



# **IAEG NEWSLETTER**

**Electronic Version**

**No.1, June 19, 2013**

**Website : [www.iaeg.info](http://www.iaeg.info)**

Edited by the IAEG Secretariat, Beijing

---

## **CONTENTS**

- 1.ACTIVITY OF THE PRESIDENT**
- 2.LETTER FROM EDITOR IN CHIEF**
- 2. REPORTS OF IAEG CONGRESS 2014**
- 3. REPORTS OF IAEG MEETING 2013**
- 4. IAEG INTERNET SURVEY 2012**
- 5. MEMBERSHIP INFORMATION UPDATE 2013**
- 7. NEWS FROM NATIONAL GROUPS**
- 8. MEETING INFORMATION**
- 9. CONTACT INFORMATION**

## ACTIVITY OF THE PRESIDENT

During the last period, in January I called for a meeting in Lisbon with the 50th anniversary book commission. I could count with the attendance of Ricardo Oliveira, Paul Marinos and Sébastien Dupray. We have discussed some important issues referring to the 50th anniversary book such as: language, table of content, author list, blocks of the book, etc. This last part will be divided in four blocks:

1. Foundation of IAEG
2. IAEG services
3. Memories
4. The past of IAEG for the future of the Engineering Geology.

We discussed about the actions that must be continued by the President, Secretary General and Presidents of National Groups, chronogram, budget and financial issues.

Another meeting by teleconference, has been fixed for May 13rd.

At the beginning of March I visited Springer's office in Germany and I had a meeting with Martin Culshaw, the new editor-in-chief, and with the responsible persons of the printing of our Bulletin. The main points discussed were:

1. Increase the citation index
2. Reach some solution to exit the big "log" of articles at present waiting to be published.
3. Author workshops organized by Springer with any National Group interested in learning how to prepare papers or articles and how to present theirs to congresses or bulletins.
4. Organized a "net work" of reviewers for speeding the system. I hope that with this new system the quantity of published articles will increase and in consequence the quality of our Bulletin.

Also last March, we celebrated a multi-conference with the Ex. Com. members trying several themes of importance:

1. 50th anniversary book
2. Bulletin
3. Website
4. TOC (Commissions)
5. Present state of the 2014 Torino Congress
6. Next FedIGS meeting in May
7. Next IAEG meeting in Beijing in September.

Many comments and positive ideas were discussed and we planned another teleconference for early June.

The Spanish NG celebrated a conference at the School of Civil Engineering (UPM). It was a pleasure was able to have important lecturers in the world of the Spanish and Portuguese engineering geology.

## INSCRIPCIÓN

La inscripción será gratuita para los alumnos de la Escuela de Ingeniería de Obras Públicas.

La inscripción da derecho a la asistencia a la Jornada, a los actos oficiales programados y al certificado correspondiente.

# A.E.G.A.I.N.

## I Jornada sobre la Ingeniería Geológica en Obras Singulares

<http://www.op.upm.es>

## INFORMACIÓN SOBRE LA JORNADA

Para cualquier información dirigirse a:

A.E.G.A.I.N.  
ASOCIACIÓN ESPAÑOLA DE GEOLOGÍA  
APLICADA A LA INGENIERÍA

Secretaría de la Jornada de:  
**Ingeniería Geológica en Obras Singulares**

Secretaría Técnica  
D. Alfonso Gorrochategui Alvarez

ESCUELA DE INGENIERÍA CIVIL  
C/ Alfonso XII Nº 3 y 5 - 28014 - MADRID  
Teléfonos 913367757 - 610795558  
FAX 913367961

## PRESENTACIÓN

Toda obra singular tiene un importante componente de estudio del terreno, y la ingeniería geológica juega un papel decisivo a la hora de estudiar el proyecto y el control durante la ejecución.

AEGAIN, en la línea de las jornadas anteriores, celebra esta orientada a grandes proyectos a nivel global con ponencias presentadas por expertos de muy alto nivel internacional.

La Jornada se desarrollará en la Escuela de Ingeniería Civil (antigua de Obras Públicas), situada en el cerro de San Blas, rodeada de edificios singulares como el Museo del Prado, el Observatorio Astronómico o los Jerónimos.



# A.E.G.A.I.N.

ASOCIACIÓN ESPAÑOLA DE GEOLOGÍA APLICADA A LA INGENIERÍA



## I Jornada sobre la Ingeniería Geológica en Obras Singulares

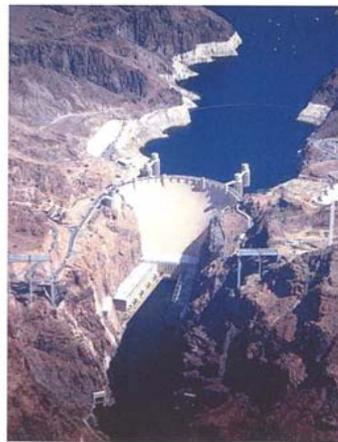
MADRID  
20 de febrero de 2013  
ORGANIZA:

# A.E.G.A.I.N.

Con el patrocinio de:

con la colaboración de:

**Escuela de Ingeniería Civil**



## PROGRAMA CIENTÍFICO

- 09.30 - 09.45  
Inauguración y acto de apertura
- 09.45 - 10.45  
1ª Ponencia: "Aplicaciones singulares de las inyecciones de fracturación hidráulica del terreno"  
Ponente: D. Antonio Santos Moreno (C.E.D.E.X, Jefe de Área)
- 10.45 - 11.45  
2ª Ponencia: "Cimentación especial para un aulario junto a la muralla árabe de Guadalajara"  
Ponente: D. Fernando Da Casa (Catedrático UAH)
- 11.45 - 12.00  
Descanso
- 12.00 - 13.00  
3ª Ponencia: "Comportamiento de las rocas blandas alterables en desmontes y su caracterización"  
Ponente: D. Jordi Corominas (Catedrático de la UPC)
- 13.00 - 14.15  
4ª Ponencia: "Investigaciones geotécnicas para cimentaciones de grandes obras"  
Ponente: D. Ricardo Oliveira (Consejero General de COBA, Consultores de Ingeniería)
- 16.00 - 17.00  
5ª Ponencia: "Condiciones de Cimentación en terrenos problemáticos. Caso práctico en el PAU de Vallecas"  
Ponente: D. Félix Escolano (Profesor U.P.M.)
- 17.00 - 18.00  
6ª Ponencia: "Dos casos de estudio de estabilidad en elementos patrimoniales"  
Ponentes: D. Javier Ángel Másferrer (Profesor U.P.M.) y D. José María García de Miguel (Director Cátedra UNESCO)
- 18.00 - 18.30  
Coloquio y debate
- 18.30 - 18.45  
Clausura

## PUBLICACIONES

Posterior a la Jornada se publicará en la página web de la Asociación <http://www.aegain.es> las conferencias desarrolladas en la jornada.

