



# IAVCEI

## COMMISSION/WORKING GROUP REPORT FOR THE LAST FOUR YEARS

### Commission leader(s) information:

(repeat the information for each commission leader , [click here](#))

Firstname:	Jurgen
Lastname:	Neuberg
Starting Date:	January 2003
Full address:	School of Erath & Environment Institute of Geophysics & Tectonics
Address:	The University of Leeds
State/Province:	United Kingdom
Zip/Postal Code:	Leeds LS2 9JT
e-mail:	J.Neuberg@see.leeds.ac.uk
Phone:	+44 (0)113 343 6769
Fax:	

### Commission leader(s) information:

Firstname:	Hiroyuki
Lastname:	Kumagai
Starting Date:	January 2003
Full address:	National Research Institute for Earth Science and Disaster Prevention 3-1 Tennodai, Tsukuba, Ibaraki 305-006, Japan
Address:	3-1 Tennodai, Tsukuba
State/Province:	Ibaraki
Zip/Postal Code:	305-0006
e-mail:	kumagai@bosai.go.jp
Phone:	+81-29-863-7606
Fax:	+81-29-863-7610

Brief (half page max) description of main objectives:

The fundamental aim of the commission is to promote volcano seismology as a tool to gain a better understanding of the dynamics of volcanoes and improve our ability to accurately predict their behaviour. The goals of the Commission are fivefold:



1. To facilitate collaborations among scientists and institutions investigating volcanic processes and structures.
2. To facilitate the transfer of knowledge, tools and training between scientists and volcano observatories, especially in developing countries.
3. To promote the use of state-of-the-art seismic equipment, such as broadband sensors and high dynamic range data loggers, in routine volcanic monitoring and seismic experiments.
4. To promote conferences, seminars and high-level education aimed at familiarising researchers with modern theoretical and experimental seismic methods used in the interpretation of volcanic processes and structures.
5. To promote funding from international organisations that could help defray travel and related expenses for the activities listed above.

## List of Commission members:

Joint Chair of the Commission: Jurgen Neuberg

Joint Chair of the Commission: Hiroyuki Kumagai

US Representative: Peggy Hellweg

US Representative: Steve McNutt

US Representative: Jeffrey B. Johnson

EU Representative: Roberto Carniel

New Zealand Representative: Art Jolly

South American Representative: Mario Ruiz

European Representative: Philippe Lesage

## Recent workshops and meetings

(for the last four years, indicating name, place, dates, aim, number of participants)

Aim of the workshops: Our workshops are organized every year at a volcanic area, as a joint effort by the IASPEI/IAVCEI Inter-Association Commission on Volcano Seismology and the Working Group "Earthquakes and Volcanoes" of the ESC. They always deal with all fields related to volcano seismology and the integration of volcano seismology with other techniques. Every year we focus in particular on a given topic, indicated by the title of the specific workshop. Every year the list of conveners includes not only the chairman and secretary of the working group, but also local researchers. At each workshop, we particularly favour the participation of local researchers doing research in fields complementary to volcano seismology. The Bruno Martinelli Fund, named after the late former Secretary of the Working Group, supports the participation to the workshops of young students and scientists from Latin America and Caribbean countries. Usually one or two people can be partially funded every year.

Name: "Hot and Cold: Seismicity associated with geothermal areas and ice-covered volcanoes"

Place: Fosshotel Nesbúð, Nesjavellir/Mt. Hengill, Iceland

Dates: 9 - 16 September 2007

Conveners:

Steinunn S Jakobsdottir, The Icelandic Meteorological Office, Reykjavík, Iceland

Jurgen Neuberg, University of Leeds, UK

Roberto Carniel, University of Udine, Italy

Number of participants: 30

Name: "Characterization of volcanic regimes using continuous seismic data... and possibly more! "

Place: Managua and León, Nicaragua

Dates: 21 - 27 September 2008

Conveners:

Wilfried Strauch, Director General de la Dirección de Geofísica, INETER, Nicaragua

