

IGS NEWS



NEWSLETTER OF THE INTERNATIONAL GEOSYNTHETICS SOCIETY

*Dedicated to the scientific and engineering development of geotextiles, geomembranes,
related products, and associated technologies*

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President's Corner:

Relationship of the IGS with our International Sister Societies



Jorge Zornberg

Dear member of the IGS,

One of the important objectives we have agreed to pursue in the current council is to *“Increase the Connections to International Organizations”*. This objective was established keeping in mind specific requests from our corporate members. Some important steps have been recently taken in this direction, which will enhance the coordination and collaboration with four important International Sister Societies:

- the **International Society of Soil Mechanics and Geotechnical Engineering** (ISSMGE),
- the **International Society of Rock Mechanics** (ISRM),
- the **International Association for Engineering Geology and the Environment** (IAEG), and
- the **International Commission for Irrigation and Drainage** (ICID)

The important development that will foster our interaction with ISSMGE, ISRM, and IAEG is that the IGS has accepted the invitation to join the **Federation of the International Geo-Engineering Societies** (FedIGS). This Federation includes these three societies each of which is a FedIGS founding member, the IGS has the distinct privilege of being the very first non-founding member society to be invited to join.



As a precursor to the invitation to join FedIGS, I was invited to join the annual board meeting of FedIGS, which took place on May 15 2011. At the time, I made a presentation on the characteristics of the IGS and the FedIGS board presented the characteristics of FedIGS. I was then excused. Upon my re-entry into the meeting I was informed of the unanimous decision to invite the IGS to join FedIGS. In the words of FedIGS President, Prof. Nielen van der Merwe,

“The decision to invite the IGS to join was unanimous and I may add that the current three Members supported the decision enthusiastically. We look forward to a long and fruitful association under the broad umbrella of the global geo-engineering activity.”

Joining FedIGS is expected to go a long way toward achieving the IGS objective of increased connections to sister international organizations. Specifically, we will have a direct channel of communication with three of the most relevant International Geo-Societies. As indicated in the mission statement of FedIGS (see article in page 7 of this issue of IGSNews), FedIGS is a collaborative forum within which learned societies or associations that are involved in engineering with, on, or in geo-materials can meet and interact.

Table 1. Membership of the ISSMGE, ISRM, IAEG, and IGS **

	ISSMGE	ISRM	IAEG	IGS
Number of National Groups or Chapters	86	48	55	34
Number of Individual Members	18,323	5,992	2,900	2,927
Number of Corporate Members	21	125	0	141
Number of Technical Committees	24	9	10	3

** self-reported values as of May 2011

Table 1 provides a comparison of the membership of the IGS with that of the ISSMGE, ISRM and IAEG as self-reported by the various organizations in May 2012. The number of individual members of the IGS is an order of magnitude smaller than that of ISSMGE but on the same order of magnitude as the individual membership of the ISRM and IAEG. On the other hand, the IGS has a healthy corporate membership that exceeds the number of corporate members of our sister geo-societies. The presence of the IGS around the globe is increasing, and good evidence of such increase is the continuing creation of new IGS chapters. The IGS is now represented with chapters on all continents with the exception of Antarctica. In addition to its chapters, which have traditionally conducted most of our technical activities, the IGS has implemented Technical Committees (TCs). While its number is currently small (TCs on Soil Reinforcement, Barrier Systems, and Filtration), they are expected to grow rapidly and to provide significant opportunities for collaboration with the ISSMGE and other sister societies.

It's worth noting that the IGS previously explored the possibility of joining FedIGS. However, in the initial investigation the Council decided to postpone making a decision until it achieved a better understanding of: (1) the level of involvement that the Federation would expect have in IGS autonomy, and (2) any financial obligations which might be involved in becoming a FedIGS member society. During the last year within FedIGS, the following decisions were made: (1) FedIGS will play a communication and cooperation role not that of a governing board, and (2) there will not be a membership fee. Since these two areas of concern were satisfactorily addressed, the IGS council took a vote and voted in favour of joining FedIGS. Accordingly, the IGS has become the very first non-founding Geo-Society to join FedIGS.

As a member of the FedIGS the IGS will work to foster productive technical relationships amongst the member societies, coordinate conference and educational activities specifically the IGS will work to achieve the aims of the Federation which include:

- raising the awareness within the geo-engineering profession of the inevitable and essential interaction between geo-engineering practitioners from the Member Societies;
- coordinating scientific and technical activities in areas with overlapping interest among the Member Societies;
- raising public awareness and profile of the geo-engineering profession.

In addition, as a member of the FedIGS the IGS will be included in helping to select future members of FedIGS.



ICID-CID

Another important development involving the relationship of the IGS with our International Sister Societies is that *the IGS and the International Commission for Irrigation and Drainage (ICID) have recently signed a Memorandum of Understanding (MoU)* that establishes a communication channel between our societies to foster collaboration. The ICID was established in 1950 as a Scientific, Technical and Voluntary Not-for-profit Non-Governmental International Organization (NGO) with headquarters in New Delhi, India. The ICID is dedicated to “enhancing the worldwide supply of food and fibre for all people by improving water and land management and the productivity of irrigated and drained lands through appropriate management of water, environment and application of irrigation, drainage and flood management techniques.”

ICID has a consultative status with the United Nations Economic and Social Council (ECOSOC), United Nations Educational, Scientific and Cultural Organization (UNESCO), and the World Meteorological Organization (WMO). The mission of ICID is to stimulate and promote the development of new technologies worldwide for achieving sustainable irrigation and drainage technologies. Cooperation between the ICID and the IGS is expected to lead to the development of guidelines and policies acknowledging the benefits of geosynthetics in important hydraulic projects.

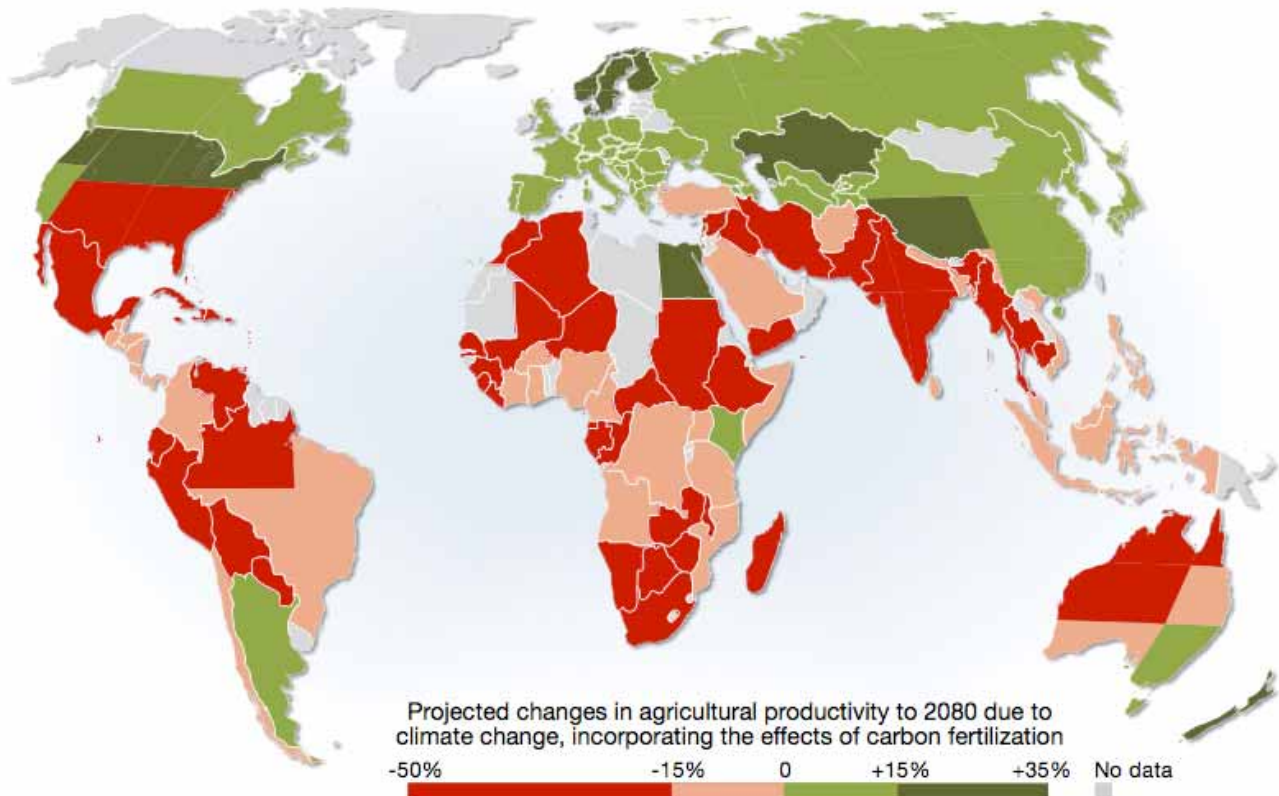


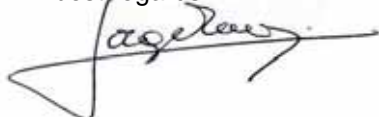
Figure 1: Projected changes in agricultural productivity (to 2080) due to climate change.

Figure 1 shows the projected changes in agricultural productivity to 2080 due to climate change, incorporating the effects of carbon fertilization (ICID 2010). As clearly shown in the figure we expect a significant decrease in agricultural productivity (red areas on the map). Geosynthetics can certainly play a significant role in reversing this somber trend by optimizing drainage technologies.

The IGS Officers met with the Board of ICID in November 2010, and set the base for a process that ended in October 2011 with the signing of the Memorandum of Understanding. Council member Eric Blond was tasked by the IGS Council to lead a Task Force that culminated with the invitation of the IGS to a signing ceremony that took place during ICID's 21st International congress on Irrigation and Drainage held in Tehran. Additional details on this important cooperation are reported by Council member Blond (see page 7 of this issue of IGSNews). The collaboration between the IGS and ICID is starting to render fruits. Indeed, Jean Pierre Giroud and Herve Plusquellec, former presidents of the IGS and ICID respectively, will offer a joint training lecture on "Geosynthetics in Irrigation and Drainage" in May 2012 on the occasion of GeoAmericas 2012 (Second Pan-American Congress on Geosynthetics, Lima, Peru). This is the first of what we anticipate will be a fruitful series of collaborative educational initiatives involving the IGS and the ICID.

We look forward to important outcomes that will promote the advancement of geosynthetic technologies in multiple areas of engineering through the collaboration of the IGS with our International Sister Societies.

All best regards



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General Information for IGS Members

Call for Candidates for IGS Council: Term 2012 to 2016



**Elizabeth
Peggs**

The IGS, in accordance with its bylaws, will hold mid-term elections in 2012. IGS Members will have the opportunity to elect eight Council Members. Each of the elected members will serve a four-year term, effective 1 October 2012.

The IGS encourages any IGS Member who is interested in furthering the IGS Mission and can attend all IGS Council meetings to consider standing for one of the Council positions. In a typical year, the IGS Council meets once for a two-day period preceding a geosynthetics event. It is the responsibility of the IGS Council member to travel to these meetings and participate in the plenary and committee meetings. The IGS council attempts to host the meetings in equal distribution around the world and based on the most suitable location in any given year.

