

# **June 2008**

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The *IAG Newsletter* is under the editorial responsibility of the *Communication and Outreach Branch* (COB) of the IAG.

It is an open forum and contributors are welcome to send material (preferably in electronic form) to the IAG COB (<a href="mailto:newsletter@iag-aig.org">newsletter@iag-aig.org</a>). These contributions should complement information sent by IAG officials or by IAG symposia organizers (reports and announcements). The IAG Newsletter is published monthly. It is available in different formats from the IAG new internet site: <a href="http://www.iag-aig.org">http://www.iag-aig.org</a>

Each IAG Newsletter includes several of the following topics:

- I. news from the Bureau Members
- II. general information
- III. reports of IAG symposia
- IV. reports by commissions, special commissions or study groups
- V. symposia announcements
- VI. book reviews
- VII. fast bibliography

Books for review are the responsibility of:

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E-mail: cct@gfy.ku.dk

# **General Announcements**

## Call for International Participation in Laser Ranging to the Lunar Reconnaissance Orbiter

A Call for Participation in Laser Ranging (LR) to the Lunar Reconnaissance Orbiter (LRO) was issued in May to all of the ILRS stations. LRO-LR is a one-way (uplink) only measurement. The ground station records its fire times, and the Lunar Obiter Laser Altimeter (LOLA) instrument measures the LR event times at the LRO spacecraft. The LOLA Science Team constructs the ranges from the ground and flight measurements. Laser Ranging will be used, along with S-band, and LOLA altimetric cross-overs, to precisely determine the LRO orbit, which in turn will be used to update the lunar gravity model and to analyze the LOLA altimetry. Global coverage of laser ranging to LRO will help in generating the precise orbit and should allow the Science Team to produce an updated gravity model earlier.

This will be the first time that the ILRS will track an object that is orbiting a body other than earth, and represents our first step into planetary laser transponders.

Proposals from the stations are due at the end of June, with selection of the participants in July. LRO is scheduled to be launched no earlier than November 24, 2008.

CAREY NOLL Secretary, ILRS Central Bureau

# IVS Seeks Host Institutions for Combination Centers and Additional Analysis Centers

The Directing Board of the International VLBI Service for Geodesy and Astrometry solicits proposals IVS Combination Centers and for additional Operational Analysis Centers and Associate Analysis Centers. The existing Associate Analysis Centers are encouraged to apply for becoming Operational Analysis Centers. The calls are posted on the IVS Web site at:

http://ivscc.gsfc.nasa.gov/about/org/components/Call4ComC.txthttp://ivscc.gsfc.nasa.gov/about/org/components/Call4OpAC.txt

The deadline for proposals is 1 September 2008. Successful proposers will be notified by October 2008.

DIRK BEHREND IVS Coordinating Center

# **Meeting Announcements**

# 37th Scientific Assembly of the Committee on Space Research and Associated Events – COSPAR 2008

50th Anniversary Assembly 13 - 20 July 2008, Montreal, Canada.

## Contact:

COSPAR Secretariat, c/o CNES, 2 place Maurice Quentin, 75039 Paris Cedex 01, France. Tel: +33 1 44 76 75 10, Fax: +33 1 44 76 74 37. E-mail: <a href="mailto:cospar@cosparhq.cnes.fr">cospar@cosparhq.cnes.fr</a> <a href="http://www.cospar-2008.org/">http://www.cospar-2008.org/</a> or <a href="http://www.cospar-assembly.org">http://www.cospar-assembly.org</a>

#### Scientific Program Chair:

Prof. Jean-Pierre St.-Maurice, University of Saskatchewan, Saskatoon, Canada

#### Topics:

Approximately 85 meetings covering the fields of COSPAR Scientific Commissions (SC) and Panels:

- SC A: The Earth's Surface, Meteorology and Climate
- SC B: The Earth-Moon System, Planets, and Small Bodies of the Solar System
- SC C: The Upper Atmospheres of the Earth and Planets Including Reference Atmospheres