Se entregará un certificado de asistencia a todos los asistentes inscritos en la Jornada.



Finally I would like to encourage all Presidents of National Groups to attend in September the IAEG meeting in Beijing and try to bring members of their groups. It will be an important meeting and important decisions will be taken.

I hope to see all of you in Beijing!

Carlos Delgado  
IAEG President



## LETTER FROM EDITOR IN CHIEF

Professor Martin Culshaw, has taken over as Editor-in-Chief of the Bulletin of Engineering Geology and the Environment, the IAEG's official journal, from Dr Brian Hawkins who had been in charge since 1998. I was formerly Director of Environment and Hazards at the British Geological Survey and am currently an Honorary Visiting Professor in the School of Civil Engineering at the University of Birmingham.

The change in Editor comes at a crucial time for the Bulletin. Springer, its publisher, have rightly insisted that all paper submissions must now be made on-line via the Bulletin's web-page. This change should speed up the review process but authors should note that this change places a greater obligation on them to produce their papers in English or French of a very high standard. It is essential that, if authors do not have English or French as their first language, they find a native speaker to read and edit their paper. Failing that, authors should use an English editing service for scientists, such as Edanz, which is recommended by Springer. As Editor, I shall reject papers that are not written in English or French that is clear and understandable. I realise that this is hard on the majority of authors who do not have English or French as their first language. However, these are the two languages in which the Bulletin is published. Unless that changes authors must submit their papers in excellent English or French.

I wish to greatly increase the size of the Bulletin's Editorial Board. I shall be happy to receive applications from IAEG members who meet the following criteria:

They will have:

- considerable experience (>10 years) in one, or more, aspects of engineering geology;
- published at least one paper in an international peer-reviewed journal;
- reviewed at least one paper for an international journal;
- a high level of understanding of written and spoken English or French.

Applicants should send their CV by email to me at [martin.culshaw2@ntlworld.com](mailto:martin.culshaw2@ntlworld.com) and state why they think that they are suitable for membership of the Editorial Board. They should also list the aspects of engineering geology in which they have particular expertise.

Each year, the Bulletin has a different engineering geological photograph on its front cover. I am now looking for a photograph to grace the cover of the 2014 volume. So, please send me your photographs to the email address above (but only one per member). The photographs should be in landscape format, be of high resolution and, while you (or an organisation) can retain copyright of the photograph, the Bulletin must be able to publish the photograph at zero cost. The photograph should not have been published anywhere previously.

Finally, let me apologise to those of you who have submitted papers to the Bulletin in the last year or so. Processing of your papers has taken longer than I would have liked. This was because of the large back-log of papers that I have had to deal with. I and my Assistant Editors and Editorial Board members have almost caught up but, inevitably, there still may be a few further delays over the next few months. I ask you to be patient.

I also want to ask you to submit your papers to the Bulletin in future. However, we want to improve the standard of the Bulletin as measured, in part, by the Bulletin's impact factor. We can only do this if you send papers of the highest quality. What does this mean? Well, if you think that your paper is not good enough for journals such as Engineering Geology, the Quarterly Journal of Engineering Geology and Hydrogeology, Environmental and Engineering Geology or Geotechnical and Geological Engineering, then it is not good enough for the Bulletin. Papers will be reviewed to international standards. I do not wish to put you off submitting papers but I do want the best papers. And do make sure that your papers are engineering geological in content. Papers that make little or no mention of geology will be rejected. So, for example, papers that are primarily, for example, geotechnical, hydrogeological, hydrological or geomorphological in nature, but without setting the content in the context of the geology, will be rejected. I know this sounds harsh but the Bulletin is an engineering geological journal!

If you have any questions about the Bulletin do get in touch.

