fact that since 2017 the role of Secretary IAVCEI is covered by an Italian, prof. Roberto Sulpizio of the University of Bari. This fact must be read on the one hand as an international recognition of Italian volcanology (INGV, but also CNR, and University), which once again represents a reference point for all world volcanology.

Closes the framework of future IAVCEI events the 7th International Maar Conference to be held in Olot in Spain from 21 to 25 May 2018. The IAVCEI's attention is, therefore, firmly focused on Europe, thanks to the strong propulsion and cohesion of European volcanology community.

Workshops

Portland 2017 hosted many young people from many countries, who were offered the opportunity to participate in 14 different Workshops. The topics ranged from new research technologies (the most significant in this regard was certainly the use of drones for the collection of images and data in hazardous and/or not possible to reach areas), guides to using technologies and codes of already stabilized calculations (e.g. Melt and other statistical packages), to finish with good scientific practices to follow in case of eruption.

Early Career Research Events

Young people are one of the most important targets for IAVCEI. The topic "volcanoes" is in itself a fascinating theme to devote enthusiastically to its scientific activity and within which to plan its own life. But turning to the many branches of volcanology and finding their place in this community, without wasting time and without accumulating frustrations, it is for the next generations perhaps even more important than the financial side. Hence many initiatives aimed at connecting senior researchers with young researchers (prize trips, discounts on attendance at conferences and workshops, competitions for best presentations and the best poster, etc.). Among the initiatives taken for this purpose, as many young people have presented posters, poster sessions have been structured with a free tasting buffet and beer, which guaranteed a good attendance at two hours of daily exposure and poster discussion and created a very informal and engaging atmosphere. In conclusion, the panorama under 35 is populated by boys and girls (even Italians) who at least did the university in two locations different, using Erasmus (for Europeans) and already seeing at least a dozen different volcanoes, speak perfectly English, unless they come from English speaking countries, and are willing to change country without looking back to follow their dreams or in any case seize the opportunities that come to him.

Plenary and Lunch Keynote Talks

The Plenary Lessons and the Lunch Keynote Talks have been predominantly dedicated to American volcanoes and volcanic fields. Seats in the biggest room in the Oregon Convention Centre have had a fair amount of affluence, although none have been sold out, because of the timing and of the choice of topics. With the exception of those lectures dedicated the way scientists must interface with the "public" both as people living in an area where a volcanic crisis is in progress, and as institutions. In the latter case, it is to be said that in comparison with other realities, even in countries such as the USA and New Zealand, our country remains at the forefront of both the state of the art of defining the chain of responsibility and the existence of the complex Civil Protection machine.

Scientific Sessions

Oral presentations were subdivided into more than 70 sessions (each session provided a 7-8 presentation slot) so the conference gave space to 550-600 oral presentations and nearly 750 posters.

Key notes of half an hour, held by the most prominent personalities for each branch of the research, have opened many sessions. The treated themes have spanned all branches of volcanology. Note that the selection of session themes has been focused solely on volcanology, without generic sessions as it often meets in larger and generically geological conferences (IUGG type). Among the topics discussed in the various sessions, there are some that can give a picture of the amplitude of the arguments covered: monogenetic volcanism, volcanic eruptions monitoring, planetary volcanology, geological mapping of volcanic areas, numerical simulations of eruptions, architecture of power systems, ash risk for aviation, underwater and subglacial volcanism, volcanic influences on climatology in the past and present, understanding of the processes of formation, confinement and evolution of magma before an eruption, the importance of volcanology in geothermal and mining resources, and many more.

The very compact conference structure, with four or five very close, simultaneously active, sessions, and the extreme precision of exposure time management, allowed both participants to follow his own specific interests. Interest in certain topics and/or speakers has often saturate the capacity of individual classrooms, with people standing or sitting on the ground in a very informal and "American" style. The general impression is of a large number of emerging young people, thanks also to the use of new and sophisticated technologies (e.g. Drones, DEM, Lidar, GIS and so on).

Field Trips

If the organization of the conference itself was good, it should be said that organizing the classic Field Trips offered before during and after the Convention was truly perfect. For the classic intra-congress day, 3 locations were relatively close to Portland: Mount Hood, Mount Saint Helens and the Columbia River Gorge. Needless to say, the main affluence was at Saint Helens with more than 20 buses, starting every half an hour from the forecourt in front of the Oregon Convention Center.

Among the pre- and post-conferences were offered 17 Field Trips of 3-4 days each with a fairly low average participation (from 10 to 20 people in the two of whom I participated, excluding organizers). The relatively low participation is certainly to be attributed to the costs, high for European people, and in the difficulties to support young researchers.

Of all the excursions offered, a detailed guide has been made, aiming at fixing the state of the art of volcanology in North American volcanism, after 28 years of the last IAVCEI held in America (Santa Fè, California, 1989), as outlined in the preface of the Scientific Investigations Report 2017-5022-L

produced by USGS (the US Geological Survey of America, which, together with the University of Oregon, was responsible for much of the organization), that collects them all in one volume, downloadable from the USGS site. To give an idea of the commitment, the organization of Field Trips required over than 70 field-trip leaders.

September 15, 2017