- SC D: Space Plasmas in the Solar System, Including Planetary Magnetospheres
- SC E: Research in Astrophysics from Space
- SC F: Life Sciences as Related to Space
- SC G: Materials Sciences in Space
- SC H: Fundamental Physics in Space
- Panel on Satellite Dynamics (PSD)
- Panel on Scientific Ballooning (PSB)
- Panel on Potentially Environmentally Detrimental Activities in Space (PEDAS)
- Panel on Radiation Belt Environment Modelling (PRBEM)
- Panel on Space Weather (PSW)
- Panel on Planetary Protection (PPP)
- Panel on Capacity Building (PCB)
- Panel on Education
- Special events: 50th anniversary lectures, interdisciplinary lectures, space agency round table, session on EGY Towards an Earth and Space Science Commons

Papers Published in Advances in Space Research, a fully refereed journal.

A. JANOFSKY Associate Director COSPAR

# 14th General Assembly of WEGENER - WEGENER 2008

September 15-18, 2008 Darmstadt, Germany

The Institute of Physical Geodesy (IPGD) of the Technische Universität Darmstadt is pleased to announce that the 14th General Assembly of WEGENER - WEGENER 2008 will take place in Darmstadt, Germany, from September 15-18, 2008. The conference venue will be darmstadtium, the new Science and Conference Center in Darmstadt.

The Wegener project aims to bring together geoscientists interested in using geodetic techniques to measure and understand the 3D surface motion in Europe and the Mediterranean. The 14<sup>th</sup> Assembly of WEGENER will provide a forum for presentation, discussion, coordination and scientific support for geoscientists interested in unravelling the kinematics and mechanisms of the broad Eurasian/African/Arabian collision zone. Contributions on new aspects arising from the global observing system GGOS and the new satellite missions for gravity, SAR and Laser Altimetry are welcome in particular. The threat by Natural Hazards to the Mediterranean is addressed in a special session on geohazards.

2nd Circular with Call for Abstracts and additional information available at <a href="http://www.ipg.tu-darmstadt.de/wegener/">http://www.ipg.tu-darmstadt.de/wegener/</a>.

MATTHIAS BECKER

#### International IGeS School "THE DETERMINATION AND USE OF THE GEOID"

Organized by Politecnico di Milano, Campus Como COMO, Italy, 15-19 September 2008.

PRELIMINARY PROGRAM (DEADLINE FOR THE REGISTRATION: 15 JULY 2008)

## **Local Organizing Committee:**

Fernando Sansò Riccardo Barzaghi Giovanna Sona

e-mail : <u>iges@polimi.it</u> web : <u>www.iges.polimi.it</u>

Tel: +39 - 02-2399.6527 / 02-2399.7520

Fax: +39 - 02-2399.7519

Organization of accommodation will follow

# **Preliminary Program:**

1st day (15 September 2008) Prof. F. Sansò and R. Barzaghi

Lecture 1 – General Introduction to Physical Geodesy

Lecture 2 – General Theory for Geoid Computation

Lecture 3 – The Remove Restores Concept and Collocation

#### 2nd day (16 September 2008)

Lecture 4 – The Global Geopotential Models **Prof. N. Pavlis** 

Exercises 1 on Global Models

Exercises 2 on Global Models

## 3rd day (17 September 2008) Prof.C.Tscherning

Lecture 5 - The Collocation Method in Geodesy

Exercises 1 on Collocation

Exercises 2 on Collocation

**BGI** Seminar

#### 4th day (18 September 2008)

Lecture 7 – The Terrain Effect in Geoid Estimation **Prof. R. Forsberg** 

Exercises

## 5th day (19 September 2008) Prof. I.Tsiavos

Lecture 6 – The FFT Methods to Geodesy

Exercises 1

Exercises 2

Note: All the software used during the school will be made available on CD for the participants

#### **REGISTRATION FORM:**

Please send by e-mail or fax this registration form to:

iges@polimi.it

Fax: +39 -02-23997519

Registration Form:	
Name:	
Organization:	
Address:	
Country:	
E-mail:	
Tel:	
Fax:	

Registration Fee (paid before 15 July, 2008):400 Euros

Registration Fee (paid after 15 July, 2008): 500 Euros

Registration Fee includes the School Lecture Notes and the sw package that will be delivered on CD to the students, the social dinner and coffee breaks.