Martin Culshaw  
Editor-in-Chief

Bulletin of Engineering Geology and the Environment

~~~~~

# REPORTS OF IAEG CONGRESS 2014

<http://www.iaeg2014.com/>

## ● Book of the Congress

The Organizing Committee has planned with Springer to collect and publish the contributions sent in a SERIES OF EIGHT BOOKS, each dedicated to a topic of the Congress. These volumes aim to constitute a bridge towards the future developments of Engineering Geology in our society on the occasion of the celebration of the 50th Anniversary.

## ● Abstract submission reached quota 1760

The deadline expired for the Congress abstract submission and we are pleased to inform you that the overall number of abstracts received has been greater than 1760!

We wish to thank all the conveners for their efforts and enthusiasm in supporting this initiative and all the authors that, through their contributions, granted this great success. According to the timetable, it is now time to start the reviewing phase of the received abstracts. For this purpose, we have already mailed to all the conveners the instructions and the guidelines that will allow them to carry forward this important task, the deadline of which has been fixed for June 30th.

As already mentioned in previous newsletters, abstracts will undergo a first peer review and, for those accepted, the deadline for the submission of the full paper will be indicatively fixed for the end of September 2013. We remind that this early deadline will grant that the publication of the Springer Proceedings book series will occur **at the beginning of the Congress.**

Here below you can find some statistics about the contributions received, according to the Topics and the Country of origin.

### 1- Contributions divided according to the country of origin

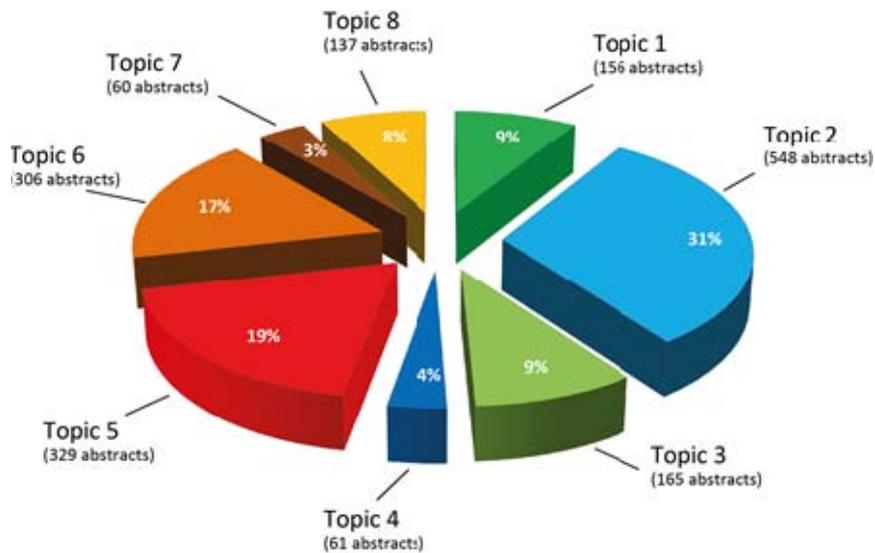
|                        |   |
|------------------------|---|
| Bhutan                 | 1 |
| Bosnia and Herzegovina | 1 |
| Botswana               | 1 |
| Bulgaria               | 1 |
| Chad                   | 1 |
| Cuba                   | 1 |
| Denmark                | 1 |
| Fiji                   | 1 |
| Iraq                   | 1 |
| Ivory Coast            | 1 |
| Laos                   | 1 |
| Lithuania              | 1 |
| Malawi                 | 1 |
| Malaysia               | 1 |

|                |    |
|----------------|----|
| Poland         | 4  |
| Georgia        | 5  |
| South Korea    | 5  |
| Bangladesh     | 6  |
| Ukraine        | 6  |
| Czech Republic | 7  |
| Sweden         | 7  |
| Albania        | 8  |
| Belgium        | 8  |
| Romania        | 8  |
| Slovenia       | 8  |
| Finland        | 9  |
| Croatia        | 10 |
| Netherlands    | 13 |

|                      |   |
|----------------------|---|
| Singapore            | 1 |
| Sri Lanka            | 1 |
| Tajikistan           | 1 |
| Tanzania             | 1 |
| United Arab Emirates | 1 |
| Uruguay              | 1 |
| Uzbekistan           | 1 |
| Argentina            | 2 |
| Barbados             | 2 |
| Luxembourg           | 2 |
| Mexico               | 2 |
| Nepal                | 2 |
| Pakistan             | 2 |
| Peru                 | 2 |
| Saudi Arabia         | 2 |
| Vietnam              | 2 |
| Afghanistan          | 3 |
| Cyprus               | 3 |
| Egypt                | 3 |
| Ethiopia             | 3 |
| Morocco              | 3 |
| Nigeria              | 3 |
| Slovakia             | 3 |
| Tunisia              | 3 |
| Azerbaijan           | 4 |
| Chile                | 4 |
| Hong Kong            | 4 |
| Israel               | 4 |

|                |     |
|----------------|-----|
| New Zealand    | 13  |
| Norway         | 13  |
| Serbia         | 13  |
| Hungary        | 14  |
| Australia      | 17  |
| South Africa   | 18  |
| Canada         | 21  |
| Turkey         | 21  |
| Algeria        | 26  |
| Portugal       | 26  |
| Taiwan         | 27  |
| Iran           | 28  |
| United States  | 29  |
| United Kingdom | 30  |
| Switzerland    | 32  |
| Austria        | 34  |
| Greece         | 34  |
| Indonesia      | 41  |
| Spain          | 41  |
| Brazil         | 43  |
| France         | 49  |
| Germany        | 51  |
| Japan          | 57  |
| India          | 63  |
| Russia         | 63  |
| China          | 151 |
| Italy          | 436 |

2 - Contributions received for each topic of the Congress.



## REPORTS OF IAEG MEETING 2013

www.iaegasia2013.com

The International Symposium & 9th Asian Regional Conference of IAEG on the theme “Global view of Engineering Geology and the Environment” will be held in Beijing, China on 24<sup>th</sup> - 25<sup>th</sup> September, 2013.

Four technical themes and 2 workshops will focus on the main aspects of engineering geology and the environment.

- Crustal Stability and Dynamical Geo-hazards
- Engineering Geology in Major Construction Projects
- Urbanization and Geological Environment
- New Ideology and Technology in Engineering Geology
- Workshop C29: Structure & behavior of Soil & Rock Mass
- Workshop: Geo-hazards in Karst and Loess Areas

27 keynote and invited lectures will be given by outstanding engineering geologists in the international community. Special activities are arranged to facilitate the information exchange for international collaboration.

( Keynote and Invited Lectures:

<http://www.conferencenet.org/conference/IAEG/html/keynotespeakers.html>)

The meetings of IAEG Executive Committee and the Council will also be held on 22<sup>nd</sup> and 23<sup>rd</sup> September. We warmly welcome all our colleagues to Beijing and share your achievements in engineering geology from all around the world.

### ● Second Announcement

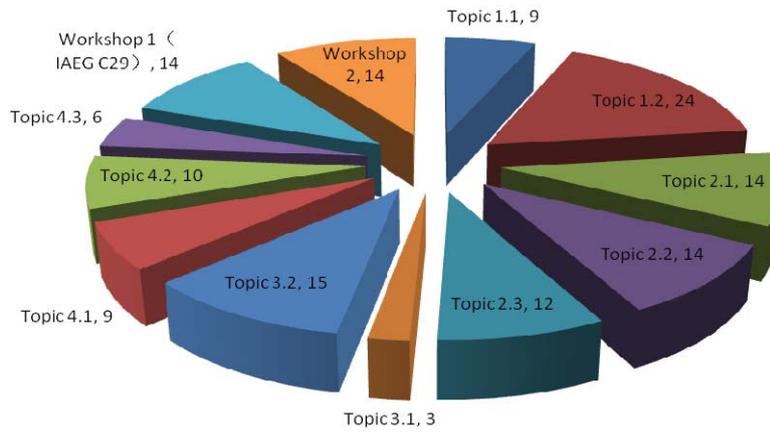
<http://www.conferencenet.org/conference/IAEG/html/2nd%20Announcement.pdf>

### ● Papers and Proceedings

Totally 303 abstract have been reviewed and 134 full papers accepted for our proceedings of the symposium after strict selection. The proceedings will be published by the publisher CRC Press, and a collection of abstracts will also be printed.

The country distribution of full papers is listed as following table, and topic distribution is shown at the Pie Chart.

| National Group    | Number of Paper | National Group | Number of Paper |
|-------------------|-----------------|----------------|-----------------|
| Argentina         | 1               | Kyrgyzstan     | 1               |
| Bhutan            | 1               | Italy          | 2               |
| Bulgaria          | 1               | Japan          | 1               |
| Canada            | 1               | Korea          | 4               |
| China (Hong Kong) | 1               | Russia         | 20              |
| China (Mainland)  | 90              | Singapore      | 2               |
| Germany           | 1               | Spain          | 1               |
| Greece            | 1               | Turkey         | 2               |
| India             | 7               | USA            | 4               |
| Iran              | 3               |                |                 |
| Total             |                 |                | 144             |



Early birds registration due will be July 31, 2013. 171 participants have registered through website <http://www.conferencenet.org/conference/IAEG/reg/reg.htm> including 87 IAEG members, and 111 have paid their fees till June 6, 2013.

The papers published finally are on the condition of revision and copyright submitted, registration and payment on time.

## ● Post-conference field trip

Post symposium excursions will show you the state-of-the-art of engineering geology in large scale engineering construction, urbanization and geological hazard prevention in China, as well as its history and traditional culture.

- Line 1: Coastal and Urban Geo-Environment in Jing-Jin-Tang Economical Circle (Sept. 26-27, 2013)
- Line 2: Loess Landslides and Ground Fissures in Xi'an (Sept. 26-30, 2013)
- Line 3: Three Gorges Hydropower Project and Geo-hazards (Sept. 26-29, 2013)

Details of lines please refer to

<http://www.conferencenet.org/conference/IAEG/html/fieldtrip.html>



## IAEG INTERNET SURVEY 2012:

### ---- The most concerned and hottest issues in Engineering Geology and Environment

To have a global view of the discipline of engineering geology and the environment, the IAEG secretariat has conducted the first round of annual internet survey within the IAEG community in the last month of 2012. The survey was focused on “the most concerned topics of engineering geology and comments for IAEG development”, and the information is collected by <http://www.surveymonkey.com/MySurveys.aspx>

134 responses from 13 National Groups/organizations have been received including 94 for “most concerned topics of engineering geology” and 40 for “comments for IAEG development”. One past president, one past secretary general, two vice presidents and some chairpersons of National Groups and Commissions of IAEG have contributed their ideas for the surveyed issues.

Responses to the IAEG Internet Survey

| National Group/<br>Organization | Most Concerned Topics of<br>Engineering Geology | Comments for IAEG<br>Development |
|---------------------------------|-------------------------------------------------|----------------------------------|
| Argetina                        | 2                                               |                                  |
| Australia                       | 1                                               | 2                                |
| Canada                          | 4                                               |                                  |
| China                           | 52                                              | 13                               |
| Channel Islands                 |                                                 | 1                                |
| France                          |                                                 | 2                                |
| Greece                          |                                                 | 4                                |
| GSL                             | 1                                               |                                  |
| Korea                           | 3                                               |                                  |
