

10th Business Meeting of IASPEI/IAGA/IAVCEI Inter-Association Working Group on Electromagnetic Studies of Earthquakes and Volcanoes (EMSEV)

July 5, 2007, Palazzo dei Priori, sala Vaccara, Perugia, Italy

1. Participants:

Uyeda, Seiya (Chairperson)
Nagao, Toshiyasu (Secretary)
Johnston, Malcolm (IASPEI and IAVCEI liaison member)
Zlotnicki, Jacques (IAGA liaison member)
Hattori, Katsumi., Chiba University, Japan
Nishihashi, Masahide, Chiba University, Japan
Nishida, Yasunori., University of Hokkaido, Japan
Mogi, Tohru, University Hokkaido, Japan
Hase, Hideaki, University Hokkaido, Japan
Sasai Yoichi, Tokyo Metropolitan Government, Japan
Izutsu, Jun, Chubu University, Japan
Kamogawa, Masashi, Tokyo Gakugei University, Japan
Sayanagi, Keizo, Tokai University, Japan
Orihara, Yoshiaki, Tokai University, Japan
Ishido, Tsuneo, AIST, Japan
Korepanov, Valery, LVIV Center of Space Research, Ukraine
Ouzounov, Dimitar, NASA GSFC/SSAI and George Mason University/CEOSR, USA
Taylor, Patrick, NASA, GSFC/SSAI, Greenbelt, MD, USA
Jeremy Thomas, USGS, Denver, USA
Blier, T. Quakefinder, Palo Alto, USA
Cutler, J. Quakefinder, Palo Alto, USA
Bortnic, J. UCLA, Los Angeles, USA
Dunson. Clark., Quakefinder, Palo Alto, USA
Freund, Friedemann, NASA Ames Res. Ctr./SETI, USA
Gokhberg, Mikhail, Inst. Phys. Earth, RAS, Russia
Spichak, Vjacheslav, Geoelectromagnetic Res. Inst., RAS, Russia
Parrot, Michel, LPCE/CNRS, France
Stanica, Dimitru, Inst. Geodynamics, Romanian Acad., Romania
Pulinets, Sergey Alexander, [ISMIRAN, Russia](#)
Singh, R.P., IIT, Kanpur, India
Singh, Ramesh, Dept. of Civil Engineering, Indian Institute of Technology, India

Harinarayana, T., National Geophys. Res. Inst., Hyderabad, India
Varotsos, Panayiotis, University of Athens, Greece
Lazaridou, Mary, University of Athens, Greece
Sarlis, Nicholas, University of Athens, Greece
Biagi, P. F., University of Bari, Italy
Lapenna, Vincenzo, University of Basilicata, Italy
Conti, Livio, University of Rome, Italy
Colangelo, Gerald, Civil Protection – Basilicata Region, Italy
Liu, Jann-Yenq, National Central University, Taiwan
Jhuang, Han-Kun, Taiwan
Ho Yi-Ying, Taiwan
42 attendees signed the participants list.



A group photo was taken at the entrance stairs to Palazzo dei Priori, sala Vaccara.

2. Opening Remark, 19h30: S. Uyeda: Chair

Seiya Uyeda opened the meeting and welcomed all participants. He thanked all for their active participation in the four EMSEV sessions held at IUGG. Due to limited time, he recommended proceeding as quickly as possible with the EMSEV meeting business.

3. Reports from liaison officers:

Jacques Zlotnicki (IAGA liaison) pointed out that IAGA continues to provide support for the EMSEV WG when our studies are based on clear pre-, co- and post-observations to earthquakes and volcanic eruptions, physics of processes, etc.

Malcolm Johnston (IASPEI, IAVCEI liaison) outlined the role of EMSEV in IASPEI and IAVCEI. Within these organizations (and the IUGG), our only role is to provide a forum for discussion of electromagnetic effects expected and observed with earthquakes and volcanoes. It is therefore extremely important that participants in meeting run by EMSEV do not make public announcement regarding earthquake prediction in the name of EMSEV. EMSEV has no authority to support such statements.

The general discussion reiterated the clear understanding that papers dealing with prediction are the responsibility of the authors, not of the EMSEV WG.