Details on methods of payment will follow.

F. Sansò – R. Barzaghi – G. Sona

## ILP workshop at Ensenada, Baja California

(Mexico), 21-26 September 2008:

Volcanism, mantle, paleo-stress and sedimentary basins;. A joint International Lithosphere Programme Task Force conference.

The conference will be held at the Corall Hotel in Ensenada, facing the Ocean, 200 m away from the Earth Science building. A 2 days pre-conference field trip (September 22-23) is scheduled. Already approved sessions comprise: Volcanism and geodynamics: insights from studies of eroded volcanic systems; Long-term evolution of volcanoes and volcanic systems recording lithospheric processes; Lithosphere-astenosphere interactions; Temporal and spatial changes of stress and strain; Baby plumes; Architecture and evolution of the Gulf of Mexico and other Mexican basins; Sub-Andean basins and Circum-Pacific margins.

On-line abstract submission, hotel infos, and registration are available on the web site of the Mexican Geophysical Union (<a href="www.ugm.org.mx">www.ugm.org.mx</a>), with a deadline for submission on 2 June 2008.

Other contacts: Dr L. Delgado-Argote (<u>Idelgado@cicese.mx</u>), Dr F. Ortuńo-Arzate (<u>fortuno@imp.mx</u>), Prof. A. Tibaldi (<u>alessandro.tibaldi@unimib.it</u>).

A. TIBALDI

# **GNSS Reflectometry Course and Workshop**

ESTEC Noordwijk, Netherlands, September 24-25, 2008.

This is to announce the forthcoming GNSS-R workshop and one-day course on GNSS-R organized by the European Space Agency and to be held on 24-25 September at ESTEC in Noordwijk, The Netherlands.

The first day there will be a course on GNSS-R covering:

- Fundamental principles
- Experiments
- Processing
- Applications (mesoscale altimetry, wind and wave scatterometry, sea-ice, soil moisture, etc)
- Limitations and sources of error
- Future of GNSS signals
- Potential in-orbit demonstrator (conceptual design, applications addressed, accuracy, error budget...)

The second day there will be a chance for those working in the field of GNSS-R to present their latest work plus round table to discuss future actions with respect to an in-orbit demonstrator.

There will be no cost for participation in the workshop and course. To register please send an e-mail to <a href="https://example.com/Christopher.Buck@esa.int">Christopher.Buck@esa.int</a>. Further details will be announced in the next few weeks.

CHRISTOPHER BUCK Payload Engineer ESA/ESTEC

# 16th International Workshop on Laser Ranging – Updated Announcement

Poznan Poland, October 13-17, 2008.

The Space Research Centre of the Polish Academy of Sciences will host the next International Workshop on Laser Ranging in Poznan Poland (15 km from the Borowiec SLR station) on October 13-17, 2008 (note new dates). The theme of this year's workshop is "SLR, The Next Generation". The first circular will be issued soon. In the meantime, we ask you to reserve these dates on your calendars and plan to attend what will surely be another exciting laser workshop.

We are also pleased to announce that the proceedings from the 15th International Workshop on Laser Ranging, held in Canberra Australia in October 2006, have been completed. All presentations and papers from this workshop will also be accessible through the ILRS Web site at: http://cddis.gsfc.nasa.gov/lw15/index.html.

CAREY NOL

Crustal Dynamics Data Information System (CDDIS)

## Colloquium to honour Helmut Moritz

on November 14, 2008 at Berlin (Germany) (Extract of the First Circular distributed on April 10, 2008)

Announcement and Invitation

On November 1, 2008, Prof. Dr. techn. Dr. h.c. mult. Helmut Moritz, Graz, Member of the Leibniz Society of Sciences at Berlin, Full Member of the Austrian Academy of Sciences (ÖAW), foreign member of over ten national academies of sciences, is reaching the age of 75.