| Netherland                      | 8                                               | 3                                |
| New Zealand                     | 3                                               | 3                                |
| Niger                           | 3                                               |                                  |
| United KingdomK                 | 17                                              | 12                               |
|                                 | 94                                              | 40                               |

**The Results of the Internet Survey are listed in the following table**

To obtain a systematical understanding to the results of the survey, they are arranged in a system by the secretariat as Table 2. All the concerned issues are classified into 5 parts which includes the fundamental of the subject, application in specific aspects, methodology and technology, professional education and training, and ideas for development of IAEG. For each part except the last one, two levels of topics are organized to establish the framework of the result, and a series of keywords are listed for the description of the subtopics.

Result of the Survey on Most Concerned Topics of Engineering Geology

| 1. Fundamental                      |                                     |                                                                                                                                   |        |
|-------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------|
| Topic                               | Subtopic                            | Keywords/description                                                                                                              | Number |
| Property and behavior of geo-medium | Structure and behavior of rock mass | Structure, discontinuity network, geo-model, rock classification, mechanical parameters, structure-environment dominated behavior | 1      |
|                                     | Micro-structural soil mechanics     | Rock-soil mixture, Structure of soil, micro-structural soil mechanics                                                             | 2      |
|                                     | Water related behavior of soil      | Mechanism, expansibility, softening, permeability, freezing and thawing, micro-cement loss of loess                               | 2      |
|                                     | Rock and soil construction material | Building stones, ornamental, aggregates, environment                                                                              |        |

|                                                             |                                                    |                                                                                                                                     |    |
|-------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----|
|                                                             | soil mechanics and rock mechanics                  |                                                                                                                                     | 1  |
| Engineering geology in tectonic active region               | Tectonic activity and regional engineering geology | Reducing seismic risks                                                                                                              | 1  |
|                                                             | Seismic response of geo-medium                     | Loess liquefaction and landslides, sandy soil liquefaction, earthquake triggered geo-hazards                                        | 3  |
|                                                             | Behavior of rock under high geo-stress             | Structural compression, rock burst, large deformation, mechanism                                                                    |    |
|                                                             | Urban development                                  | Urban development in unstable areas                                                                                                 | 1  |
| Coastal engineering geology                                 | Near coastal dynamic process                       | Dynamics of wave and current, erosion and deposit, construction-seawater interaction                                                |    |
|                                                             | Property of sediment and filling                   | Subsidence, hi-water content                                                                                                        |    |
|                                                             | Marine and coastal geo-hazards                     | Seabed geomorphology and landslide, seabed liquefaction, mud volcanoes, tsunami, shallow gas                                        | 5  |
| Engineering geology under extreme climate                   | Freezing-thawing region                            | Permafrost degaration, freezing-thawing mechanism                                                                                   | 1  |
|                                                             | Desert area                                        | Desert, loess, gobi, stony desertification                                                                                          |    |
|                                                             | Storm and hot region                               |                                                                                                                                     | 1  |
|                                                             | Impact of climate change                           |                                                                                                                                     | 3  |
| Ground engineering geology                                  | Slope stability                                    | Large slope stability, earth filling slope stability, learn from the design of ancient quarry slope                                 | 4  |
|                                                             | Foundation                                         | Foundation failures for Infrastructures                                                                                             | 1  |
|                                                             | Thick loose sediment                               | Slope stability, seepage deformation                                                                                                | 1  |
| Deep engineering geology                                    | Mining, excavation and storage                     | Deep mining, High geo-stress, physicochemical interaction, seepage, carbon catchment and storage                                    | 1  |
|                                                             | Complex underground space                          | Rock stability                                                                                                                      | 1  |
|                                                             | Geo-hazards and resources                          | High temperature hazards; low temperature passage; exploitation of geothermal resources, genesis and distribution                   |    |
| <b>2. Application in Specific Aspects</b>                   |                                                    |                                                                                                                                     |    |
| Urbanization and civil engineering                          | Planning for urbanization                          | Digital city and sharing of eng. geo. information                                                                                   | 3  |
|                                                             | Foundation and foundation pit                      | Soft soil, slope stability of foundation pit, impact of groundwater                                                                 | 2  |
|                                                             | Underground space                                  | Subway, sub-pipe network, interaction between ground and underground constructions                                                  | 4  |
|                                                             | Reclamation area                                   | Ground subsidence control                                                                                                           |    |
|                                                             | Geo-environment                                    | water-soil contamination, waste disposal, subway vibration, dust of industry and construction                                       | 4  |
| Hydropower and water conservancy                            | Hydropower plant                                   | High slope, large underground power house, high geo-stress, loosening of high slope, thick loose sediment                           |    |
|                                                             | Ground and underground reservoir                   | Stability of bank, leakage                                                                                                          |    |
|                                                             | Inter basin water diversion                        | Water sensitive soil, deep-long tunnel, active fault                                                                                |    |
| Hi-speed transportation                                     | Planning and design                                | Engineering geological planning, zero differential subsidence control, avoiding and passing through                                 |    |
|                                                             | Deep tunnel                                        | Large deformation, groundwater hazards, advanced geological prediction, water sensitive and weak cemented sandstone, loess          | 1  |