The IGS Council Members whose term of office expires in 2012 are:

- D.T. Bergado (Thailand)
- A. Bouazza (Australia)
- P. Fantini (Italy)
- H.Y. Jeon (Korea)
- J. Kuwano (Japan)
- M. Sadlier (Australia)
- M. Ziegler (Germany)
- V. Pimentel (Brazil)

The IGS bylaws stipulate that a Council Member may only be elected to two consecutive terms; hence, A. Bouazza, P. Fantini, and M. Sadlier are not eligible for re-election. Each of the other incumbents may stand for re-election.

Nomination & Election Schedule

Under the bylaws of the IGS, only IGS Members are eligible for election to the Council. Candidates must be able to travel to and attend the IGS Council meetings, which are held once per year. Meetings of the IGS Council are generally held in conjunction with international and regional conferences.

- Call for Nominees: Now – 30 April 2012
A signed letter of application together with a biographical note (not exceeding 12 lines) and a photograph should reach the IGS Secretary no later than 30 April 2012. Biographical notes and photos will be published in the IGS News, Issue #2, 2012 (June 2012) and on the IGS website.

- **Announcement of Nominees: June 2012**
The IGS will announce the eligible candidates in the 2nd Issue of the **IGS News** (June 2012) as well as on the IGS website. All IGS Members will be encouraged to review the candidates' biographies in preparation for the voting period.
- **Voting: 1 August – 30 September 2012**
Voting instructions will be sent to each eligible Individual IGS Member and each designated representative from the IGS Corporate Membership. Each member may vote once.
- **Announcement of Successful Candidates: 1 October 2012**
IGS Members will be made aware of the successful candidates via email and website on 1 October 2012.
- **First Meeting of the New IGS Council: December 2012 – Bangkok**
The first meeting for each of the successful candidates will be held in Bangkok, Thailand immediately preceding the GeoAsia 2012 conference.

If you have any questions or would like any further information on the election process or the responsibilities involved with becoming an IGS Council Member, please contact the IGS Secretary, Elizabeth Peggs (Elizabeth@geosynthetica.net), SKYPE: elizabeth.peggs, TEL +1.561.768.9487.

*Reported by
Elizabeth Peggs, IGS Secretary*

Summary of 2010 IGS Chapter Activities

The use of the standard reporting form for chapter reports allows IGS to understand the activities being carried out at local, regional and international level. This summary report for the year 2010 again shows an impressive number of technical activities being undertaken around the world. Out of the 31 chapters, 6 chapters did not submit a report by 30 November 2011. Figure 1 summarises the total number of technical activities carried out in 2010 by IGS chapters. These include activities where the chapter acted either independently or as a collaborating organisation.



Figure 1: Number of activities carried out in 2010 reported by the chapters of IGS

It can be seen from figure 1 that the IGS chapters were involved with:

- 16 technical conferences;
- 19 workshops;
- 20 short courses; and
- 20 main lectures

These technical activities were supported by 118 reported board/committee meetings (in-person and conference calls), which shows the effort being put in by the chapter officers and members.

An assessment of the most active IGS chapter has again been carried out and it should be noted that this is based on the number reported by the chapters. It is felt that this is a worthwhile exercise not only to

identify chapters that are worth recognition, but also to identify chapters that may benefit from more support and help in coordinating future activities.

Figure 2 shows a measure of the level of activities conducted by each of the IGS chapters in 2010. As previously, the Activity Index was defined as a weighted average of the self-reported technical activities. The weighting methodology used allows, for example, that conferences are worth more than workshops, which in turn are worth more than main lectures. Also, activities conducted by chapters are worth more than those conducted by chapters acting as a collaborating organisation. While the approach used to calculate the Activity Index is certainly subjective, the distribution within Figure 2 is expected to be insensitive to the weighting approach.

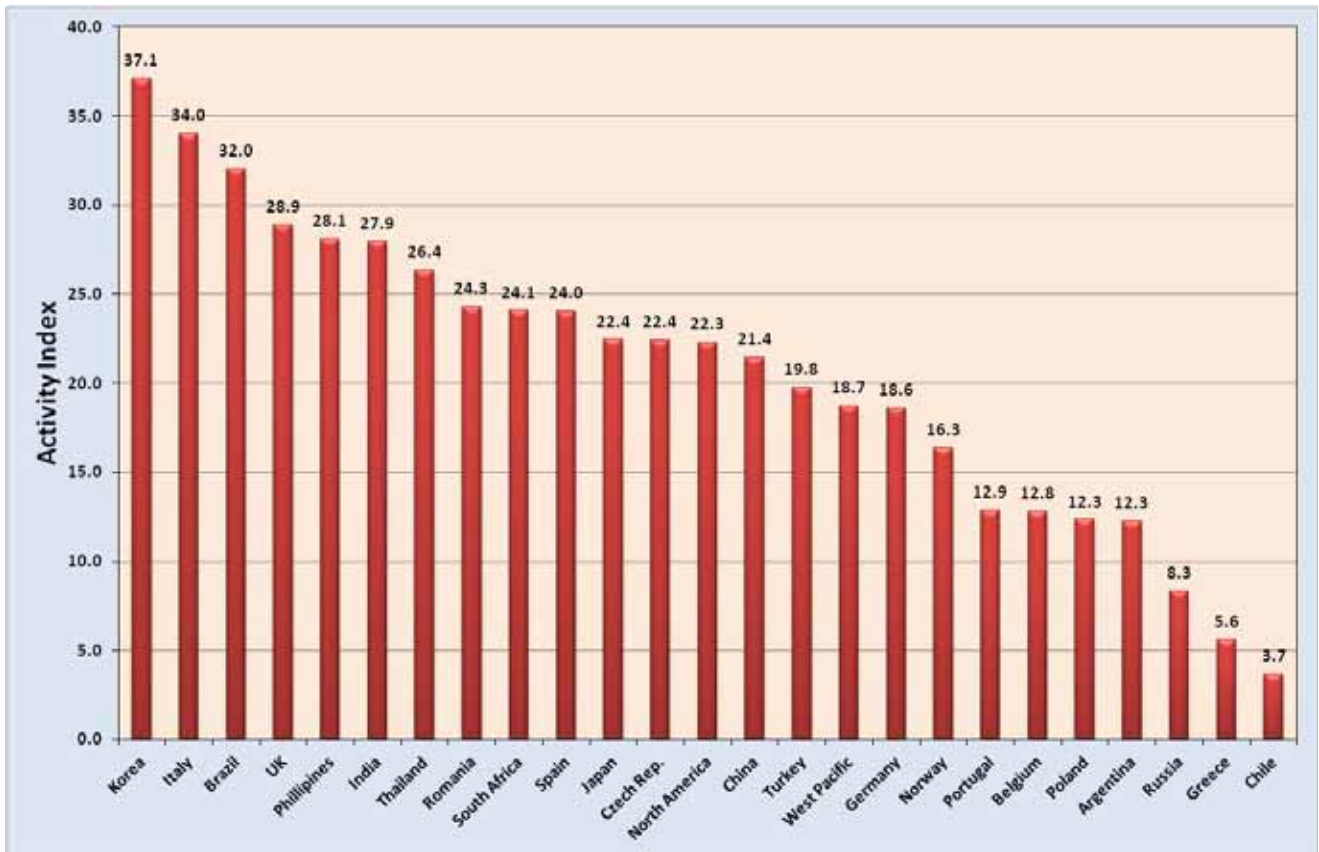


Figure 2: Activity Index for 2010 as reported by the chapters of IGS

The chapters have also reported a healthy number of technical activities planned for 2011.

Figure 3 summarises the number of conferences, workshops, short courses and main lectures planned. Based on this information, the level of activities is expected to continue to be significant, which is very encouraging.

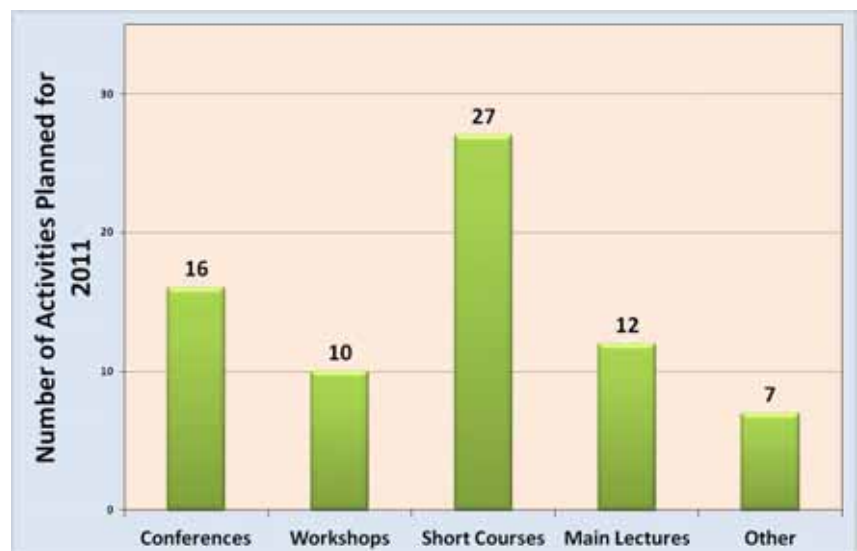


Figure 3: Number of activities planned for 2011 by the chapters of IGS

In summary, the overall level of activity is very high as clearly illustrated by a total of 87 technical events reported by the chapters for 2010. This is even higher than the impressive 84 technical events reported for 2009. With 72 technical events planned for 2011, it certainly looks like the activities show no sign of slowing down.

*Reported by
Russell Jones, IGS Vice President*

The IGS Joined the Federation of the International Geo-Engineering Societies (FedIGS)

Following a formal invitation to join the Federation of the International Geo-Engineering Societies (FedIGS), the IGS council voted in favour of accepting the invitation. In this way the IGS will have the opportunity for close interaction and coordination with the three founding organizations of FedIGS: the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), the International Society of Rock Mechanics (ISRM), and the International Association for Engineering Geology and the Environment (IAEG).

It should be noted that the IGS is the first non-founding International Geo-Society invited by the FedIGS founding members to join the Federation. The possibility exists that other International Societies will be invited in the future, and the IGS will now participate in this process. Joining FedIGS is an important step towards increased visibility of the IGS and of geosynthetic technologies in the international geo-engineering community.

The current president of FedIGS is Prof. Nielen van der Merwe, from South Africa, who is in turn the immediate past-president of the International Society of Rock Mechanics (ISRM). With the joining of FedIGS, the IGS is now formally represented in the Board of FedIGS by the IGS President, Immediate Past President and Secretary. The IGS now has the same voting rights in the decisions of FedIGS as any of the three founding member societies. Specifically, the terms of the FedIGS Agreement of Cooperation indicate that the IGS President and Immediate Past President will have full voting rights while the IGS Secretary-General will be an observer.

The information below reproduces the statement of the Federation, indicating its mission and objectives.

The Federation of International Geo-Engineering Societies (FedIGS) is a collaborative forum within which learned societies or associations that are involved in engineering with, on, or in geo-materials can meet and interact. The structure of FedIGS is such that it can progressively evolve to meet the needs of its member societies, as those needs evolve.

The purpose of the Federation is to facilitate interaction among the member societies, explore opportunities to promote their common interests and provide a unified response to common issues through effective collective actions that are more effective than individual responses of the members.

The Federation is founded on the fundamental principle that each of the participating societies and associations will always retain its own identity and autonomy.