On this occasion the Leibniz Society, to honour its standing member of many years', is organising an all-day Colloquium on the theme "Scientific Geodesy" on November 14, 2008, at Berlin. This colloquium is supported by the Austrian Academy of Sciences (ÖAW), the International Association of Geodesy (IAG) and the Graz Technical University.

Helmut Moritz is also by international standards one of the most important representatives of scientific geodesy in the last half-century heralded by the International Geophysical Year 1957/58, which marked the beginning of space travel and the resulting space research in October 1957, in which the geodesy with all its branches reached a level unimaginable before and became truly international and global. Helmut Moritz served the international geodetic community over many years, to mention only: from 1979 to 1983 as the President of the International Association of Geodesy, and from 1991 to 1995 as the President of the International Union of Geodesy and Geophysics, to which there belong 7 associations, the oldest of these being the IAG.

In the honorary colloquium on the 14<sup>th</sup> of November 2008 the Leibniz Society centres on Helmut Moritz' fields of study and scientific interest. The Society invites his friends, colleagues, coworkers and scholars to present papers on relevant actual and historical subjects Future applications can be accepted only for poster presentation.

The Committee organising the colloquium consists of Erik W. Grafarend (Stuttgart), Bernhard Hofmann-Wellenhof (Graz), Heinz Kautzleben (Berlin) and Reinhard Rummel (Munich). The 2<sup>nd</sup> Circular will be distributed on July 31, 2008.

Colleagues, who intend to take part in the colloquium and are interested to get the 2<sup>nd</sup> Circular, are asked to contact the address kautzleben.leibniz-sozietaet@t-online.de

HEINZ KAUTZLEBEN

# IAG Sponsored Meetings

#### New Challenges in Earth's Dynamics ETS2008

September 1-5 2008, Jena, Germany

Under the sponsorship of the International Association of Geodesy (IAG), the Commision 3 (Geodynamics) & the sub-commissions on earth Tides (3.1), Crustal Deformation (3.2), Geophysical Fluids (3.3) and the Global Geodynamics Project (GGP) organise for the first time a joint meeting which will include the 16th International Symposium on earth Tides. The assembly will provide a unique opportunity to exchange new results and strategies to meet the current challenges of earth's dynamics from different viewpoints. For details, please visit www.ets2008.de.

## 14th General Assembly of WEGENER - WEGENER 2008

September 15-18, 2008, Darmstadt, Germany

The 14th General Assembly of WEGENER - WEGENER 2008 will take place in Darmstadt, Germany, from September 15-18, 2008. The conference venue will be darmstadtium, the new Science and Conference Center in Darmstadt. The 14<sup>th</sup> Assembly of WEGENER will provide a forum for presentation, discussion, coordination and scientific support for geoscientists interested in unravelling the kinematics and mechanisms of the broad Eurasian/African/Arabian collision zone. Contributions on new aspects arising from the global observing system GGOS and the new satellite missions for gravity, SAR and Laser Altimetry are welcome in particular. 2<sup>nd</sup> Circular with Call for Abstracts and additional information are available at <a href="http://www.ipg.tu-darmstadt.de/wegener/">http://www.ipg.tu-darmstadt.de/wegener/</a>.

# IAG Related Meetings

## **United Nations Regional UN-SPIDER Workshop**

July 8-11, 2008, Hastings, St. Michael, Barbados, South Korea

The United Nations Regional UN-SPIDER Workshop: "Building Upon Regional Space-based Solutions for Disaster Management for the Caribbean" will be held in Barbados from 08-11 July 2008. First Announcement provides information on the workshop and is available on the website <a href="http://www.unoosa.org/oosa/en/unspider/workshops.html">http://www.unoosa.org/oosa/en/unspider/workshops.html</a>.

## 37th Scientific Assembly of the Committee on Space Research and Associated Events - COSPAR 2008

50th Anniversary Assembly

13 - 20 July 2008, Montreal, Canada.

The 50<sup>th</sup> Anniversary Assembly COSPAR 2008 will be held in Montreal, Canada. For more information about this particular event please visit the Assembly website at <a href="http://www.cospar2008.org/">http://www.cospar2008.org/</a>.