| Mining & resources engineering                              | Plan of earth resources                            | Responsible use, renewable energy design, shale gas                                                                                 | 4  |
|                                                             | Deep mining                                        | Deep geo-hazard prediction and prevention, carbon sequestration                                                                     | 2  |
|                                                             | Nuclear power and waste disposal                   | Soft rock foundation in nuclear power plant siting                                                                                  | 1  |
|                                                             | Mine reclamation and environment protection        | Deep excavation induced surficial geo-hazards, long- term stability of ancient caverns                                              | 2  |
| Geo-hazard prevention                                       | Method of geo-hazard assessment and mitigation     | Geo-hazard prediction, loss evasion, early warning, design method                                                                   | 10 |
|                                                             | Prevention of landslide, rockfall & debris flow    | Potential size of debris flow, infiltration model of rainfall, urban geo-hazards, mechanism and monitoring of large scale landslide | 7  |
|                                                             | Other geo-hazards                                  | Surface collapse, karst collapse, pit falls                                                                                         | 3  |
|                                                             | Anti-seismic reinforcement of slope                | Mechanism of seismic triggered slope failure, dynamic analysis of slope stability                                                   | 4  |
| <b>3. Methodology and Technology of Engineering Geology</b> |                                                    |                                                                                                                                     |    |
| Investigation and mapping                                   | Geological exploration                             | Coring Techniques, equipment and reliability, improve quality of eng. geological investigation                                      | 4  |
|                                                             | Geophysical exploration                            | Deep water prospection and equipment, high resolution geophysical equipment                                                         |    |
|                                                             | Remote sense                                       | Interpretation of satellite image                                                                                                   | 1  |
|                                                             | Interpretation of RS data                          | Remote Sense, laser scanning,                                                                                                       |    |
|                                                             | Modeling and mapping                               | 3D modeling and GIS for geo-structure                                                                                               |    |
| Testing and monitoring                                      | Sample testing and equipment                       | Multi-field action, process testing, large sample                                                                                   |    |
|                                                             | In situ testing                                    | MWD, exact measurement of 3D stresses                                                                                               |    |

|                                 |                               |                                                                                                                                                                                                    |   |
|---------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|                                 | Integrated monitoring         | Automatic monitoring, RS, InSar, LiDar, GPS                                                                                                                                                        | 2 |
| Engineering geological analysis | Typical analysis method       |                                                                                                                                                                                                    | 1 |
|                                 | Modeling and simulation       | Mathematics, statistics and fitting modeling, FEM, FDM, DDA, PF, RFPA, HP computation                                                                                                              |   |
|                                 | Geo-mechanical modeling       | Physical modeling, shaking table, centrifuge                                                                                                                                                       |   |
| Information technology          | Data and technical supporting | Database and Decision Support Systems                                                                                                                                                              |   |
|                                 | Data Tele-transmission        | Tele-transmission and Internet of Things                                                                                                                                                           |   |
| Geological engineering          | Design technique              | Communication between engineering geology and design, design of anchored pile and micro-pile, resistance of weathered cataclastic rock, relationship between engineering geology and construction. | 5 |
|                                 | Geo-technique                 | Deep drilling and cracking, advanced detection and prediction, grouting, composite foundation                                                                                                      | 1 |
| Technical Standards             |                               | Comparison of standards and guidelines used in different countries                                                                                                                                 | 2 |

#### 4. Professional Education and Training for Engineering Geology

|           |                                                                               |   |
|-----------|-------------------------------------------------------------------------------|---|
| Education | Ideology, curriculum system and teaching material, improve quality of student | 1 |
| Training  | Ideology, international authentication of engineering geologist               | 2 |

#### 5. Development of IAEG

|                                              |                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |
|----------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Ideas for development of Engineering Geology | Development of the discipline                             | Lack of design/plan for development of engineering geology; make clear the domain; ; identify research direction; concern that engineering geology is to be replaced by civil Engineering; look for the gaps and overlap areas in technology; applications of engineering geology in developing market; insist on benefits of engineering geology to society; risk, environment, rational use of resources, protection of water; feeding back engineering geology results into the mainstream of geological and geomorphological research                                                                                            | 8  |
|                                              | Administration of IAEG                                    | Make IAEG a global registration body; carry out professional recognition; connecting different disciplines; collaboration with sister societies; rearrange commissions and set up new ones for growing orientations; concern the decrease of work quality, culpability to professional delinquent; provide recommended IAEG methods and state of the art techniques, approaches; continued gathering of people and information; support to developing countries where engineering geology is crucial; accept more members from engineers; building stronger links between industry and the academic community in engineering geology | 11 |
|                                              | Services for IAEG member                                  | Supply on line resources; provide material for analyzing questions; set up international database of engineering geology; improve the communication with engineering geologists and civil engineers; indications of demand from the industry; training with knowledge of interaction between structure and soil/rock in university; cost and availability of training? provide training courses or lectures every half year; seeking funding for engineering geology research                                                                                                                                                        | 8  |
|                                              | Comments on the internet survey for most concerned issues | Good, to have it regular; specify/comprehensive the survey questions; post the survey results somewhere; survey from other field except engineering geology; the survey results should translate into better practice worldwide; have one survey on what are key benefits within IAEG productions                                                                                                                                                                                                                                                                                                                                    | 16 |