The aims of the Federation include:

- raising the awareness within the geo-engineering profession of the inevitable and essential interaction between geo-engineering practitioners from the Member Societies;
- coordinating scientific and technical activities in areas with overlapping interest among the Member Societies;
- raising public awareness and profile of the geo-engineering profession.
- The benefits of membership of the Federation include the opportunity for interaction with other geo-engineering societies on technical and educational issues and the enhanced synergy that can come about from such interaction.

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*Reported by
Jorge G. Zornberg, IGS President*

Memorandum of Understanding signed between the IGS and the ICID



ICID-CIID

On October 22, 2011, a Memorandum of Understanding was signed between the International Congress on Irrigation and Drainage (ICID) and the IGS. This took place in Tehran where the ICID had their 21st congress, held concurrently with the 8th International Micro Irrigation Congress.

The International Commission on Irrigation and Drainage (ICID) was established in 1950 as a Scientific, Technical and Voluntary Not-for-profit Non-Governmental International Organization (NGO) with headquarters in New Delhi, India. The Commission is dedicated to enhancing the worldwide supply of food and fibre for all people by improving water and land management and the productivity of irrigated and drained lands through appropriate management of water,

environment and application of irrigation, drainage and flood management techniques.

Members of the ICID are National Committees, each representing a country. Individual engineers and scientists participate in the activities of the Commission through their National Committees. There are currently 110 countries which are member of the ICID, spread over all continents.

The activities of the Commission are carried out through technical workbodies, dealing with various irrigation and drainage issues covering on-farm aspects, development and management of appropriate systems, inter-basin water transfer, socio-economic impacts of irrigated agriculture, livelihood & poverty alleviation, climate change, etc. See www.icid.org for more details.

ICID publishes one peer-reviewed technical journal (5/yr), a newsletters (4/yr) and updates (12/yr), as well as technical reports and books of interest for the membership. Several activities are organized such as the World Irrigation and Drainage Congresses (1 / 3yr), regional conferences (1 / yr) by rotation in Africa, Asia, Europe, and the Americas, International Drainage Workshop, and International Micro Irrigation Congress.

Opportunities identified for the IGS:

The world food crisis is continuing after 3 decades of limited investments, a small number of new projects and little maintenance in the field of irrigation and drainage, mostly because of environmental problems associated to the use of water for agriculture. Now some countries face dramatic problems such as the use of very high percentage of water only for agriculture. There is a need to act soon and efficiently. ICID is willing to bring to their members the information on the latest technologies for water control: canal lining, embankment protection, and filtration. ICID is hoping for the help of IGS to achieve this.

IGS will thus work on proposing geosynthetic solutions matching the needs of the ICID, for canal lining, drainage, erosion control and other geosynthetic technologies. The action that will be taken will facilitate the exchange of knowledge and information in relation to these needs between ICID and IGS members.

Among these, it is possible to name keynote lectures by representatives of the ICID in IGS events, organization of joint / collaborative events reaching ICID members, facilitating access to documentation and resources of the IGS to ICID members through the central secretariat, as well as other actions that will help promote geosynthetic technologies among users, designers and regulators participating in ICID events.

Reported by

Eric Blond, IGS Council Member, Task Force on relation with ICID

IGS represented at 2011 ISRM Council Meeting 17 October 2011, Beijing, China

The 12th International Congress on Rock Mechanics (ISRM 2011) was held in Beijing, China, Oct. 18 - 21, 2011. The theme for the ISRM 2011 Congress is "Harmonising Rock Mechanics and the Environment" to emphasize the critical roles of rock mechanics and rock engineering in sustainable development and environment preservation. Celebration of the 50th anniversary of the ISRM was held at the Beijing Congress in 2011, by including a presentation on the development of rock mechanics that has already occurred over the past 50 years as well as that will be anticipated in the future 50 years.

The ISRM Board invited Prof. Zornberg, the President of IGS, to participate the ISRM Council meeting on October 17. On behalf of Prof. Zornberg, Prof. Xiaowu TANG as the observer attended the ISRM Council meeting. International Tunneling Association (ITA) and International Association of Engineering Geology and Environment (IAEG) dispatched the observers.

The International Society for Rock Mechanics (ISRM, <http://isrm.net>) was founded in Salzburg in 1962 as a result of the enlargement of the "Salzburger Kreis". Its foundation is mainly owed to Prof. Leopold Müller who acted as President of the Society till September 1966. The ISRM is a non-profit scientific association which has 5,000 members and 46 National Groups.

One of the important objectives the current council of IGS is to "Increase the Connections to International Organizations". Recently, IGS has accepted the invitation of FedIGS to join the Federation of International Geo-Engineering Societies (IGS, ISSMGE, ISRM, IAEG).



IGS , IAEG , ITA dispatched the observers



Prof. Tang, Prof. Hudson (ISRM) and his wife

*Reported by
Xiaowu TANG, IGS Council Member*

Michael Heibaum – 2012 / 2013 Mercer Lecturer



The Mercer Lecture is a biennial lecture sponsored by Tensar International, with the endorsement of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) and the International Geosynthetic Society (IGS).

The series was established in 1992 to provide individuals who have made significant technical contributions to the advancement of geosynthetics the opportunity to present their work at international conferences around the world. They are held in honor of the late Dr Brian Mercer, the inventor of geogrids and a strong advocate for innovation, research and development.

The key objective of the lecture is to help promote the co-operation of information exchange between the geotechnical engineering profession and the geosynthetics industry by giving an eminent practitioner the opportunity to undertake a lecture tour on the subject of Geosynthetics in Geotechnical Engineering.

A webpage has been established (www.mercerlecture.com) to promote the Mercer Lecture Series. The webpage shows the upcoming events as well as is giving proceedings of the past lectures for free download.

The recent Mercer Lecturer **Dr. Michael Heibaum** will be delivering his lecture on:

Geosynthetics for Waterways and Flood Protection Structures – Controlling the Interaction of Water and Soil

You will be able to access the full abstract [here](#) and attend his lecture at the following locations:

- 12th Baltic Sea Geotechnical Conference, Rostock, 31st May – 2nd June, 2012, www.12bscg.de
- ANZ 2012 – Ground Engineering in a Changing World, Melbourne, 15th – 18th July, 2012, www.anz2012.com.au



ANNOUNCING the 2ND **IGS** Photo Contest

The IGS Photo Contest was conceived to create an excellent collection of photos showcasing outstanding work by IGS members. The response to the initial contest was phenomenal with many outstanding entries received. The winning photos, as well as being featured on the IGS website, have been tapped for use and recognized in various publications and lectures worldwide.

Winning photos will be acknowledged during the IGS Regional Conferences in 2012.

Rules & Guidelines of the Photo Contest

- Photos should clearly display a geosynthetic material/ technology in use
- Contestant must be an active IGS Member
- Each member is eligible to submit up to 5 photographs to the contest
- A title and description are required for each photo
- The file size should not exceed 4MB per picture
- File format must be .jpg
- Provide a clear understanding of what geosynthetic technology or event is being demonstrated
- Photos should be sharp, well focused and aesthetically pleasing
- "Before and After" photo sets are welcome and count as one entry
- Final selection of First, Second, Third and Honorable Mention photos will be made by an independent committee

2012 IGS Photo Contest submissions must be received no later than February 1, 2012

To submit photos please go to:
<http://www.geosyntheticssociety.org/PhotoUpload.aspx>



Conference Reports

Georreforços' 2011

16 August 2011 Recife and 18 August 2011, São Paulo (Brazil)

In August 18th, the São Paulo Regional Chapter of the Soil Mechanics and Geotechnical Engineering Brazilian Society (ABMS), together with the geosynthetics company Huesker, organized in São Paulo, Brazil, a workshop called "Georreforços" (Georeinforcements), with the aim of promoting a wide discussion around the subject "Structured Embankments on Soft Soils". With this purpose, distinguished specialists, Brazilians and non-Brazilians, were invited to present their expertise on the issue, what should accomplish the state of the art on that matter.

In the other hand, almost 200 people, including consultants, professors and students attended to the workshop and took part on wide and dynamic discussion sessions, above the 1 hour lectures presented by: Eng. Gerhard Bräu from Technical University Munich (Germany), Prof. Márcio Almeida from Federal University of Rio de Janeiro (Brazil), Eng. Suzanne Van Eekelen from Deltares Research Institute (Netherlands), Eng. Werner Bilfinger from Vector Consultancy Company (Brazil) and Eng. Dimiter Alexiew from Huesker GmbH (Germany).

Two days before, in Recife, a short version of the same event was promoted by the Northeast Regional Chapter of ABMS also together with Huesker in Recife, state of Pernambuco in Brazil, with Eng. Gerhard Bräu and Eng. Dimiter Alexiew as lecturers, where the same subject was the focal point and more than 100 people attended.

It was a great opportunity to develop and consolidate knowledge and, beyond that, to promote the geosynthetics and some specific and important applications on geotechnical projects. The two events were a great success to the aims of the Brazilian Geotechnical Community.

Reported by

Marcos Massao Futai, Chairman of the São Paulo Regional Chapter of the Soil Mechanics and Geotechnical Engineering Brazilian Society (ABMS)

5th Remediation Technologies Expo, RemTech 2011

28 - 30 September 2011, Ferrara, Italy



From Wednesday 28 to Friday 30 September 2011, the fifth edition of **RemTech Expo** – Remediation Technologies Exhibition and Conferences, took place in Ferrara, Italy, with the auspices of various leading societies, including the IGS Italian Chapter (AGI-IGS).

RemTech Expo is an unique event entirely dedicated to remediation techniques and to territory requalification, the ideal place for meetings between operators, manufacturers, contractors, institutions and academics, in order to build together workable solutions for the environment. Other qualifying element of this fifth edition was the special section **Coast Expo 2011**, second edition, dedicated to coastal protection and in particular to dredging issues.

RemTech 2011 was able to capture at Ferrara Exhibition Centre a growing number of exhibitors and visitors: if the firsts grown from 120 to 130 in comparison with the previous year, visitors passed from 2.500 in 2010 to 3.000 in 2011 (+20%).

Renewed exhibition area was characterized by 120 booths, coming from the sectors of: characterization, analysis, remediation, monitoring, demolitions, general contractors, dredging, geosynthetics, asbestos, requalification, insurances, services, design companies and environmental communication firms.

At least 12 booths were related to geosynthetics manufacturers, distributors and applicators.

At the end of the Opening Conference chaired by Daniele Cazzuffi, coordinator of the RemTech Scientific Committee and IGS Past President, the ceremony of the third RemTech Degree Awards took place. The Awards were assigned to the seven best theses discussed in Italian Universities and related to reclamation technologies items: in particular, two were related to PhD thesis, while five were referred to Master thesis.

The focus of RemTech was not only represented by the exhibition, but also by 9 Official Conferences, coordinated by the Scientific Committee, and by 9 Special Events coordinated by the Advisory Committee.

The **Proceedings of the Official Conferences** (Editors: Daniele Cazzuffi and Ilaria Pietrini) are available on a CD-Rom containing 55 papers for a total of 436 pages published by DEA Edizioni: the proceedings are available at a cost by contacting info@deaedizioni.it



Photo 1: Opening Session of the RemTech 2011 event in Ferrara.

From the left, Paolo Carrera (Saipem, Milano), Gianni Andreottola (Trento University), Daniele Cazzuffi (CESI, Milano and IGS Past President), Marco Lupo (Ministry for Environment, Roma) and Alberto Chiarini (Syndial, Milano)



Photo 2: Audience during the Opening Session of the RemTech 2011 event in Ferrara.