# Conference on Remote Sensing Techniques in Disaster Management

22-24 September 2008, Zadar, Croatia

The First International Conference on Remote Sensing Techniques in Disaster Management and Emergency Response in the Mediterranean Region will take place in Zadar, Croatia. The subject "Disaster Management and Emergency Response" is a high-priority topic in the Mediterranean region. Risk reduction using remote sensing techniques may be very helpful in various applications. Identification of relevant space-based and airborne information for Disaster Management Support and Emergency Response is a major priority issue. The webpage of the conference is <a href="http://www.earsel.geosat.hr/">http://www.earsel.geosat.hr/</a>.

## Third World Congress "Aviation in the XXI-st Century"

22-24 September 2008, Kyiv, Ukraine

The Third World Congress "Aviation in the XXI-st Century" - "Safety in Aviation and Space Technology", will be held at the National Aviation University, Kiev, Ukraine, September 22-24, 2008. For more information please visit <a href="http://congress.nau.edu.ua/">http://congress.nau.edu.ua/</a>.

#### **GNSS Reflectometry Course and Workshop**

24-25 September 2008, ESTEC in Noordwijk, Netherlands

The forthcoming GNSS-R workshop and one-day course on GNSS-R is organized by the European Space Agency and will be held on 24-25 September at ESTEC in Noordwijk, The Netherlands. There will be no cost for participation in the workshop and course. To register please send an e-mail to Christopher.Buck@esa.int.

## 16th International Workshop on Laser Ranging

13-17 October 2008. Poznan. Polan

The next International Workshop on Laser Ranging will be held in Poznan Poland (15 km from the Borowiec SLR station) on October 13-17, 2008. (note new dates). The theme of this year's workshop is "SLR, The Next Generation". The first circular will be issued soon.

#### HydroChange 2008

October 1-3, 2008, Kyoto, Japan

The HydroChange 2008 Symposium "Hydrological changes and management from headwater to the ocean" will be held at Kyoto Garden Palace, Kyoto, Japan. Please visit the official web site of the Symposium at <a href="http://www.chikyu.ac.jp/HC">http://www.chikyu.ac.jp/HC</a> 2008.

#### 21st CODATA International Conference

5-8 October 2008, Kyiv, Ukraine

CODATA - International Council for Science: Committee on Data for Science and Technology's 21<sup>st</sup> International Conference: "Scientific Information for Society - from Today to the Future" will be held in Kyiv, Ukraine. Visit <a href="http://www.codata.org/08conf/index.html">http://www.codata.org/08conf/index.html</a> for more information.

# **UN-SPIDER Bonn Workshop**

October 13-15 2008, Bonn, Germany

The Second United Nations International UN-SPIDER Bonn Workshop: "Disaster Management and Space Technology – Bridging the Gap" to be held in Bonn, Germany from 13-15 October 2008. The workshop will be organised by the United Nations Office for Outer Space Affairs (UNOOSA) and the German Aerospace Center (DLR) and will build on top of the first workshop held in Bonn last year. More information on the workshop is available on the website <a href="https://www.unspider.org">www.unspider.org</a>.

#### The Role of Hydrology in Water Resources Management

October 13-16 2008, Isle of Capri, Naples, Italy

A joint IAHS UNESCO Symposium on The Role of Hydrology in Water Resources Management will be held in Naples, Italy. The purpose of the Symposium "The Role of Hydrology in Water Resources Management" is to discuss ways in which hydrologists can contribute most effectively to the planning and management of freshwater projects, including the efficient operation of existing systems faced with new socio-political situations. Web page of the Symposium is <a href="https://www.ihp2008capri.it">www.ihp2008capri.it</a>.

#### XXXVI IAH Congress

October 26-31, 2008, Toyama, Japan

"Integrating Groundwater Science and Human Well-being" congress is planned to be held in Toyama, Japan. Please visit http://www.envr.tsukuba.ac.jp/~IAH2008.