~~~~~

## MEMBERSHIP INFORMATION UPDATE 2013

Secretariat has been calling for the membership information update since January this year. So far, we have received updates from 27 NGs. We have 3132 members in total: 1671 members with Bulletin, 1445 members without Bulletin and 31 associated members. Comparing to the data at the same date last year, we have 244, 95, 153 and 11 in number of members respectively.

For Bulletin subscription and delivery in time, it's highly appreciated for NGs to update the information of membership as soon as possible.

### 2013 National Group update progress

No	NG	Global No. of members	With B.	Without B.	Associate member	No	NG	Global No. of members	With B.	Without B.	Associate member
1	Albania					30	Japan	99	92	1	6
2	Algeria					31	Korea	23	18	5	
3	Argentina	45	45			32	Lithuania	10	10		
4	Australia	324	189	134	1	33	Malaisie				
5	Austria	19	13	6		34	Mexico				
6	Belgium					35	Nepal				
7	Brazil	63	46	17		36	New Zealand	344	161	183	
8	Bulgaria	10	10			37	Norway				
9	Canada	121	106	15		38	Paraguay				
10	China	416	205	211		39	Peru				
11	Colombia	22	17	5		40	Poland				
12	Croatia					41	Portugal				
13	Cyprus	5	5		2	42	Romania	33	18	13	2
14	Czech Republic	30	18	12		43	Russia	80	30	50	
15	Denmark					44	SEAGS				
16	Estonia					45	Serbia	43	10	33	
17	Finland					46	Singapore	74	7	67	
18	France	219	168	51	13	47	Slovak Republic	9	4	5	
19	Georgia	10	1	9		48	Slovenia				
20	Germany	531	66	465		49	South Africa	187	49	131	7
21	Greece	96	64	32		50	Spain	91	91		
22	Hong Kong SAS					51	Sweden				
23	Hungary					52	Switzerland				
24	Iceland					53	Netherland	43	43		
25	India					54	Turkey	99	99		
26	Indonesia					55	United Kingdom				
27	Iran					56	USA				
28	Ireland					57	Vietnam				
29	Italy	86	86								
<b>Total</b>								<b>3132</b>	<b>1671</b>	<b>1445</b>	<b>31</b>

~~~~~

## NEWS FROM NATIONAL GROUPS

### ● Brazil

#### XIV Brazilian Congress 2013



Public Policies, Planning  
and Technologies for  
Socio-environmental and  
economic Development



Associação Brasileira de Geologia de Engenharia e Ambiental – ABGE  
The Brazilian Association for Engineering Geology and the Environment

The Congress structure and scientific programme comprises thematic Symposia, Keynote Lectures, Technical Sessions, Short Courses, Technical Visits and Field Excursions all coordinated and convened by distinguished professionals, scholars and experts.

#### KEYNOTE LECTURES

1. Urban risk prevention and planning in Brazil;
2. Geotechnical and geoenvironmental mapping: State of the Art;
3. Brazilian National Solid Waste Policy;
4. Major infrastructure projects in Brazil and the role of the Engineering Geology.



**SYMPOSIA:** Some of **ABGE** most traditional thematic symposia will be organised and held simultaneously within the Congress programme covering the full range of relevant engineering geology issues: 8<sup>th</sup> Brazilian Symposium on Geotechnical and Geoenvironmental Mapping; 4<sup>th</sup> Brazilian Symposium on Natural Disasters; 9<sup>th</sup> Brazilian Symposium on Erosion Control; 4<sup>th</sup> Symposium on Solid Waste and Contaminated Land Sites; 4<sup>th</sup> Symposium on Environmental Management; 2<sup>nd</sup> Symposium on Infrastructure Projects and Investigation; 2<sup>nd</sup> Symposium on Teaching, Training and Young Professionals; 2<sup>nd</sup> Symposium on Mining and Construction Materials; 1<sup>st</sup> GEOPETRO – Symposium on Engineering Geology applied to Petroleum Exploitation.

**BUSINESS MEETING:** South and Central American Commission on Engineering Geology - COMGEO

Details, schedules, deadlines and guidelines to paper submissions (oral and poster presentations) can be found at the official site of the Congress: [www.acquacon.com.br/14cbge](http://www.acquacon.com.br/14cbge)

## ● China

### **The International Symposium in Commemoration of the 5<sup>th</sup> Anniversary of the 2008 Wenchuan Earthquake**

With the support of IAEG and National Natural Science Foundation of China (NSFC), The International Symposium in Commemoration of the 5th Anniversary of the 2008 Wenchuan Earthquake: Long Term Geo-hazard and Risk Consequences of Areas Struck by High Magnitude Earthquakes was held in State Key Laboratory of Geohazard Prevention and Geoenvironment Protection (SKLGP), Chengdu university of technology, China on May 12-18, 2013.



57 seminars were organized during the symposium. More than 100 scholars attended the symposium and 95 paper were published both at home and abroad. In addition, the post symposium surveys were made in Wenchuan-yingxiu, Qingping (Wenjiagou gully), Anxian (Daguangbao landslide) and Beichuan.

### **IAEG Past President Niek Rengers visited the Key Lab. of Engineering Geomechanics, IGCAS**

Invited by prof. Faquan WU, the IAEG Past President, prof. Niek Rengers visited the Key Lab. of Engineering Geomechanics, IGCAS from May 21 to May 23, 2013.

In the morning of May 22, professor Rengers gave a speech on “Writing of Scientific (Research Papers)”. 30 scholars and graduate students attended the seminar and had a warm discussion with Prof. Rengers. Faquan WU hosted the seminar.

Prof. Rengers then had a talking with prof. WU and the staff of IAEG secretariat on the operation of IAEG and other concerned issues.



## ● India

### **IAEG India Golden Jubilee International Geotechnical Conference, New Delhi, October 2015**

(www.isegindia.org)

#### **Preliminary Announcement**

On completion of 50 Years of its existence, the Indian National Group of IAEG (the Indian Society of Engineering Geology) proposes to organize an International Geotechnical Conference in October 2015. During its vibrant journey, besides bringing out its annual Journal of Engineering Geology and the biannual Newsletter-the ISEG News, the Society has been organizing seminars, symposia and workshops regularly. Prominent international events organized by the Society in the past include the International Conference on Underground Space Technology in January 2011 (ICUST 2011) and the 4th International Congress of the IAEG in the Year 1982.

For making the proposed Conference a truly Golden Jubilee event, the Society looks forward to global participation in the Conference on a large scale. The programme formulation for the Conference has begun and a formal announcement is expected by early January 2013 following a meeting of the Secretary of the India National Group with the Secretary General of the IAEG during Vietnam Workshop of 17-18 December 2012 at Hue.

While, the preliminary details of the event will be available in the formal announcement, the proposed Conference will be of 3-5 days duration and will be held at New Delhi. The Conference aims at deliberations on practice and research on a wide range of geotechnical, engineering geological and environmental aspects that are of particular significance in the 21st Century. The Conference assumes great importance at this juncture when the country is going through a hydropower and infrastructure development boom. In this context, the 50,000 MW hydropower initiative of the Government of India is of particular significance.