4. Report of EMSEV activity in 2006- Perugia 2007: Nagao: Secretary

4.1 Web site

Toshiyasu Nagao (EMSEV Secretary) outlined the history and structure of EMSEV Web site: Since 2005, the EMSEV web-site links to the IUGG web site with a maximum 2 GB size. The EMSEV site is: <http://www.emsev-iugg.org/emsev/>
Sent email should not exceed 50kB in size, and should not include attached files. Larger size email should be sent to T. Nagao: nagao@scc.u-tokai.ac.jp
From panel discussion, it was recommended that a list of the major publications completed by EMSEV participants be included on the EMSEV web site.

4.2 Activities

2006

In 2006, EMSEV has participated to several international meetings; has sponsored the EMSEV annual meeting and supported field work in a developing country (Philippines):

- WPGM/AGU Meeting, Beijing, China,
- EMSEV Annual Meeting and Workshop, Agra, India
- Fall AGU, San Francisco
- Field work on Taal Volcano, Philippines

2007-to present (IUGG),

The main EMSEV task was the organization of four integrated sessions at IUGG on “Progress in electromagnetic studies on earthquakes and volcanoes”:

- Crustal instabilities and earthquake precursors (JSS009) (Main convener P.F. Biagi)
- Electromagnetic fields associated with earthquakes and active faulting (JSS008) (Main convener M. Johnston)
- Seismo-electromagnetic studies using space technology (JSS010) (Main convener R.P. Singh)
- Volcanic structure and activities (JSS007, JVS002) (Main convener: S. Spichak)

More than 143 abstracts were accepted and presented in the four sessions.

4.3 Budgets

2006 Incoming Funds:

IUGG \$2,000 (for general EMSEV activities);

IAGA \$2,000

IASPEI \$500

IAVCEI \$2,000

Saved funds from Mexico meeting by S. Pulinets \$800

Total = \$7,300

2006 Outgoing Funds:

EMSEV Agra Meeting \$3,000 (\$2,000 from IAGA + \$500 from IASPEI + \$500 from Pulinets saving)

Work on Taal Volcano \$2,300 (\$2,000 from IAVCEI + \$300 from Pulinets saving). However, this fund was left over to 2007 because the October field campaign was postponed due to Typhoon.

Reserve for IUGG Meeting in Perugia \$2,000 (Funds from IUGG)

Total = \$7,300

2007 Budget:

\$2,300 for Taal field campaign left over from 2006 (2006 budget has been used during February and April 2007 campaigns).

\$2,000 (IUGG support for 2006) was used for Perugia EMSEV sessions.

Incoming:

\$2,500 from IUGG

\$1,500 from IAGA

Support from other associations undecided yet.

Total = \$ 4000

Outgoing:

\$500 for the Indonesian meeting 'International Workshop on Seismo-Electromagnetic Phenomena: Recent Progress'. This meeting will be held in Indonesia (Bandung) on November 6-7, 2007.

\$ 3500 will be allocated in the course of next months (Taal, EMSEV Romania meeting ...)

5. Proposed activities after Perugia and in 2008-2009

5.1 2007

Italy/Japan bilateral Seminar on EM in Seismic and Volcanic Areas, Chiba, Japan, July 25-27
(contact: hattori@earth.s.chiba-u.ac.jp)

Third international school-seminar on electromagnetic sounding of the earth (EMS-07), Zvenigorod, Russia. September 3-8, 2007 (<http://www.igemi.troitsk.ru/EMS-07/en/>)
(Contact: v.spichak@g23.relcom.ru, spichak@igemi.troitsk.ru)

The 8th China International Geo-Electromagnetic Workshop

Oct. 11- 14, 2007, Yangtze University, Jingzhou, Hubei, China

<http://www.kletor.yangtzeu.edu.cn/cigew/e1.htm>

International Workshop on Seismo-Electromagnetic Phenomena: Recent Progress
Japan/Indonesia Project, Bandung, Indonesia November 6-7,

D. S. Widarto, Chair, K. Hattori ,Co-chair, (contact: hattori@earth.s.chiba-u.ac.jp)

5.2 2008

IAVCEI GA in August 18-25, 2008 at Reykjavik, Iceland.