#### ACM GIS 2008

November 5-7, 2008, Irvine, CA, USA

The ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems 2008 (ACM GIS 2008) is the sixteenth event of a series of symposia and workshops that began in 1993 with the aim of bringing together researchers, developers, users, and practitioners carrying out research and development in novel systems based on geo-spatial data and knowledge, and fostering interdisciplinary discussions and research

in all aspects of geographic information systems. Additional information is available through the webpage <a href="http://acmgis08.cs.umn.edu/">http://acmgis08.cs.umn.edu/</a>.

## Digital Earth Summit on Geoinformatics: Tools for Global Change Research

November, 12-14, 2008, Potsdam, Germany

The summit will be held in Wissenschaftspark Albert Einstein, Potsdam, Germany from 12-14 November 2008. It will bring together leading scientists from Geoinformatics and Global Change research and will foster the exchange of ideas, cooperation between so-far disjoint scientific fields and provide time for in-depth discussion. For details please visit the webpage of conference, www.isde-summit-2008.org.

## IAG Sister Societies' General Assemblies

#### Associations' Scientific Assemblies of the IUGG

- IUGG/IAGA, August 23-30, 2009, Sopron, Hungary
- IUGG/IAHS, September 7-12, 2009, Hyderabad, India
- IUGG/IASPEI, January 10-16, 2009, Cape Town, South Africa
- IUGG/IAG, August 31-September 4, 2009, Buenos Aires, Argentina
- IUGG/IACS-IAMAS-IAPSO, July 19-29, 2009, Montreal, Canada
- IUGG/IAVCEI, August 18-25, 2008, Reykjavik, Iceland

#### XXI ISPRS Congress

July 3-11, 2008, Beijing, China

The quadrennial ISPRS Congress will be hosted by the Chinese Society of Geodesy, Photogrammetry and Cartography, with the theme 'Silk Road for Information from Imagery'. It is worth mentioning that ISPRS 2008 Beijing will be held just one month before 2008 Beijing Olympic Games when the city will become the focus of world attention. Detailed information is available from the Congress website: <a href="http://www.isprs2008-beijing.org/">http://www.isprs2008-beijing.org/</a>.

## 33rd International Geological Congress IGC

August 6-14, 2008, Oslo, Norway

The 2008 Congress will be held in collaboration with the International Union of Geological Sciences (IUGS) and many other international and national organisations, the National IUGS Committees in the five Nordic Countries (Norden): Norway, Denmark, Finland, Iceland and Sweden. Please visit <a href="http://www.33igc.org/">http://www.33igc.org/</a> for more information about the IGC 2008.

#### IAVCEI 2008 General Assembly

August 18-25, 2008, Reykjavík, Iceland

Reykjavik is an excellent place to host the IAVCEI General Assembly in 2008. The main theme of the meeting will be "Understanding Volcanoes". The meeting is devoted to volcanism and volcano-tectonics of all environments and the impact of volcanic eruptions on the surface environment and human activities. The website of the Assembly is <a href="http://www.iavcei2008.hi.is/">http://www.iavcei2008.hi.is/</a>.

# Reports

A Report on the Joint Symposium "Measuring the Changes" of the FIG 13th Symposium on Deformation Measurement and Analysis and the IAG 4th Symposium on Geodesy for Geotechnical and Structural Engineering, May 12 – 15, 2008, Lisbon, Portugal

Adam Chrzanowski<sup>1</sup>, Chris Rizos<sup>2</sup>, Maria Joao Henriques<sup>3</sup> and Cecilia Whitaker<sup>4</sup>