Photo 3: Ceremony of the third RemTech Awards, assigned to the two best PhDthesis and to the five best Master thesis discussed in Italian Universities and related to remediation technologies items.



Photo 4: Gala dinner of the RemTech 2011 event at Circolo Unione in Ferrara

"The themes defined during the event make us to be full of pride – declared Nicola Zanardi, President of Ferrara Fiere - the way that themes were developed, with high specialization and professionalism as well, as customer satisfaction form confirmed. Our purpose – pursues Zanardi – was to give new opportunities to the most important operators of the sector and also to favourite new dialogue occasions with Public Administrations, in a circle of enlarged relations. And the positive course of the exhibition proves us that that objective has been achieved and that Ferrara can be considered the ideal place to construct changes which remediation sector needs in Europe".

Silvia Paparella, RemTech's Project Manager, take a look to the future: "Another growing number regards the presence of foreign exhibitors, this year is of 10%, without count up the very good replies obtained from the two international training courses and the success of initiatives like the presentation of the "Russia Environment Project". They are encouraging items, which stimulates us to think to the next edition though a more international address".

For the first time, a Gala Dinner was organized in one of the most beautiful old and historical buildings in Ferrara: the atmosphere was quite unique and resulted in a great success of the evening.

RemTech has confirmed his own place vocation where institutions, specialized companies, associations of category, university world (teachers, but also young students and researchers), contractors and operators can dialogue, compare and collaborate at most high levels, creating a true community in the broad and interdisciplinary field of remediation technologies.

Next edition of **RemTech** (www.remtechexpo.com) will be in **Ferrara from 19th to 21st of September 2012**: the date was selected also in order to attract experts coming from overseas and attending EuroGeo 5 in Valencia, Spain, scheduled from 16th to 19th September 2012.

See you at RemTech 2012 in Ferrara!

Reported by

Daniele Cazzuffi, IGS Past President, and Coordinator of RemTech Scientific & Advisory Committees

Sardinia 2011

Thirteenth International Waste Management and Landfill Symposium

3 - 7 October 2011, S. Margherita di Pula, Cagliari, Italy



The thirteenth edition of the Sardinia Symposium, organised by the IWWG (International Waste Working Group, www.iwwg.eu) and promoted by various international societies including IGS, was held in Forte Village, Santa Margherita di Pula, Italy from October 3rd to 7th.

The event was attended by approximately 800 participants (researchers, technicians, administrators and operators) from 63 different nations and saw the presentation of 562 scientific papers.

The traditional issues of waste prevention, material and energy recovery, waste treatment and final disposal were addressed in 128 general, specialised and workshop sessions. Numerous IWWG task group workshops and meetings were devoted and provided for extensive discussion on main controversial and challenging issues such as waste thermal treatment, industrial waste and WEEE recovery and recycling, landfill stabilization by means of in situ aeration and the development of the sustainable landfilling concept.

The opening lecture of Sardinia 2011 Symposium was given by prof. Armin Reller, University of Ausburg, Germany and presented a thorough overview on waste of electronics, with focus on the high potential offered by the recovery of valuable metals from advanced electronic devices.

The production of electronic devices is increasing exponentially and at the same time the product life span becomes shorter and shorter (6 to 24 months for mobile phones). Moreover, due to technology advances, a larger number of substances is used (up to 60 different elements are present in current laptops or mobile phones). Among these elements, strategic metals (i.e. gold) can be found in advanced electronic devices in concentration higher than in the original mineral.

According to Prof. Reller, global postconsumer recycling rates for many metals show lots of room for improvement. Considering that the annual global production of raw materials by mining increased from 10 bil. tons to 15 bil. tons within 25 years, the sustainable resource/waste management will be a key issue for future generations and the following criteria should be carefully considered:

- consistency with the carrying capacity of the planet earth
- efficiency of the use of resources and energy
- sufficiency of the life style

The theme of waste prevention and recycling was discussed in several sessions during Sardinia 2011. Andreas Bartl from Austria pointed out that more emphasis should be put on waste prevention than to recycling. To this goal, the concept of resource management should be considered instead of waste management, in order to cover the complete supply chain of a product from cradle to grave. This holistic approach should take into account any action or policy that results in cycle processes and seems thus to be the proper tool towards the goal of zero waste and sustainable development.

In this framework, an important role is played by the concept of extended producer responsibility (EPR). According to Vera Rotter (Technical University of Berlin), the main idea of EPR is the internalization of social and environmental life cycle costs of a product into the product price. In particular, product prices should reflect the costs for their end-of-life treatment and disposal. EPR provides incentives for producers to consider environmental end-of-life aspects already in the product design. Collection is one of the bottlenecks in most EPR scheme in terms of effectiveness and cost. That calls for new and innovative take back systems that give producers access to their waste. Deposits or new technologies like product identification are one way, new business models reorganizing the material ownership of products might be another. EPR goes beyond national waste policies. With globalizing product and waste streams EPR becomes a global issue that includes a global responsibility also for exported products and secondary raw materials. Last but not least, the objectives of waste management need to be redefined. Many EPR laws define quantitative recycling target, not a qualitative target. The discussion around mass based recycling quota and material specific recycling rates is one example. EPR is a means not goal. Responsibly dealing with resources is a challenge to both, producer and consumers.

Although prevention and recycling of waste are increasingly considered and proper measures are adopted in waste management strategies, landfilling will still play a fundamental role to close the resource cycle for future generation also. For this reason, a debate within the waste community has been in progress since a few years for the definition of the sustainable landfill concept. The IWWG task group on sustainable landfilling coordinated by Heijo Scharff organized a workshop on landfill aftercare completion on 6 October 2011, which was attended by more than sixty Symposium delegates. The intention of the workshop was to clarify terminology and specify the ultimate goal of aftercare completion and to obtain a shared notion on minimum requirements for completion procedures. It was agreed that in order to be able to release a landfill from aftercare, the potential emissions of relevant elements or compounds in the absence of active control should be within the natural attenuation capacity of the environment. For this reason the remaining emission potential of the waste mass should be properly evaluated and considered.

The majority of delegates agreed that the main challenge is the contradiction between current regulations and sustainability: appropriate regulations should comprise the promotion of active acceleration of waste degradation and stabilization processes in the landfill.

Among the active processes for promoting waste biodegradation in the landfill, in situ aeration certainly is the most promising and its application is increasingly considered worldwide. The IWWG task group on landfill in situ aeration coordinated by Marco Ritzkowski (Hamburg University of Technology) organized a workshop on October 4th, where the following main issues were addressed: how and to what extent might temperatures be controlled during aeration? How does emission behaviour develop in the long term after completion of aeration? Do undesired emissions (such as e.g. heavy metals or N₂O) emerge during aeration? Are nitrogen balances suitable to determine landfill bio-stabilisation?

As reported by Marco Ritzkowski, during the discussion there was a broad consensus whereby temperature control is one of the major issues contributing towards successful aeration measures. Whereas previously temperature control was primarily associated with the avoidance of potential landfill fires, nowadays it is understood that elevated temperatures have a direct effect on the bio-chemical processes and might therefore lead to undesired emissions during the aeration process. Possibilities exist with the addition of water (liquid) and/or intermittent aeration modes; however, in particular regarding the first option negative experiences have already been made with some previous aerated bioreactor landfill trials in the US. In the future it will be of importance to investigate these issues with increased intensity and to summarize the findings within the framework of the Task Group.



Sardinia 2011 Closing Session

Awards

Six awards were assigned during the Symposium and were delivered to recipients in occasion of the Gala Dinner. The winners were as follows:

- Kriton Curi Award for the best paper on waste management in developing countries: "Evaluation of contamination potential of sanitary landfill lysimeter using leachate pollution index", by I.M. Rafizul, M. Alamgir and M.M. Islam (Khulna University of Engineering & Technology, Bangladesh)
- Giovanni Bozzini Award for the best Italian paper: "LCA of integrated municipal solid waste management systems: case studies of Torino & Cuneo (Italy)", by G.A. Blengini, G. Genon and M. Fantoni (Politecnico di Torino, Italy)
- Luigi Mendia Award for the best paper on waste management policy issues: "The issue of waste in european manufacturing SMEs", by S. Mitchell, P. O'Dowd A. Dimache and T. Roche (Galway-Mayo Institute of Technology, Galway, Ireland)
- Alberto Rozzi Award for the best paper on anaerobic digestion: "Co-digestion of food waste and sewage sludge by two-stage anaerobic digester for biogas production from high-rise building", by C. Ratanatamskul, O. Wattanayommanaporn (Chulalongkorn University, Bangkok, Thailand) and K. Yamamoto (University of Tokyo, Japan)
- Award for best poster: "The effect of vegetation on microbial methane oxidation", by S. Bohn (Darmstadt University of Technology, Germany), J. Gebert (University of Hamburg, Germany) and J. Jager (Darmstadt University of Technology, Germany)

The recipient of the seventh edition of the "Life for Waste" Award, presented every two years to individuals who have made an outstanding contribution to advances in international waste management, was Prof. Hector Collazos Peñaloza. The Award (a sculpted silver statue by the Sardinian artist Antonello Pillittu) was presented by Susan Thorneloe, from the US Environmental Protection Agency.

Social events

As usual, Symposium participants were able to enjoy a detailed social programme throughout the five days of the conference: from the traditional folk music and dances during the Sardinian Dinner in the "Su Talleri" restaurant to the Gala Dinner that closed the Symposium. The traditional international football match was an opportunity to play sports and have fun even in the highly scientific context of the Sardinia Symposium!

The next edition of the Sardinia Symposium has been scheduled for September 30th – October 4th 2013, once again in the traditional venue of Forte Village Resort.

To obtain the proceedings of the Sardinia Symposium (one volume of 1200 pages containing the extended abstracts and one CD-Rom containing all the papers), please contact Eurowaste at: eurowaste@tin.it

Reported by

Daniele Cazzuffi, IGS Past President, and Roberto Raga, University of Padua

XXIV Italian National Conference on Geosynthetics 7 October 2011, Bologna, Italy



Speakers, organisers and coordinator of the Pavements Session (from right to left): Pierpaolo Fantini, Marco Pasetto, Gabriele Tebaldi, Claudio Soccodato, Daniele Cazzuffi, Hervé Di Benedetto, Francesco Canestrari, Luis Russo, Moreno Scotto

The XXIV Italian National Conference on Geosynthetics was held on 7th October 2011 in Bologna, in the frame of the huge SAIE Exhibition, the main event in Italy of the constructions and civil engineering sector.

The Conference theme was "**Pavements and Tunnels**" concerning the use of geosynthetics for roads and railways infrastructures and for tunnels applications.

The Conference was organized by the Italian Chapter of the IGS (AGI-IGS), with the participation of SIG (Tunnels Italian Society), SIIV (Roads and Railways Infrastructures Italian Society) and SITEB (Italian Association of Asphalt Bitumen Roads), under the auspices of the Bologna Engineers and Architects Association (ASSIABO) and the Bologna University.

The Conference was divided in two different sessions.

The first session was chaired by Claudio Soccodato (Secretary of AGI, the Italian Geotechnical Society) and focused on "**Pavements**". One keynote lecture, one invited lecture and four papers were presented.

The keynote, presented by Marco Pasetto (University of Padova), was addressed to a comprehensive review and a careful analysis of the use of geosynthetics in road pavements. The invited lecture was presented by Hervé Di Benedetto (University of Lyon – ENTPE) and focused on the mechanical behaviour of road materials.