EMSEV session on Electromagnetic (EM) Investigations of Volcanoes and Hydrothermal/Geothermal Fields, Conveners: J. Zlotnicki, M. Johnston, R. Karlsdottir

Annual EMSEV Meeting and Second DEMETER meeting in Romania

Meeting early in September 2008 at a resort centre (Sinaia) in the Romanian mountains. Dimitru Stanica (Deputy Director) would be in charge. (Contact: dstanica@geodin.ro).

DEMETER mission on EM signals related to earthquakes and volcanic eruptions

CNES will organize a second DEMETER meeting in 2008. It is suggested that that sessions related to Earthquakes will be co-convened with the Romania-2008 EMSEV meeting.

5.3 2009

Annual EMSEV Meeting

Ramesh P. Singh confirms his plan to organise an EMSEV meeting at George Mason University in Washington DC, USA also in 2009.

IAGA meeting

EMSEV should present some sessions at the meeting. Proposals are welcome.

6. EMSEV Structure

Seiya Uyeda reminds that EMSEV WG is composed of three bodies:

- The **Bureau** (Chairman: S. Uyeda, Secretary: T. Nagao, IASPEI & IAVCEI liaison: M. Johnston, IAGA liaison: J. Zlotnicki, IAG WS1.2 representative: Y. Ogawa (IAGA WS1.2))
- The **EMSEV members**. There are 35 members (14 countries) with generally not more than five per country to ensure international and interdisciplinary balance.
- The **EMSEV corresponding members**, about 220 in number, include all (i.e., any number per county) who are interested in EM aspects of earthquakes and volcanoes and have joined the EMSEV mailing list.

7. Chair & Co-Chair election

Seiya Uyeda wished to step down from the chairpersonship.

IUGG has asked to EMSEV to nominate a new chair. The Bureau nominated Jacques Zlotnicki to next Chair and Malcolm Johnston to Vice Chair. Seiya Uyeda will be Past Chair.

Professors P. Varotsos, D. Stanica and R.P. Singh asked Seiya Uyeda again to chair EMSEV WG for several more years. S. Uyeda responded that he has now done this for almost 8 years and declined with thanks. A general vote validated the new Chair and Co-Chair.

8. Association liaisons

EMSEV Bureau suggested representatives for Associations:

- M. Johnston for IASPEI
- J-Y Liu for IAGA
- Y. Sasai for IAVCEI.

All of them accepted this new task.

The assembly unanimously supported a new mandate for T. Nagao as EMSEV Secretary.

Professor T. Harinarayana was nominated as new representative from WG 1.2.

9. New memberships

Seiya Uyeda proposed to update our EMSEV members list; since several non-member colleagues are very active in the EM field, we would like to integrate these people into EMSEV.

It was decided by the majority that the following colleagues should become EMSEV members:

Prof. A.K. Gwal for his ionospheric expertise.

Dr. T. Harinarayana for his excellence as scientist and organizer.

Dr. Friedemann Freund for laboratory experiments on possible EM signals.

Dr. W. S. Widarto for his initiatives in raising Seismo-EM investigation in SE Asia.

Prof. K. Eftaxias for his active research and leadership.

Dr N. Sarlis for his theoretical research and cooperation.

Dr V. Traumatoli for his research on thermal changes.

The new EMSEV bureau will contact these colleagues for a formal acceptance as well as some of the present day members list in order to check if they are still active in the EM field (Hao Zinqi, V. Shapiro, etc).

For information, the present membership was as follows.