Jurgen Neuberg, University of Leeds, UK



Roberto Carniel, University of Udine, Italy and UNAM, Mexico  
Number of participants: 32

Name: "Interactions between tectonic and volcanic activity and implications for eruption forecasting"

Place: Pico, Azores, Portugal

Dates: 14 - 20 September 2009

Conveners:

Zilda Terra Tavares de Melo de França, Universidade dos Açores - Ponta Delgada, Azores, Portugal

Alicia García García, CSIC, Madrid, Spain

Jurgen Neuberg, University of Leeds, UK

Roberto Carniel, University of Udine, Italy

Number of participants: 35

Name: "Combining stochastic and deterministic models to characterise seismo-volcanic source processes"

Place: Clermont-Ferrand and Besse, Massif Central, France

Dates: 18 - 25 September 2010

Conveners:

Jean Battaglia, CNRS, Université Blaise Pascal, Clermont-Ferrand, France

Roberto Carniel, University of Udine, Italy

Jurgen Neuberg, University of Leeds, UK

Number of participants: 29

## Future workshops and meetings

(for the next two years, indicating name place, dates, aim, expected number of participants)

In the next two years, we will continue to organize our annual workshops, again at volcanic areas, and again as a joint effort by the IASPEI/IAVCEI Inter-Association Commission on Volcano Seismology and the Working Group "Earthquakes and Volcanoes" of the ESC. The next will be this workshop:

Name: "S.O.S.: Seismic and Other Signals"

Place: Malfa, Salina, Aeolian Islands, Italy

Dates: 17 - 24 September 2011

Conveners:

Jurgen Neuberg, University of Leeds, UK (WG chairman)

Roberto Carniel, University of Udine, Italy (WG secretary)

Susanna Falsaperla, Istituto Nazionale di Geofisica e Vulcanologia, sezione di Catania, Osservatorio Etneo, Italy

Horst Langer, Istituto Nazionale di Geofisica e Vulcanologia, sezione di Catania, Osservatorio Etneo, Italy

Number of participants: 20 people have already registered, but registrations are still open. We expect to reach the usual number of about 30 participants.

Location, dates and title of 2012 workshop will be decided during the 2011 workshop in Salina.

## Other activities:

The commission provided up-to-date information in the field of Volcano Seismology through the commission web site ([http://volc\\_seis\\_commission.leeds.ac.uk/](http://volc_seis_commission.leeds.ac.uk/)). The information included tutorials, publications, academic opportunities, conferences, seminars, and lectures.

Commission members promoted the use of modern seismic equipment including broadband seismic and infrasonic sensors and high dynamic range data loggers for routine volcano monitoring and seismic experiments in various countries such as Ecuador, Philippines, Guatemala, Chile, Taiwan etc.

Commission members facilitated the transfer of knowledge and training of seismic and infrasonic data analyses for researchers and technicians in the countries mentioned above.

A review paper on theoretical fundamentals of the source quantification of volcano seismic signals was published as a commission activity, and the paper was distributed to researchers and volcano observatories in various countries through commission members.

## Observations:



This application form should be submitted electronically by e-mail to the Secretary General Prof. Joan Martí ([joan.marti@ija.csic.es](mailto:joan.marti@ija.csic.es))

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<b>Firstname:</b>	Jurgen
<b>Lastname:</b>	Neuberg
<b>Starting Date:</b>	January 2003
<b>Full address:</b>	The University of Leeds Leeds LS2 9JT, United Kingdom
<b>Address:</b>	
<b>State/Province:</b>	
<b>Zip/Postal Code:</b>	
<b>e-mail:</b>	J.Neuberg@see.leeds.ac.uk
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<b>Full address:</b>	National Research Institute for Earth Science and Disaster Prevention 3-1 Tennodai, Tsukuba, Ibaraki 305-006, Japan
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<b>State/Province:</b>	Ibaraki
<b>Zip/Postal Code:</b>	305-0006
<b>e-mail:</b>	kumagai@bosai.go.jp
<b>Phone:</b>	+81-29-863-7606
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