The other contributions were devoted to the analysis of the behaviour of reinforced road pavements and to the practical applications in the field.

The second session was chaired by Daniele Cazzuffi (AGI-IGS President



Speakers, organisers and coordinator of the Tunnels Session (from right to left): Michela Chiorboli, Enrico Dal Negro, Simone Lo Grasso, Daniele Cazzuffi, Yves Boissonnas, Daniele Peila, Diletta Traldi, Michele Maugeri, Paolo Carrubba, Claudio Soccodato

and IGS Past President) and focused on the "**Waterproofing and drainage in tunnels**". Also in this case one keynote lecture, one invited lecture and four papers were presented.

The keynote, presented by Daniele Peila (Politecnico Torino) was mainly addressed to the fundamentals of the design methods for waterproofing and drainage in tunnels, while the invited lecture, presented by Yves Boissonnas (Amberg Engineering AG, Zurich), focused on waterproofing in deep tunnels, presenting the case of the Gothard Base tunnel.

The other four contributions focused on the different waterproofing techniques in tunnels.

At the end of each session, a fruitful and interesting discussion on the different topics took place.

A special presentation was devoted to EuroGeo 5, the next European Geosynthetics Conference and Exhibition that will take place in Valencia, Spain, in September 2012.

The next XXV Italian National Conference on Geosynthetics will be organised in Bologna in October 2012.

Reported by

Daniele Cazzuffi, AGI-IGS President and IGS Past President, and Nicola Moraci (AGI-IGS Secretary)

Announcements of Conferences of IGS

10th International Conference on Geosynthetics – 10ICG Berlin, Germany, 21 – 25 September 2014



The German Geotechnical Society (DGGT) and the International Geosynthetics Society (IGS) German Chapter, as a special group within the DGGT, cordially invite you to participate in the 10th International Conference on Geosynthetics (10ICG) in 2014 in Berlin, Germany.

The conference will be held from 21 to 25 September 2014 in direct connection with the 33rd Baugrundtagung (German Soil Mechanics Conference) of DGGT (23 to 26 September 2014).

As the Baugrundtagung expects 1200 participants, great synergy and interaction is expected between these events, especially in the co-organized, co-located exhibition.

The overlapping of lectures from both events will also attract many additional experts from the geotechnique and geosynthetics professions.

Venue

The 10ICG will be held in the south-eastern part of Berlin at the ESTREL convention centre, just 15 minutes from the new international airport Berlin-Schönefeld.

ESTREL offers about 50 rooms for lectures and meetings in different sizes, integrated exhibition halls (approx. 5000 m²) and a 4-star hotel (1125 rooms).

Travelling time from there to the centre of Berlin is about 20 minutes.

Language

The official language of 10ICG will be English.

Exhibition

The 5000 m² technical exhibition space is directly connected to the conference rooms and is half-way between the hotel and the lecture rooms inside the centre.

The exhibition space will be used both by 10ICG and the Baugrundtagung event.

Berlin

Berlin is the capital city of Germany and offers a tremendous number of interesting cultural events, museums and sightseeing attractions directly in the city and its surrounding area.

Berlin is the "gateway" to the eastern part of Europe. The city is easily reachable and the site of many significant political milestones not only in the history of Germany but of Europe and the world.

More than 6.5 million visitors per year experience Berlin. The 10ICG programme for accompanying persons will cover guided city tours, visits to museums and galleries - such as the Museumsinsel (a "World Cultural Heritage" site of UNESCO since 1999) and the Brandenburg Gate) – as well as special offers for individual trips and visits to the surrounding area (e.g., Spreewald, Potsdam, Mecklenburg Lakes).

10ICG Conference Themes

- Green Engineering, Sustainability and Durability with Geosynthetics
- Use of Geosynthetics for Renewable Energy
- Mining, Waste Management, Contaminated Sites and Environmental Protection
- Roads, Railways and Other Transportation Applications
- Reinforcement in Walls, Slopes, Embankments and Base Courses
- Flood Control, Levee and Canals, Dams, Reservoirs and Other Hydraulic Applications
- Drainage and Filtration Properties of Geosynthetics
- Geomembrane and Geosynthetic Clay Liner Barrier Systems
- Case Histories and Innovative Uses of Geosynthetics
- Quality Control, Quality Assurance and Accreditation
- On-site Installation Technologies and Monitoring Programs
- Soil-Geosynthetic Interaction and Large-Scale Performance Testing
- Design Approaches
- Regulations and Recommendations
- Looking to the Future with New Geosynthetic Products

For more information

Please visit the website that will be updated in due time: www.10icg-berlin.com

For further information please contact:

Gerhard Bräu (Gerhard.Braeu@bv.tum.de)

Dr. Kirsten Laackmann (service@dggt.de)

Announcements of Regional Conferences of IGS

Geoamericas 2012

II Pan-American Congress on Geosynthetics

Lima, Perú, 1 – 4 May 2012



The II Pan-American congress will take place from 1 - 4 May 2012, and will bring together researchers, consultants, environmental engineers, contractors, geosynthetic courses and exhibitors. It will be held at the modern Westin Hotel in Lima, Peru. Lima is the capital city of Peru, which is the fifth-most populous and the third-largest country in South America. Geoamericas 2012 will be organized by the IGS Perú under the auspices of the IGS.

Technical Program

The congress will highlight the main topics in the geosynthetics industry and application. Keynote lectures and selected papers will be presented on the main themes:

- Geosynthetics in Environmental Applications
- Geosynthetics in Dynamic Applications
- Geosynthetics in Hydraulic Applications
- Geosynthetics in Mining Applications
- Geosynthetics in Highways Applications
- Geosynthetics in Sanitary Applications
- Case Histories
- New Geosynthetics Products

Exhibition

During the Geoamericas 2012 an exhibition will be available to all interested companies and organizations that are willing to present latest technologies, innovations and services to delegates and visitors. The conference venue offers exhibition facilities with 1340 m². of available space for consultants, contractors, suppliers, installers, agencies, project offices, and all organizations interested in the geosynthetic community.

Important Dates

Date of submission of paper: 30 November 2011

Language

English and Spanish will be the official languages of the congress. The abstracts can be submitted on both.

For more information

More information will be available in the congress web site may be found in www.geoamericas2012.com

5th European Geosynthetics Conference

Valencia, Spain, 16 - 19 September 2012



The next European Geosynthetics Conference “EuroGeo 5” will be held on 16 – 19 September, 2012 at the Convention & Exhibition Center (Centro de Eventos) in Valencia, Spain under the auspices of the IGS.

The event will be organized by the Spanish IGS Chapter in cooperation with European and national associations of producers and with scientific

and engineering organizations.

The main objective is that the experts, manufactures, applicators and end users can exchange their experiences related to Geosynthetics.

A group of experts will be present in the event and will describe the most recent developments in these fields. The aim of the discussions is to establish an open dialogue which will enable to enhance the participants' knowledge.

The EuroGeo5 will appeal to all participants in the field of Geosynthetics whether in a practical or scientific sense: project authorities, designers, technicians, manufacturers, applicators, inspectors, researchers, regulators, experts, users, consultants, laboratories and other persons who, due to their professional activities, are interested in this field of technology.

Main Subjects of the Conference

The conference will provide an overall look at the multiple applications of

- Transport (roads, railways, tunnels, airports)
- Hydraulic structures (dams, reservoirs, canals)
- Erosion control and coastal works
- Waste landfills
- Soil improvement and reinforcement
- Mining
- Environmental applications
- Agriculture and aquaculture
- Building construction
- Remediation technologies

All aspects of the use of Geosynthetics will be dealt with, drawing on experience gained from case histories as well as research and development into new products and uses:

- Testing and properties
- Specifications and certifications
- Long term experiences and durability
- Design concepts and calculation methods
- Installation and pathology.

Technical Exhibition

Exhibitors will present the latest technological innovations and associated services to the conference delegates and visitors.

The technical exhibition is open to all interested companies and organizations. Information and a registration file will be available on the conference website.

Languages

The official languages will be English and Spanish. Simultaneous translation will be provided. All written communications will be presented in English and/or Spanish.

Important Dates

- Deadline for submission of abstracts: 31 December 2011
- Deadline for submission of final papers: 31 March 2012

Further instructions to submit abstracts are available in the Conference website www.eurogeo5.org

For more information please contact the Conference Secretariat: E-mail info@eurogeo5.org

Geosynthetics Asia 2012

5th Asian Regional Conference on Geosynthetics

Bangkok, Thailand, 10 - 14 December 2012



The Fifth Asian Regional Conference on Geosynthetics (GA2012) will be held in Bangkok, Thailand from 10 to 14 December 2012. GA2012 will be hosted by the Asian Center for Soil Improvement and Geosynthetics (ACSIG) in the Geotechnical and Earth Resources Engineering (GTE) Program under the School of Engineering and Technology (SET) at the Asian Institute of Technology (AIT). The theme of this Conference is "Geosynthetics for Sustainable Adaptation

of Climate Change". The Conference theme includes the following:

Keynote Lectures

- Keynote 1: Embankments on Soft Ground and Ground Improvement
- Keynote 2: Riverbank and Coastal Protection
- Keynote 3: Geosynthetics for Environmental Protection
- Keynote 4: Reinforced Earth Structures
- Keynote 5: Geosynthetics Innovation for Sustainable Engineering

Conference Theme Lectures

- Geosynthetics for Climate Change due to Global Warming (Reinforced Slopes, Reinforced Embankment/Walls, Erosion Control)
- Sustainable Infrastructure including Limited Life Geosynthetics (LLGS) (Green Geosynthetics, Bioplastics, Natural Fibers, Renewable, Durability)
- Geosynthetics for Human Security (Flood Controls, Roads and Railways, Dams, Levees and Canals)
- Geosynthetics for Food and Agriculture (Irrigation Canals, Aquaculture Ponds)
- Geosynthetics for Water Conservation (Lining Systems, Geocontainer, Reservoirs)
- Geosynthetics for Leisure Activities and Sports (Artificial Lakes, Golf Courses, Race Tracks)
- Geosynthetics for Waste Disposal and Mining Activities (Geomembranes, Geosynthetic Clay Liners, Interface Shear Strengths)
- Geosynthetics for Coastal and Riverbank Protection (Drainage, Filtration, Geotubes, Geobags)
- Geosynthetics for Soft Ground Improvement (Prefabricated Vertical Drains, Vacuum/Electro-Osmotic/Heat Preloading)
- Case Histories and Innovations (Geosynthetics Interaction, Seismic Resistance, Futuristic, Innovative)

Language

The official language of this conference will be English

Important Dates

Deadline for Abstract Submission: 31 January 2012
Notification of Abstract Acceptance: 29 February 2012
Deadline of Paper Submission: 30 April 2012
Notification of Paper Acceptance: 30 June 2012
Deadline for Author Registration: 30 June 2012
Deadline for Early Bird Registration: 30 April 2012

For more information

For further information, please contact: GA2012 Secretariat

Email: igs-thailand@ait.ac or bergado@ait.ac.th

Website: www.set.ait.ac.th/acsig/GA2012/

Phone: +66-2 524 5500/5523

Fax: +66-2 524 6050

Announcements of Conferences under the Auspices of IGS

2011 ISKGSS - International Symposium on Sustainable Application of Geosynthetics Technology Commemoration of 10th Anniversary of Korean Geosynthetics Society Foundation, 23 - 24 November 2011, Seoul, South Korea



The ISKGSS (International Symposium of Korean Geosynthetics Society) invites you to participate 2011 ISKGSS which will be held in the commemoration of 10th Anniversary of Korean Geosynthetics Society Foundation from November 23 - 24 2011. The objective of this symposium is to provide a forum for dissemination and exchange of scientific and technical ideas and progress among researchers which will make this conference be helpful for practitioners and researchers. The symposium is organized by the Korean Geosynthetic Society (KGSS) under the auspices of the IGS

Conference Topics

- Coastal, Transportation and Underground Engineering
- Erosion Control and Hydraulic Engineering
- Geo-Environmental and Green Structure Application
- Testing, Standardization, Regulation and Reliability
- Geosynthetics Stabilized and Reinforced Soil Structure
- MQC/MQA and CQC/CQA of Geosynthetics

For more information

For more information, please contact: hyjeon@inha.ac.kr

Reported by

Dennes T. Bergado, President of IGS Thai-Chapter

International Symposium on Sustainable Geosynthetics and Green Technology for Climate Change (SGCC 2011) Retirement Symposium for Prof. D.T. Bergado 20 and 21 June 2012, Bangkok, Thailand

We would like to inform you that the International Symposium on Sustainable Geosynthetics and Green Technology for Climate Change (SGCC2011), which also serves as the Retirement Symposium of Prof. Dennes T. Bergado, will be rescheduled on 20 and 21 June 2012 instead of 7 and 8 December 2011 due to difficulties of the current flood calamity in Bangkok.

