

IAVCEI

Activities' Report - Year 2017

Giuseppe De Natale

1. Introduction

Last year, 2017, has been particularly important for Volcanological Research and related civil protection activities in Italy. The Campi Flegrei caldera unrest, going on since more than one decade, has focused most of the volcanological and civil protection activities, shared with the concern for the occurrence of the Casamicciola, M=4 earthquake, on Ischia volcanic island. This volcanic area experienced the last eruption in 1302, whereas several destructive earthquakes had previously occurred starting from XIII century, the last of which in 1883, killing about 2400 people and destroying completely the town of Casamicciola. Out of the Neapolitan volcanic area, Mt. Etna in Sicily also shown remarkable volcanic activity, involving both effusive and explosive eruptions. As for the recognition of Italian Volcanological Research, 2017 was certainly a year full of satisfactions. In April, during the General Assembly of the European Geophysical Union held in Vienna, our colleague Augusto Neri from INGV has been awarded with the Medal Sergey Soloviev, rewarding excellence contributions to the Research and Mitigation in the field of Natural Hazards (in this case, volcanic hazard). Furthermore, in October, the European Geosciences Union released the names of the Medalists 2018, announcing my name as the recipient of the Sergey Soloviev Medal 2018, for Research and Mitigation of seismic and volcanic hazard.

2017 was also an important year for the preparation of the COV10 Conference (Cities on Volcanoes), one of the most important initiatives of the IAVCEI, which will be held in Naples in September 2018, for the second time after the first edition (in 1998, when it was held in Rome and Naples). The Italian Volcanology, in the scientific sessions of the Conference, is well represented at the level of Session Convenors. In August 2017, the IAVCEI Assembly was held in Portland (Oregon, USA).

Among the important initiatives at international level, somehow favored by the scientific cooperation among the various groups operating in the IAVCEI, it is certainly worth mentioning the volcanic deep drilling project 'Newberry Volcano Deep Drilling Project' , for the organization of which an International Workshop, funded by the International Continental Drilling Program (ICDP), was held in September 2017 in Bend (Oregon, USA), in the local State University. The final project was submitted to the same organization (ICDP) on 14/1/2018. Regarding activities in some way related to IAVCEI in Italy, we note the International Workshop held in February 2017 in Naples, for the organization of a drilling Project in the Gulf of Naples and Pozzuoli, to be submitted to the International Ocean Drilling Program (IODP) to coincide with the transit of IODP oceanographic vessels in the Mediterranean, which will begin in 2019. The project is closely coordinated with the CFDDP (Campi Flegrei Deep Drilling Project), already operating in the Campi Flegrei area.

These initiatives indicate the strong attention of the Italian Volcanological Research to the big problem of the Campi Flegrei unrest, which again this year has been represented by numerous publications in prestigious journals. In many of these activities the CNR is well represented, not only by its research groups working in Earth Sciences, but also by Scientific Institutes of different disciplines (Departments of Engineering and Physics), therefore with large

2. Main activities carried on by (Union name) during 2017 relevant for Italy and for CNR

The main activity, very significant for our country and directly linked to the IAVCEI, was certainly the organization phase of the COV10 (Cities on Volcanoes) Conference in Naples. Among the other important activities mentioned in the Introduction, although not directly carried out by the IAVCEI but certainly strongly favored by the common IAVCEI membership, we highlight the International Workshop of February 2017 held in Naples, and organized jointly by CNR (IAMC) and INGV , focused on the preparation of a project for drilling in the IODP area, for the study of the main eruptions and eruptive and depositional processes of the Campi Flegrei. At the workshop there was participation of some leading volcanologists in the the world (including the USA, Japan, New Zealand, France, United Kingdom). In addition, a special mention, for the presence of Italian research groups, deserves the preparation of the 'Newberry Volcano Deep Drilling Project' (NDDP), in the framework of ICDP, with the Programming Workshop held in Bend (Oregon, USA) in September 2017. In addition to the Italian INGV research group, among the 'Principal Investigators' of the International Project, many of the world's most important volcanologists and geophysicists took part in the event.

3. Activities carried on by (Italian Delegate name) within the Union during 2017 and impact on the Italian scientific community

In almost all the events mentioned, I was personally present. The fallout of international activities in the field of Volcanology, directly or indirectly linked to the IAVCEI, on the national scientific community, is very large and important. It is no coincidence that Italy today, precisely for the decades of cooperation in the

IAVCEI framework, is one of the reference countries in Vulcanology Research, as testified by the large body of leading scientific production, as well as by the prestigious awards recently assigned to Italian volcanologists.

4. Evaluation of the participation in terms of benefits and membership cost

In my opinion, it is unreasonable to imagine our research activities without participation in these international organizations. The benefits are invaluable, compared to absolutely insignificant costs.

5. Evaluation of Italians' attendance and how to improve interest and involvement

The Italian participation in these Organisms is always very valid at a scientific and planning level. What is instead generally lacking (and I do not speak so much and only of the IAVCEI, but of numerous international organizations in which Italy is present or otherwise interested) is the low level of resources assigned to the international participation. This problem is largely due to the absence in Italy, unlike almost all the highly developed countries, of a national agency that economically supports scientific research. Organisms such as NSF (USA), DFG (Germany), ANR (France), FNS-SNF (Switzerland), etc., are fundamental for the funding of Research and in particular of that one included in the International Collaborative Projects. In my opinion, it is imperative that Italy adopts a similar Organization, whose functions, in the past, were largely carried out by the CNR.

6. Italian experts with important roles within the Union or within related Commissions and Programs (if known)

The Secretary General of IAVCEI is Roberto Sulpizio, Associate Professor of the University of Bari. In the various thematic Commissions, Italy is represented by:

Franco Tassi, University of Florence (Chemistry of volcanic gases)

Gianluca Groppelli, CNR-IDPA (Volcanic Geology)

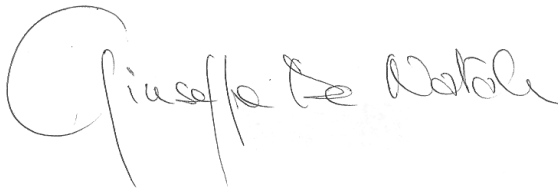
Giuseppe Puglisi, INGV-OE (Volcanic Geodesy)

Marco Pistolesi, University of Pisa (Tephra fall hazard models)

Roberto Carniel, University of Udine (Volcanic seismology and Acoustics)

Susanna Falsaperla, INGV-OE (World Organization of Volcano Observatories, WOVO)

Signature

A handwritten signature in black ink that reads "Giuseppe De Natale". The signature is written in a cursive style with a large initial 'G'.

Place and date

Naples, May 10^o 2018