It is proposed to include pre- and post-Conference technical and sightseeing excursions to important destinations across the country such as hydropower and infrastructure projects in the Indian Himalaya, and tourist spots like the Taj Mahal, beautiful Himalayan Hill Stations, colourful Rajasthan deserts, enchanting Northeast, scintillating Central and South India, etc. All efforts are being made to make the Indian experience during the Conference truly memorable.

The Indian National Group of the IAEG takes this opportunity to invite the global geotechnical and engineering geological fraternity to the proposed Conference. Please do join us in our Golden Jubilee celebrations and make the Conference a Grand Success!



## ● Argentina

Organization of the Course “The analysis of the threats of geodynamics and its application to risk management” , Buenos Aires, May 15-17.

Edition of the publication “Proceedings and Publications Collection 1981-1997” .

Publication of the Journal of Geology Applied to Engineering and the Environment, N° 30.



## ● Japan

### 10<sup>th</sup> Asian conference invitation

The Executive Committee of the Japan Society of Engineering Geology (JSEG) has agreed to be a host of the 2015 Asian Conference. It is the tenth anniversary of Asian conference and furthermore, Japan is the birth-land of Asian conference.

JSEG is going to set up an organizing committee and to prepare for it and planning to have the conference in September, 2015. The candidate venue is Kyoto. The annual assembly of the Japan Society of Engineering Geology will be at the same time.

There will be a brief introduction for the invitation in September, Beijing.

---

## ● Korea

### Spring conference of Korean society of engineering geology

On 4-5 April 2013, Spring conference of the Korean society of engineering geology was held in Gyeongju, Republic of Korea. 140 members of Korea National group were attended the conference and total 60 papers were presented at the conference. Prof. Do Minh Duc of Hanoi University of Science, Vietnam was invited to present keynote lecture. The title of keynote lecture was 'Heavy rainfall induced landslides in Vietnam: Case studies of BacKan and BinhDinh Provinces'.

During the conference, the signing ceremony of MOU between Korea Society of Engineering Geology and Vietnam Association of Engineering Geology and Environment were held. Both societies agreed to establish collaborative research efforts and exchange the members.

Prof. Gyo-Cheol Jeong of Andong National University was elected as President of IAEG Korean National group for next two years.



## ● New Zealand

### Register of Professional Engineering Geologists

On 3 April 2013, a register for Professional Engineering Geologists (PEngGeol) was established in New Zealand with the assessment of a small crowd of engineering geologists from around the country, each with well over 20 years' experience in the field. This group has undertaken training to act as practice area assessors for applications received by the Institute of Professional Engineers New Zealand (IPENZ) for PEngGeol. The register recognizes the important benefits engineering geologists provide to the engineering profession. Already, some regulators are looking to use the PEngGeol quality mark as a benchmark of current competence.

The statutes of the International Association for Engineering Geology and the Environment (IAEG, 1992) define Engineering Geology as “the science devoted to the investigation, study and solution of engineering and environmental problems which may arise as a result of the interaction between geology and the works and activities of man as well as to the prediction and development of measures for prevention or remediation of geological hazards.”

Geotechnical practice encompasses the general fields of both geology and civil engineering. Specialisation within both disciplines has led to the recognition of “engineering geology” and “geotechnical engineering” as distinct fields of professional practice. The engineering geologist is responsible for anticipating the nature of the ground and how it might respond to changes brought about by physical engineering works.

The need for a register of Engineering Geologists in New Zealand was recognised at the enquiry into the Abbotsford landslide that occurred in 1979 – its establishment, albeit some 34 years later, is cause for celebration!

Registrants on the Professional Engineering Geologist register are able to use the ‘PEngGeol’ postnominal. Guidelines for Professional Engineering Geologists can be found at [www.ipenz.org.nz/IPENZ/finding/PEngGeol/](http://www.ipenz.org.nz/IPENZ/finding/PEngGeol/).



Assessment of the first small crowd of engineering geologists for PEngGeol. Left to right: Debbie Fellows, Ann Williams, Warwick Prebble, David Burns, Bernard Hegan, John Underhill, Doug Johnson, Dick Beetham, David Bell, Stuart Reed, Don MacFarlane, Geoff Farquhar (some 35 years' experience in engineering geology)

## CONTACT INFORMATION

### IAEG EXECUTIVE COMMITTEE

|                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Carlos Delgado</b><br/>Escuela Universitaria de Ingenieria<br/>Técnica de Obras Publicas<br/>Calle Alfonso XII, nº3 y 5<br/>28014 Madrid<br/><b>ESPAGNE</b></p>                     | <p>Tel + 34 91 336 77 36<br/>Fax + 34 91 336 79 61<br/>Mail : <a href="mailto:carlos.delgado@upm.es">carlos.delgado@upm.es</a></p>                                                                                                                                                      | <p>President<br/>Président</p>                                                                                                                                                                                        |
| <p><b>Fred BAYNES</b><br/>Baynes Geologic<br/>9 Chester Street<br/>Subiaco WA 6008<br/><b>AUSTRALIE</b></p>                                                                               | <p>Tel + 61 89 382 12 59<br/>Mob + 61 40 00 23 381<br/>Mail : <a href="mailto:fredb@iinet.net.au">fredb@iinet.net.au</a></p>                                                                                                                                                            | <p>Immediate past president<br/>Président sortant</p>                                                                                                                                                                 |
| <p><b>Prof. WU Faquan</b><br/>Institute of Geology and Geophysics<br/>Chinese Academy of Sciences<br/>P.O. Box 9825<br/>Beijing 100029<br/><b>R.P. de CHINE</b></p>                       | <p>Tel + 86 10 82998216<br/>Fax + 86 10 82998216<br/>Mail : <a href="mailto:wu faquan@mail.igcas.ac.cn">wu faquan@mail.igcas.ac.cn</a><br/>Skype: wu faquan3<br/>Web: <a href="http://www.igcas.ac.cn">www.igcas.ac.cn</a></p>                                                          | <p>Secretary general<br/>Secrétaire général</p>                                                                                                                                                                       |