The International Symposium on Sustainable Geosynthetics and Green Technology for Climate Change (SGCC2011) will be held from 20 to 21 June 2012 at the Grand Centara Convention Hotel, Bangkok, Thailand. This symposium is hosted by the Asian Center for Soil Improvement and Geosynthetics (ACSIG) in the Geotechnical and Earth Resources Engineering Program (GTE) under the School of Engineering and Technology (SET) at the Asian Institute of Technology (AIT), the Southeast Asian Geotechnical Society (SEAGS), the International Geosynthetics Society-Thailand Chapter (IGS-Thailand), and Suranaree University of Technology (SUT), under the auspices of the International Geosynthetics Society (IGS). SGCC2011 will also serve as the Retirement Symposium of Prof. Dennes T. Bergado.

The Symposium will cover a wide range of topics including:

- Roads/Railways/Transport Applications
- Flood Control/Reservoirs/Hydraulic Applications
- Mining/Waste Containment/Environmental Protection
- Ground Improvement/Remediation/Case Studies
- Reinforced Slopes/Walls and Geohazard Mitigations
- Geosynthetic for Renewable Energy
- Geo-Containers and Geotubes

- Behavior of Unsaturated Soils/Rain-Triggered Landslides
- Earthquake Engineering/Geophysics
- Foundation Engineering/Retaining Walls
- Laboratory/Field Tests/Durability of Geosynthetics
- Sustainable Limited Life Geosynthetics (LLGs)
- Case Histories and Geosynthetics Innovations
- Sustainable Geosynthetics Engineering/Applications

Keynote Guests and invited Lectures

The Keynote Guests and Invited Lectures will be mainly represented by the professional colleagues and friends, as well as the successful former students of Prof. D.T. Bergado. Other interested presenters are very much welcome.

Language

English will be the official language of this symposium.

For more information

For further information please contact: SGCC2011 Secretariat c/o Asian Center for Soil Improvement and Geosynthetics (ACSIG), GTE/SET, Asian Institute of Technology, P.O. Box 4, Klong Luang, Pathumthani 12120 Thailand

Tel No.: +66-2 524 5500/5523,

Email: climatechange@ait.ac.th or igs-thailand@ait.ac.th

Fax No.: +66-2 524 6050

www.set.ait.ac.th/acsig/sgcc2011/

International Conference on Ground Improvement and Ground Control Transport Infrastructure Development and Natural Hazards Mitigation 30 October – 2 November 2012, Wollongong, Australia

The Centre for Geomechanics and Railway Engineering, University of Wollongong, Australia and the Australian Geomechanics Society (AGS) under the auspices of ISSMGE will be hosting the International Conference on Ground Improvement and Ground Control: Transport Infrastructure Development and Natural Hazards Mitigation. The Conference is also supported by the International Geosynthetics Society (IGS) and the Southeast Asian Geotechnical Society.

The Conference will be held at the Innovation Campus of University of Wollongong, Australia, during October 30 - November 2, 2012. It will be aimed at promoting the latest ground improvement concepts and applications predominantly in the fields of transportation and natural hazards management. Following the earlier successful conference in Singapore, this Conference will act as a platform for disseminating the most recent research developments and field advances to the geotechnical community around the globe. It is expected to be the biggest Ground Improvement conference to be held in this region.

The Conference will consider papers in, but not limited to, the following themes:

- Soft Soil Consolidation
- Sand and Gravel Piles, Stone Columns and Rigid Inclusions
- Geosynthetics Reinforcement
- Compaction and Vibroflotation
- Grouting and Chemical Stabilization
- Electro-kinetic, Electro-osmotic, Bio-engineering, Thermal and Explosion-based Techniques
- Methods of Preventing Soil Erosion, Scour and Internal Piping
- Ground Control in Underground and Surface Mine Excavations
- Methods of Stabilisation of Landslides and Mass Movement
- Surface and Sub-surface Drainage
- Stabilisation of Fractured and Jointed Rockmass

We cordially invite all to attend the conference in Wollongong in 2012.

For further information

Please visit the following conference website for more details: <http://www.icgiwollongong.com>

Please contact the ICGI Conference Secretariat:

Dr Jayan S. Vinod, Faculty of Engineering, University of Wollongong, Wollongong City, NSW 2522, Australia

Phone: 02 4221 4089

Fax: 02 4221 3238

Email: icgi_2012@uow.edu.au

End of Year Report North American Geosynthetics Society NAGS

The year 2011 has been a very good year for NAGS.

Our new Board of Directors took office at the Geo-Frontiers Conference. They include Dean Sandri, President; Bob Mackey, President-elect; Corey Bobba, Treasurer; and Vice Presidents Marolo Alfaro, Richard Brachman, Dhani Narejo, John Henderson, and Jay McKelvey. We are maintaining a healthy membership. This year we had 32 new or revived memberships.

Under the guidance of the past Board, the early part of the year was devoted to working with IFAI, and the Geo-Institute organizing the Geo-Frontiers 2011 Conference. We had close to 2000 attendees and 150 exhibitors. As a result NAGS received one of the best, if not the best financial return that we have experienced for any of the conferences in which we have participated.

NAGS sponsored a student paper completion at the Conference. First, second and third place cash prizes were given to the top three papers based on a combined score of the written paper and the oral presentation at the Conference. There were seven papers in all were presented in the competition. The winning student author was Ms. Azadeh Hoor from Queen's University for her paper, "Application of Thermal Insulation in Landfill Liners". The 1st runner up was Mr. Ben Leshchinsky of Columbia University for his paper titled "Enhancing Ballast Performance Using Geocell Confinement. The 2nd runner up was Ms. Carmen Franks of University of Maryland for her paper titled "Geosynthetic Filters for Water Quality Improvement."



Ben Leshchinsky, 1st runner-up; David Suits, Executive Director, NAGS; Azadeh Hoor, winning author (left to right)



Carmen Franks, 2nd runner-up (unavailable for the group photo)

NAGS partnered or worked with the Geosynthetics Materials Association on some major undertakings including a co-operative effort to get a geotextile separation cost/benefit study funded by the Federal Government. This had been a long standing proposal which began over 10 years ago with a Research Needs Statement submitted to AASHTO by the New York State DOT. GMA has worked with their lobbyists in Washington keeping the need for this study before members of Congress for the last several years. Just recently, after the last Lobby Day in Washington in September, GMA was informed that Congress has told the Government Accounting Office (GAO) to fund the study. Further information will be submitted to the GAO so that the study can begin in a timely manner.

The 4th Portuguese Seminar on Geosynthetics will be held in the University of Aveiro, Portugal, on 22 - 23 November 2011. This event is organised by the Portuguese Chapter of IGS (IGS-Portugal), the Portuguese Geotechnical Society (SPG) and the University of Aveiro (UA).

The conference is aimed to be of great interest for geotechnical, environmental and civil engineers, project designers, contractors, consultants, manufacturers and installers, facility owners, researchers, professors and students. In keeping with the NAGS mission of education, we have been actively working on co-sponsored 1½ day short courses on geosynthetics with GMA. We are trying to hold these in different regions of the US to reach out to new audiences. Watch for e-mails, or go to the NAGS website to see the future schedule (nags-igs.org). When you see a course scheduled in your region we would appreciate it if you would pass the information along to others that might be interested.

Looking ahead; we have a conceptual agreement with the Canadian Geotechnical Society to sponsor geosynthetics sessions at their 2013 Conference. We also will be working with IFAI and GMA on the 2013 Geosynthetics Conference. Details as to our arrangements with IFAI for this conference are being worked out. Dave Suits has been asked to be the short course chair for this program. We are also being encouraged to submit a bid for the 2016 Geo-Americas Conference. Work is underway to prepare a proposal for doing so.

It is due to member support both financially and through participation that has enabled NAGS to continue to carry out its mission, which is, "To provide leadership in advancing the education and research of geosynthetics". We know that this support will continue on into the future. Thank you.

Reported by

L. David Suits, Executive Director NAGS

Upcoming Courses and Certifications at the Geosynthetic Institute



One – Day Courses:

- Geosynthetic Reinforced Retaining Wall Failures and Their Remediation (NEW), 30 November 2011 and 13 March 2012. For more information and registration visit our website at www.geosynthetic-institute.org, Education - Courses
- Inspection, Monitoring and Maintenance of MSE Walls, Berms and Slopes (NEW), 1 December 2011 and 14 March 2012. For more information and registration visit our website at www.geosynthetic-institute.org, Education -

Courses

- Geosynthetics in Waste Containment Liner and Cover Design, 6 December 2011 and 20 March 2012. For more information and registration visit our website at www.geosynthetic-institute.org, Education - Courses
- Quality Assurance/Quality Control of Geosynthetics Installation, 7 December 2011 and 21 March 2012. For more information and registration visit our website at www.geosynthetic-institute.org, Education - Courses

Inspector Certification Programs:

- MSE Walls, Berms and Slopes (**NEW**), 1 December 2011 and 14 March 2012 (Exams Immediately follow Course). For more information and registration visit our website at www.geosynthetic-institute.org, Certification – MSE Walls, Berms, Slopes
- Geosynthetics and Compacted Clay Liners, 7 December 2011 and 21 March 2012 (Exams Immediately follow Course). For more information and registration visit our website at www.geosynthetic-institute.org, Certification – Geosynthetics/Compacted Clay Liners

Reported by

Jamie R. Koerner, IGS member

Product Certification of Geosynthetics in Germany



The European standards for geosynthetics provide for a different system of factory production control and external monitoring from which has been usual in Germany. They define a proof-of-conformity procedure which contains the certification of the factory production control (FPC) on the basis of an initial inspection of the factory and the FPC, together with ongoing monitoring, assessment and approval of the FPC by an independent certification body. In this system, regular sampling and material testing are exclusively carried out under the responsibility of the manufacturer.