Chairman: UYEDA, Seiya, Tokai University, Japan

Secretary: NAGAO, Toshiyasu, Tokai University, Japan

Liaison:

IAGA: ZLOTNICKI, Jacques, CNRS, Observatoire de Physique du Globe

IASPEI/ IAVCEI: JOHNSTON, Malcolm, US Geological Survey, USA

IAGA WS1.2: OGAWA, Yasuo, Tokyo Institute of Technology, Japan

Members:

BIAGI, P. F., University of Bari, Italy

FRASER-SMITH, Anthony, Stanford University, USA

GOHKBERG, Mikhail B., United Inst. Phys. Earth, RAS., Russia

HAO, Zinqi, China Seismological Bureau, China

HATTORI, Katsumi, Marine Biosystems Research Center, Chiba University, Japan

HAYAKAWA, Masashi, Univ. Electro-Communications, Japan

HUANG, Qinghua, Peking University

KOPYTENKO, Yuri Anatol'ievitch, Inst. Terrestrial Magnetism, Ionosphere and Radiowave Propagation, RAS.,

KOREPANOV, Valery, Lviv Centre, Inst. Space Res., Nat. Acad. Sci. and Nat. Space Agency, Ukraine

LAPENNA, Vincenzo, University of Basilicata, Italy

Le MOUEL, Jean-Louis, Inst. Physique du Globe de Paris, France

LIU, Jann-Yenq, National Central University, TAIWAN

MELONI, Antonio, Inst. Nac. Geof. Volc.(INGV), Italy

MOLCHANOV, Oleg, United Inst. of Physics of the Earth(UIPE), RAS, Russia

OUZOUNOV, NASA GSFC/SSAI and George Mason University/CEOSR, USA

PARK, Stephen, University of California, Riverside, USA

PARROT, Michel, LPCE/CNRS, France
PULNETS, Sergey Alexander, Institute of Geophysics, UNAM, Mexico
SASAI, Yoichi, Tokyo Metropolitan Government, Japan
SHAPIRO, Vsevolod, Inst. of Geophysics, Urals Department of RAS, Russia
SINGH, Birbal, R.B.S. College (Agra University), India
SINGH, Ramesh, Department of Civil Engineering, Indian Institute of Technology, India
SPICHAK, Vjacheslav, Geoelectromagnetic Res. Inst., RAS, Russia
STANICA, Dimitru, Inst. Geodynamics, Romanian Acad., Romania
TEISSEYRE, Roman, Inst. Geophysics, Polish Acad. Sci., Poland
TUNCER, Mustafa Kemal, Bogazici University, Turkey
VALLIANATOS, Filippou, Technological Educational Inst. Crete, Greece
VAROTSOS, Panayiotis, University of Athens, Greece
ZENG, Xiaoping, China Seismological Bureau, China
ZHAN, Zhijia, China Seismological Bureau, China

10. Publication policy for Perugia Sessions.

IASPEI President Engdahl encourages special volumes in Elsevier journals to Lead Conveners of IUGG 2007 IASPEI-Led Symposia & Workshops

From: Bob Engdahl, IASPEI President
Subject: Publication of Proceedings

As at previous assemblies, you should consider publication of the Proceedings of your Symposium or Workshop in Elsevier journals such as Physics of the Earth and Planetary Interiors or Tectonophysics. In return for royalties that are used to support Association activities and participation in General Assemblies, IASPEI has given Elsevier the right of first refusal. There needs to be developed a package of "thematic" special volumes relevant to those journals (e.g., structure, tectonics, etc.) for submission to Elsevier as a publications proposal. Information required in such a proposal follows:

- (1) A tentative list of manuscripts, for which the authors have, in principle, indicated that they are willing to contribute to such a project. The primary requirement is scientific quality. Nevertheless, it should be noted that the list of papers should represent a coherent set which are clearly linked by an overall theme, with international appeal.
- (2) Details of the team of Guest Editors (preferably an international team of 2-3 specialists in the field, preferably with editorial experience, and one of whom should have English as their first language).
- (3) Details of the time schedule for completion of the project.

Now that the final program of IASPEI-led symposia and workshops has been put together we should begin the process of developing an IASPEI publication package. Please contact the IASPEI Secretary General (Peter Suhadolc) with suggestions or questions you may have about your publication options...

It appears to our community that a large volume including the contents of our four sessions should be more appropriate if a link is done between the topics. Lead convener of each session should contact the authors to evaluate the number of potential papers.

11. Proposals of symposia, titles and conveners, for IAGA GA in Sopron, Hungary, in 2009 and IASPEI GA in Capetown, South Africa, in 2009.

Proposals from EMSEV WG are encouraged.

The meeting was adjourned at 9 pm