Canadian Centre for Geodetic Engineering, University of New Brunswick, Canada<sup>1</sup> School of Surveying & Spatial Information Systems, University of New South Wales, Australia<sup>2</sup> Laboratorio Nacional de Engenharia Civil (LNEC), Portugal<sup>3</sup> Metropolitan Water Dsitrict of Southern California, USA<sup>4</sup> The second jointly held symposium on deformation measurements and analysis was held May 12 – 15, 2008 in Lisbon, Portugal. The symposium was a combined meeting of the FIG Commission 6, Working Group 6.1, Deformation Measurements and Analysis (13<sup>th</sup> FIG Symposium on Deformation Measurement and Analysis) and the IAG Sub-commission 4.2, Applications of Geodesy in Engineering (4<sup>th</sup> IAG Symposium on Geodesy for Geotechnical and Structural Engineering). The theme of the symposium "Measuring the Changes", reflects the importance, and demand, for fully automated, continuous, and reliable deformation monitoring in the civil engineering, mining, and energy sectors. In addition there is a strong trend to incorporate deformation systems into new structures from the very beginning, driven by concerns for whole-of-life structural health monitoring. Automation, multi-sensor integration, continuous data collection, integrated analysis and physical interpretation, and enhanced accuracy and reliability are the key developments in new monitoring systems. These issues are the subject of studies of these two international working groups.

The symposium was attended by about 160 delegates from 30 countries. Maria Joao Henriques and her Laboratorio Nacional de Engenharia Civil (LNEC) colleagues did a wonderful job of organizing the symposium and events, and the meeting was a great success. (Information about the symposium can be found at the official site of the organizers: <a href="http://measuringchanges.lnec.pt">http://measuringchanges.lnec.pt</a> and soon to be posted proceedings.)

The symposium had 20 technical sessions with topics ranging from modeling (4 sessions), monitoring of structures (3), GNSS (2), geodeformations (2), radar (2), equipment (2), laser scanning, engineering geodesy, multi-techniques and poster papers (2). In addition, there was a special session for those interested in fiber optic sensors hosted by the FIG WG 6.4 (Engineering Surveys for Construction Works and Structural Engineering) task force on fiber optic sensors. Keynote presentations by each chair of the two organizations started off the symposium and were followed by many excellent presentations and poster papers throughout the event.

There was also great participation by supporting vendors in the exhibitor's session. There were exhibits from



Leica Geosystems, Sokkia Europe, Topcon, Fiber Sensing, Emilio de Azevedo Campos and Measurand Geotechnical. These exhibitors were very active participants with types of equipment demonstrations taking place inside and outside of the symposium hall. attendees event Many received personalized and handson experience with the equipment.

Another aspect of the symposium is the great support the organizing committee received from the vendors to help sponsor this event. The vendors that sponsored the symposium at the

platinum level were Leica Geosystems, Topcon and Trimble. At the silver level, support was received from



GAUSS, SPGO, Portuguese Geographic Institute, Sokkia Europe, Sol Data Iberia and Technasol FGE. The organizers and chairs of the symposium sincerely express their appreciation for the support these organizations provide for these meetings to take place.

No symposium is complete without a social event to "loosen up" the attendees for a night of mingling and making new friends and connections. The LNEC provided a wonderful

evening of fun by hosting a dinner at the Lusitania Horse Training Center. The evening started with a show of the horse's skill in historic battlefield maneuvers and was followed by an excellent dinner with a show of the traditional Portuguese fado music.

The first morning of the symposium coincided with the devastating earthquake in China. The symposium participants prepared a condolence letter for the victims of the Chengdu earthquake to express their sadness and

solidarity with the peoples of Sichuan Province. To show further support, at the closing session, discussion was held regarding holding the next symposium in mainland China. Canada and Hong Kong were also offered as possible venues. The proposers of these locations are tasked with submitting a proposal to Adam Chrzanowski (chair FIG WG 6.1) and Chris Rizos (vice president IAG) for consideration. Proposals should address topics like local and international travel to site, hotel accommodations, conference facilities, cost to participants and local appeal.

The day after the symposium end was a technical field trip to visit Alqueva Dam. This trip provided attendees the opportunity to observe the Portuguese countryside and to see the issues that Portuguese dam engineers and surveyors face close up.



One of the action items from the closing session was to provide a web site specifically for deformation topics, which would include the past proceedings and other related documents. While this is not accomplished yet, links for the proceedings for all the past events with digital proceedings can be seen below. The majority of the proceedings are at this general link - <a href="http://www.fig.net/commission6/reports/reports.htm">http://www.fig.net/commission6/reports/reports.htm</a>. The Lisbon proceedings will be added in the near future.