To overcome this lack of external product testing and approval before products are supplied to projects, the Federal Highway Authority (BASt) requires in the latest version of the standard contract document ZTV E-StB 09 (Additional Technical Contractual Obligations for Earthwork and Road building) that all products which are delivered at a site must be tested on all specified properties at arrival. They may be released for installation only after all tests have been executed and the results are found in accordance with the specification. This means a considerable waiting time during construction and considerable extra costs for testing.

This extensive testing after delivery may, according the ZTV E-StB-09, be ignored in case the product is voluntary monitored and certified under a system which is equivalent to the incoming construction material testing procedure.

The German Geosynthetics Industry Association (Industrieverband Geokunststoffe e.V. -IVG) has developed such a monitoring and certification system, together with the German Highway Authority (BASt) and in cooperation with the German Chapter of IGS (FGSV). The rules are fixed in the document: "Recommendation for the implementation of the supervision and certification of geosynthetics approved by the European proof-of-conformity procedure". The base is the existing European proof-of-conformity system, which requires the monitoring and certification of the factory production control (FPC). This is done by an independent (notified) body. On top of this, the production is audited, samples are taken by the inspectors and tested in qualified laboratories. The results of the auditing and the testing are handed over to the certification body which assesses the results. The test results are compared with the quoted values for the properties by the manufacturer in the official CE documents, which he is obliged to publish. If the properties of the product meet the quoted values, the certification body issues an **ivg-Product Certificate**. The product may also be identified with the **ivg-Quality Mark**. A list with valid product certificates is published on the IVG-website and only the documents which are published there are valid ones. (<http://www.ivgeokunststoffe.com/ivg-files/list.php>). The product certificate is annually renewed. Only the certification bodies have access to this part of the IVG website, so in this way any potential falsification is eliminated. The text in German, together with an English translation of the Recommendation, is also published on the website.

Since the start of the program one and a half year ago, more than 210 products have been certified from more than 22 manufacturers and trading companies. This means that ca. 90% of the geosynthetic products which are on the market in Germany are certified and bear the ivg-Quality Mark.

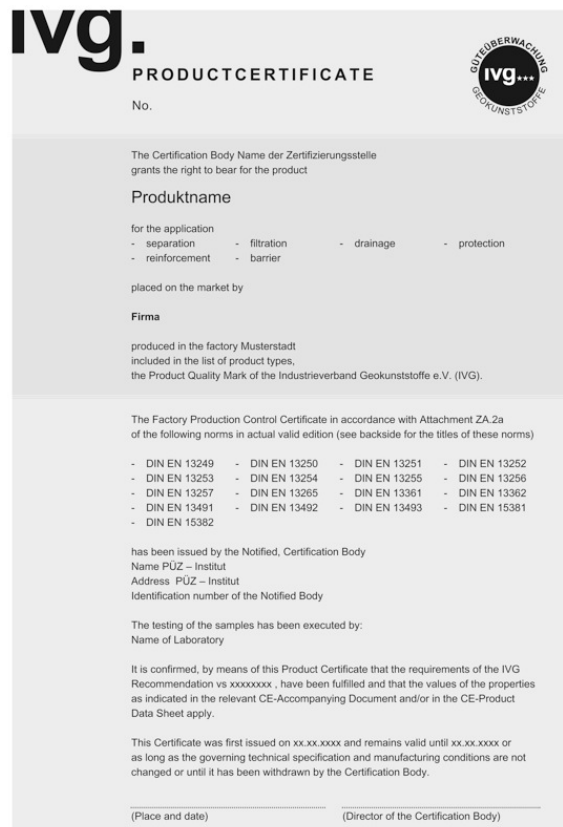
The certification system turns out to be a transparent process that meets the requirements of clients of geosynthetics to the manufacturers, in order to achieve an increase in mutual trust in the products used.

Most of these certified products are also available in other European countries or are exported to other parts of the world. Users in these countries can benefit from this German certification system, as the system it assures the quality of the supplied product in accordance with ISO TR 15019 and it is executed by accredited and certified institutes, qualified as notified bodies under the EU Construction Products Directive (89/106/EU).

More information can be obtained from the IVG secretariat: info@geokunststoffe.com

Reported by

Wim Voskamp, Chairman of German Geosynthetics Industry Association - IVG



ivg. PRODUCT CERTIFICATE

No. _____

The Certification Body Name der Zertifizierungsstelle grants the right to bear for the product

Produktname _____

for the application

- separation
- reinforcement
- filtration
- barrier
- drainage
- protection

placed on the market by _____

Firma _____

produced in the factory Musterstadt _____ included in the list of product types, the Product Quality Mark of the Industrieverband Geokunststoffe e.V. (IVG).

The Factory Production Control Certificate in accordance with Attachment ZA 2a of the following norms in actual valid edition (see backside for the titles of these norms)

- DIN EN 13249	- DIN EN 13250	- DIN EN 13251	- DIN EN 13252
- DIN EN 13253	- DIN EN 13254	- DIN EN 13255	- DIN EN 13256
- DIN EN 13257	- DIN EN 13265	- DIN EN 13361	- DIN EN 13362
- DIN EN 13491	- DIN EN 13492	- DIN EN 13493	- DIN EN 15381
- DIN EN 15382			

has been issued by the Notified, Certification Body

Name PÜZ – Institut _____

Address PÜZ – Institut _____

Identification number of the Notified Body _____

The testing of the samples has been executed by:

Name of Laboratory _____

It is confirmed, by means of this Product Certificate that the requirements of the IVG Recommendation vs xxxxxxxx, have been fulfilled and that the values of the properties as indicated in the relevant CE-Accompanying Document and/or in the CE-Product Data Sheet apply.

This Certificate was first issued on xx.xx.xxxx and remains valid until xx.xx.xxxx or as long as the governing technical specification and manufacturing conditions are not changed or until it has been withdrawn by the Certification Body.

(Place and date) _____ (Director of the Certification Body) _____

Geo-hazards During Earthquakes and Mitigation Measures Publication of the Japanese Geotechnical Society, November 2011



The Japanese Geotechnical Society has published "GEO-HAZARDS DURING EARTHQUAKES AND MITIGATION MEASURES - LESSONS AND RECOMMENDATIONS FROM THE 2011 GREAT EAST JAPAN EARTHQUAKE".

This document is based on experiences with, and lessons from, the disasters that resulted from the 2011 Great East Japan Earthquake, 11 March 2011. These documents show several fields where geosynthetics engineering can be applied for restoration, reconstruction and new construction. It is noted that the Immediate Past President of the IGS, Fumio Tatsuoka, worked as one of the core members for these documents.

The Digest Version is posted at http://www.geosyntheticssociety.org/Uploads/Japan_Earthquake.pdf. After November 2011 the full version will be available to be downloaded from: www.jiban.or.jp.

Reported by

Fumio Tatsuoka, Immediate Past President of IGS

Activities and Plans of the Newly Founded Finnish IGS-Chapter



The IGS activities have finally started also in Finland! The Finnish Chapter was founded in May 2010 and accepted by IGS Council this spring.

The Chapter is organized under the Finnish Geotechnical Society. There are already 25 members, including salesmen, university staff, design engineers and contractors. The organization is very light and the aim is to increase

both the number of members and awareness of possibilities of geosynthetics by organizing seminars, workshops, site and factory visits etc.

The IGS-FIN has already organized an educational 10-day-seminar on geosynthetics, in co-operation with Finnish Geotechnical Society, Finnish Environment Institute and Tampere University of the Technology and with significant contribution of several manufacturers and experts, such as Ian Peggs and Helmut Zanzinger, especial compliments to all of them! The seminars were found very successful and beneficial.

Next year we are planning, in addition to the active participation to the IGS conferences, a visit to the geosynthetic clay liner producer and a workshop on geosynthetic clay liners on 20th of March with Nathalie Touze-Foltz as a key lecturer. Our members are also diligently drafting new national design guidelines for geosynthetic reinforcement and the general quality requirements for landfill structures.

The Chapter webpage is - mainly in Finnish, naturally: <http://geosynt.wordpress.com/>

Reported by

Minna Leppänen, President of Finnish IGS Chapter

Geosynthetics Taiwan 2011 25 November 2011, Taipei, Taiwan



West Pacific Chapter
Chinese Geosynthetics
Association

Hosted by the West Pacific Chapter (WPC) of IGS, under auspices of the Chinese Geosynthetics Association (CGA), themed "GEOSYNTHETICS TAIWAN 2011" was held on 25 November. More than 100 attendees gathered from across central government officials, engineering consultants and college students to participate in this event. In the opening keynote speech, Yueh

Liang, PhD, General Director of CGA, presented "Strategic Competency of Sustainable Engineer". His speech discussed how the 21st century brought the geosynthetic applications of routine operations to a high level. He said that executing change in an increasingly fast-paced and facing on extreme climate remained a big challenge. The following different multi-topics were presented below.

- The Strategy for Compound Disaster led by Severe Weather
- The Challenge for Slope Protection and Hazard Mitigation in Sustainable Infrastructure
- The Active Concept and Action for Flood Control in Taiwan
- Geofiber Applications for Slope and Riverbank Protections
- The Case Study of Infrastructure and Hazard Mitigation via Ecological Technology

The speaker in each topic captivated the audiences with practical examples of application among others that led to many questions as well as backstage discussions.



Time of coffee break



Live Session

During the coffee break, the exhibit hall was packed for networking by attendees. After the completion of the featured



Q&A Session (from left to right):

Prof. Ho C. C. of National Taipei University of Technology; Prof. Wei-Fong Lee of National Taiwan University of Science and Technology ; Prof. Chia-Nan Liu of National Chi-Nan University, Mr. James Cheng, Executive Director of CGA and Daniel Hung-Chia Hou, Chief Secretary of CGA

lecture, the panel discussion was convened. The Q&A session offered some insightful answers to questions and sparked many valuable recommendations which were very helpful in further applying and promoting the geosynthetic applications in the coming projects.

This is an excellent platform to improve and update the knowledge as well as connect and share experiences with experts and other practitioners in geosynthetics. The success of the conference can be attributed to the support by Chinese Soil and Water Conservation Society, National Taiwan University of Science and Technology and Gold-Joint Industry Co., Ltd. for this event. WPC of CGA truly appreciates the attendance of all attendees, presenters, sponsors and guest speakers who joined this conference.



The lecture, Dr. Nan-Shan Chou , President of Sinotech Engineering Services, Ltd.



The lecture, Dr. Dr. Hui-Long Wu, Honorary Director General of Chinese Soil and Water Conservation Society



The lecture, Dr. Shen-Hsien Chen, General Secretary of New Taipei City Government



The lecture, Prof. Wei-Fong Lee of National Taiwan University of Science and Technology was introduced by Prof. Chia-Nan Liu of National Chi-Nan University

*Reported by
Daniel Hung-Chia, Hou, IGS News Correspondent from West Pacific Chapter*

10th Saxon Construction Textiles Symposium "Bautex 2012 – Building with geosynthetics" 26 January 2012, Chemnitz, Germany

On 26 January 2012, the 10th Saxon Construction Textiles Symposium "BAUTEX 2012" takes place in Chemnitz. The number of arrangements, organized in an interval of 2 years, is realized by the Saxon Textile Research Institute e. V., the University of Applied Sciences Dresden, the Construction Industry Federation Saxony / Saxony-Anhalt e. V. and the North-East German Textiles and Clothing Industry Association e. V.

The "BAUTEX" is an in the industrial sector established number of arrangements and started 1994. The conference is a possibility for the exchange of experiences of producers of technical textiles, planning offices, departments, authorities and the building industry. The goal of the number of symposiums is the presentation of new guidelines and application / calculation examples as well as research results for the "construction with geosynthetics".