| <p><b>Pierre POTHÉRAT</b><br/>CETE de Lyon<br/>Laboratoire Régional des Ponts et<br/>Chaussées<br/>25, avenue François-Mitterrand<br/>Case n°1<br/>69674 Bron cedex<br/><b>FRANCE</b></p> | <p>Tel + 33 4 72 14 32 77<br/>Fax + 33 4 72 14 33 42<br/>Mail : <a href="mailto:p.potherat@cegetel.net">p.potherat@cegetel.net</a></p>                                                                                                                                                  | <p>Treasurer<br/>Trésorier</p>                                                                                                                                                                                        |
| <p><b>Giorgio LOLLINO</b><br/>CNR-IRPI<br/>Strada delle Cacce, 73<br/>10135 Torino<br/><b>ITALIE</b></p>                                                                                  | <p>Tel +39 011 3977810<br/>Fax +39 011 3977820<br/>Mail : <a href="mailto:giorgio.lollino@irpi.cnr.it">giorgio.lollino@irpi.cnr.it</a></p>                                                                                                                                              | <p>Web Editor</p>                                                                                                                                                                                                     |
| <p><b>John STIFF (South Africa)</b><br/>JD Geotechnical Services<br/>P.O. Box 13293<br/>Clubview<br/>0014<br/><b>SOUTH AFRICA</b></p>                                                     | <p>Tel + 27 12 654 5280<br/>Fax + 27 12 654 5277<br/>Mail : <a href="mailto:jstiff@lantic.net">jstiff@lantic.net</a> ;<br/><a href="mailto:jdgeotech@telkomsa.net">jdgeotech@telkomsa.net</a><br/>Skype :john.s.stiff<br/>Web :<a href="http://www.saieg.co.za">www.saieg.co.za</a></p> | <p>Vice-president for Africa<br/>Vice-président pour l'Afrique</p> <p>[National groups : Algeria ; South Africa]</p>                                                                                                  |
| <p><b>Runqiu HUANG (China)</b><br/>Chengdu University of Technology<br/>No.1, Erxianqiao East 3 Rd<br/>Chengdu District<br/>Chengdu, 610059<br/><b>CHINA</b></p>                          | <p>Tel + 8628-84078953<br/>Fax +<br/>Mail : <a href="mailto:hrq@cdu.edu.cn">hrq@cdu.edu.cn</a><br/>Web : <a href="http://www1.cdu.edu.cn">www1.cdu.edu.cn</a></p>                                                                                                                       | <p>Vice-president for Asia<br/>Vice-président pour l'Afrique</p> <p>[National groups : P.R. of China ; India ; Indonesia ; Iran ; Japan ; South Korea ; Malaysia ; Nepal ; Singapore ; South-East Asia ; Vietnam]</p> |
| <p><b>Ann WILLIAMS (New Zealand)</b><br/>c/- Beca Infrastructure Ltd<br/>132 Vincent St<br/>P O Box 6345<br/>Auckland 1141<br/><b>NEW ZEALAND</b></p>                                     | <p>Tel + 64 9 300 9172<br/>Fax + 64 9 300 9300<br/>Mob +64 28 09 162<br/>Mail : <a href="mailto:ann.williams@beca.com">ann.williams@beca.com</a><br/>Web : <a href="http://www.beca.com">www.beca.com</a></p>                                                                           | <p>Vice-president for Australasia<br/>Vice-président pour l'Australasie</p> <p>[National groups : Australia ; New Zealand]</p>                                                                                        |

|                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Réjean COUTURE ( Canada)</b><br/> Geological Survey of Canada<br/> Commission géologique du Canada<br/> Natural Resources Canada<br/> Ressources naturelles Canada<br/> 601 Booth St, Ottawa (ON)<br/> <b>K1A 0E8 CANADA</b></p> | <p>Tel + 1 613 943 5237<br/> Fax + 1 613 992 0190<br/> Mail : <a href="mailto:rcouture@nrcan.gc.ca">rcouture@nrcan.gc.ca</a><br/> Skype : <a href="mailto:rcouture@nrcan.gc.ca">rcouture@nrcan.gc.ca</a><br/> Web :<br/> <a href="http://www.landslides.nrcan.gc.ca">www.landslides.nrcan.gc.ca</a></p> | <p>Vice-president for North America<br/> Vice-président pour l'Amérique du Nord</p> <p>[National groups : Canada ; Mexico ; United States of America]</p>                                                                                                                         |
| <p><b>Silvina Andrea MARFIL (Argentina)</b><br/> Geology Department<br/> Universidad Nacional del Sur<br/> San Juan 670<br/> 8000 Bahia Blanca<br/> <b>ARGENTINA</b></p>                                                               | <p>Tel + 54 291 4595101 Ext. 3021<br/> Fax + 54 291 4595148<br/> Mail : <a href="mailto:smarfil@uns.edu.ar">smarfil@uns.edu.ar</a></p>                                                                                                                                                                  | <p>Vice-president for South America<br/> Vice-président pour l'Amérique du Sud</p> <p>[National groups : Argentina ; Brazil ; Colombia ; Paraguay ; Peru]</p>                                                                                                                     |
| <p><b>Atiye TUGRUL (Turkey)</b><br/> Istanbul University<br/> Engineering Faculty<br/> Avcilar Campus<br/> 34320 Istanbul<br/> <b>TURQUIE</b></p>                                                                                      | <p>Tel + 90 212 4737295<br/> Fax + 90 212 4737180<br/> Mail : <a href="mailto:tugrulatiye@gmail.com">tugrulatiye@gmail.com</a></p>                                                                                                                                                                      | <p>Vice-president for Europe<br/> Vice-président pour l'Europe</p> <p>[National groups : Albania ; Austria ; Bulgaria ; Croatia ; Cyprus ; France ; Georgia ; Greece ; Hungary ; Italy ; Portugal ; Romania ; Slovenia ; Serbia(Yugoslavia) ; Spain ; Switzerland ; Turkey]</p>   |
| <p><b>Ian JEFFERSON (United Kingdom)</b><br/> School of Civil Engineering<br/> The University of Birmingham<br/> Edgbaston<br/> Birmingham<br/> B15 2TT<br/> <b>ROYAUME UNI</b></p>                                                    | <p>Tel + 44 121 4147972<br/> Fax + 44 121 4143675<br/> Mail : <a href="mailto:i.jefferson@bham.ac.uk">i.jefferson@bham.ac.uk</a></p>                                                                                                                                                                    | <p>Vice-president for Europe<br/> Vice-président pour l'Europe</p> <p>[National groups : Belgium ; Czech Republic ; Denmark ; Estonia ; Finland ; Germany ; Iceland ; Ireland ; Lithuania ; Norway ; Netherlands ; Poland ; Russia ;Slovak Republic ; Sweden; United Kingdom]</p> |