Symposium comprises 12 lectures in the fields of:

- historical development and future prospects
- applications in traffic area
- contributions to ecology and connection of practice
- science and research.

Language

The conference language is German and the conference materials are also available only in German

For more information

For more information, please contact: www.bautex.org

Reported by

Matthias Mägel, IGS member

12th Baltic Sea Geotechnical Conference "Infrastructure in the Baltic Sea Region" 31 May – 2 June 2012, Rostock, Germany



On behalf of the ISSMGE, the German Geotechnical Society (DGGT) and the University of Rostock warmly invite you to participate in the 12th Baltic Sea Geotechnical Conference being held in Rostock, from 31 May to 2 June 2012. This conference will be organized also under the auspices of the German IGS Chapter.

The main aim for all countries around the Baltic Sea and of the 12th Baltic Sea Geotechnical Conference is to provide a forum for an intensive transfer of ideas and experiences with other engineering and research groups. Significant contributions from industry are encouraged and hence the ultimate aim is to bring together state-of-the-art research in Geotechnics in maritime engineering with current industrial experiences. The conference is not limited only to the countries of the Baltic Sea area and participants from other regions are also warmly welcomed. The Baltic Sea area is a booming region with a lot of related problems with regards to infrastructure development. Sustainable development has to reflect on a balance of interest between industrial and

touristic use and protection of nature. Additionally consequences of climate change and sustainability strategies regarding the population's need of protection and of future development are to be considered.

Conference Topics

The sessions of the conference related to global change and sustainability needs are as follows:

- Traffic infrastructure
- Research and development projects
- Constructions in soft subsoil
- Harbour construction
- Coast protection
- Foundations for offshore wind energy plants

TC-Meetings

Two meetings of ISSMGE Technical Committees ("Dykes and Levees" on 31st May 2012 and "Soil Structure" on 1st June) will take place during the conference.

Mercer Lecture

The conference will start with the Mercer Lecture already on **30th May 2012** at 4 p.m. and will be followed by the welcome reception. The Mercer lecture for the period 2012/2013 will be presented in Europe at the 12th Baltic Sea Geotechnical Conference by Dr.-Ing. Michael Heibaum, BAW (Federal Waterways Engineering and Research Institute), Karlsruhe, Germany. The title is: **“Geosynthetics for waterways and flood protection structures – controlling the interaction of water and soil”**

The Mercer Lecture is one of several geosynthetic highlights at the 12th Baltic Sea Geotechnical Conference.

Exhibition

An exhibition will be held in the Foyer of the Stadthalle Rostock, offering an opportunity for companies and organizations to present their products and services. If you are interested in the exhibition, please send an e-mail to 12bsgc@interplan.de to make sure that you will receive all information. Organizer of the exhibition is INTERPLAN AG, Hamburg.

Technical visit

A technical visit will be organized on the last day of the conference, Saturday, 2nd June:

- Sea port of Rostock – extension by seaside land reclamation on the example of the maritime trade territory III

Language

The conference language is English.

For more information

For more information, please contact: www.12bsgc.de

2nd International Conference on Transportation Geotechnics (IS-Hokkaido 2012)

10 - 12 September 2012, Sapporo, Hokkaido, Japan,



The 2nd International Conference on Transportation Geotechnics (2nd ICTG) will be hosted by the Hokkaido Branch and TC202 (Transportation Geotechnics) Japanese Domestic Committee of Japanese Geotechnical Society (JGS). It will offer an excellent opportunity to discuss some issues essential for further development in transportation geotechnics. This conference will comprise parallel sessions over a 3-day period, including keynote lectures, oral presentations, discussion and exhibition. Several workshops, relating to intelligent compaction technologies and

geotechnical challenges for transportation geotechnics in extreme climates and in rail track and its transitional zones, are also planned on the previous day. All the accepted papers are included in the proceedings. Furthermore, the limited number of selected papers can be considered for publications in the special issue of Soils & Foundations, subjected to the usual peer-reviewing process set out by the JGS editorial committee, and the relevant authors will be notified at an appropriate time.

Main Subjects of the Conference

- Geotechnics for Pavement, Rail Track and Airfield
- Geomaterial, including Nontraditional Materials
- Asphalt Mixtures and Hydraulically-bound Materials
- Earthworks for Transportation Facilities
- Application of Geosynthetics
- Laboratory Testing and In-situ Testing
- Modeling and Numerical Simulations, etc.

Language

English is the official language of the conference

Important dates

Deadline for formatted paper submission: 31 December 2011

Notification of final paper acceptance: 30 April 2012

For more information

More information may be found at the Conference website: <http://congress.coop.hokudai.ac.jp/tc3conference>

Please contact and send abstracts or enquiries to email: tc3conference@eng.hokudai.ac.jp

List of IGS Chapters

Argentina

Argentinean Chapter (2009)
President: Prof. Sergio Reyes,
sreyes@reyesasoc.com.ar

Australia and New Zealand

Australasian Chapter (2002)
President: Mr. Mike Sadlier
sadlier@attglobal.net

Belgium

Belgian Chapter (2001),
Chairman: Frans De Meerleer
frans.texion@skynet.be
www.belgian-geosynthetics.be

Brazil

Brazilian Chapter (1997)
President: Eng. Lavoisier Machado
igsbrasil@igsbrasil.org.br
www.igsbrasil.org.br

Chile

Chilean Chapter (2006),
President: Luis Paredes
lparedes@vectorchile.cl
<http://igs-chile.org/index.html>

China

Chinese Chapter (1990)
Chairman: Li, Guangxin
postmaster@ccigs.com.cn
www.ccigs.com.cn

Czech Republic

Czech Chapter (2003)
Chairman: Mr. Petr Hubik
igs@igs.cz
www.igs.cz

Finland

Finish Chapter (2011)
President: Minna Leppänen
igsfin.secretary@gmail.com

France

French Chapter (1993)
President: Mr. Jean-Pierre Magnan
francois.caquel@developpement-durable-gouv.fr

Germany

German Chapter (1993)
Chairman: Prof. Dr.-Ing. Martin Ziegler
service@dggt.de
www.gb.bv.tum.de/fachsektion/index.htm

Greece

HGS, Greek Chapter (2005)
President: Mr. Dimitrios K. Atmatzidis
dac@upatras.gr

India

Indian Chapter (1988)
President: Prof. K. Rajagopal
cbip@cbip.org
www.cbip.org

Indonesia

INA-IGS, the Indonesian Chapter (1992)
President: Mr. Gouw Tjie Liong
ina_igs@binus.ac.id

Italy

AGI-IGS, the Italian Chapter (1992)
President: Dr. Ing. Daniele Cazzuffi
agiroma@iol.it
www.associazionegeotecnica.it/~agi/

Japan

Japanese Chapter (1985)
Chairman: Dr. Hiroshi Miki
miki-egri@nifty.com
wwwsoc.nii.ac.jp/jcigs/

Korea

KC-IGS, The Korean Chapter (1993)
President: Prof. Eun-Chul Shin
kgss-adm@kgss.or.kr
www.kgss.or.kr

Mexico

Mexican Chapter (2006)
President: Giovanni Bellei
Giovanni.bellei@maccaferri.com.mx

The Netherlands

Netherlands Chapter (1992)
President: Dr. Ir. A. H. de Bondt
mail@ngo.nl
www.ngo.nl

North America

North American Geosynthetics Society (NAGS) (Canada, USA) (1986)
President: Dean Sandri
NagsDirector@aol.com
www.nags-igs.org

Norway

Norwegian Chapter of IGS (2008)
President: Jan Vaslestad
jan.vaslestad@vegvesen.no

Pakistan

Pakistani Chapter of IGS (2011)
President: Tariq Ikram
mr.tariq.ikram@gmail.com

Peru

Peruvian Chapter (2001)
President: Boris Castillo
boris.castillo@geoserviceing.com.pe
www.igsperu.org

Philippines

Philippine Chapter (2007)
President: Thomas Wintermahr
thomas@maccaferri.com.ph or
igs_philippines@yahoo.com
www.igsphilippines.com

Poland

Polish Chapter (2008)
Chairman: Prof. Adam Bolt
abolt@pg.gda.pl

Portugal

Portuguese Chapter (2003)
President: Maria de Lurdes Lopes
Lcosta@fe.up.pt
www.spgeotecnia.pt

Romania

Romanian Chapter (1996)
President: Christina Feodorov
christina.feodorov@iridexgroup.com or
adiol@utcb.ro

Russia

Russian Chapter of IGS (RCIGS, 2008)
President: Prof. Andrey Ponomaryov
ofrikhter@mail.ru

Slovakia

Slovakian Chapter of IGS (2011)
President: Dr. Radovan Baslik
baslik@tecgeo.sk

South Africa

South African Chapter (1995)
President: Anton Bain
bain@jaws.co.za or joan-nes@englining.co.za
www.qiqsa.org

Spain

Spanish Chapter (1999)
President: Mr. Angel Leiro
pabad@cetco.es
www.igs-espana.com

Thailand

Thai Chapter (2002)
President: Prof. Dennes T. Bergado
bergado@ait.ac.th
www.set.ait.ac.th/acsig/igs-thailand

Turkey

Turkish Chapter (2001)
President: Dr. Fazli Erol Guler
eguler@boun.edu.tr

United Kingdom

U.K. Chapter (1987)
Chairman: Neil Dixon
n.dixon@lboro.ac.uk
www.igs-uk.org

West Pacific Regional Chapter

West Pacific Regional Chapter (1997)
President: Dr. Dave Ta-The Chang
tateh@cyu.edu.tw

Note:

- If you find your information is incorrect please contact your chapter secretary or if you are not affiliated with a chapter contact the IGS secretary. Please also advise the IGS News editor

Conferences
Symposia
Workshops

BAUTEX 2012 - Bauen mit Geotextilien (Building with Geotextiles), 10th Sächsisches Bautextilien - Symposium (Saxonian Buildingtextile - Symposium) Chemnitz, Germany
26 January 2012
E-mail: matthias.maegel@stfi.de
www.stfi.de

Tanzania Buildex 2012
International Trade Exhibition on Building & Construction
Dar-Es-Salaam, Tanzania
9 - 11 March, 2012
www.eventexhibition2012.info/tz_builde/index.html

GeoAmericas 2012
II. Pan-American Congress on Geosynthetics
Lima, Peru
1 - 4 May 2012
www.igsperu.org

Second International Conference on Performance-Based Design in Earthquake Geotechnical Engineering
Taormina, Italy
28 - 30 May 2012
E-mail: agiroma@iol.it
www.associazionegeotecnica.it/novita

TC 211 International Symposium & Short Courses "Recent Research, Advances & Execution Aspects of GROUND IMPROVEMENT WORKS"
Brussels, Belgium
30 May - 1 June 2012
E-mail: carine.godard@bbri.be
www.bbri.be/go/IS-GI-2012

12th Baltic Sea Geotechnical Conference
Rostock, Germany
31 May - 02 June 2012
E-mail: On scientific issues: service@dggt.de
On organizational issues: 12bsgc@interplan.de
www.12bsgc.de

International Symposium on Sustainable Geosynthetics and Green Technology for Climate Change (SGCC2011)
Retirement Symposium for Prof. D.T. Bergado
Bangkok, Thailand
20 - 21 June 2012 (rescheduled due to flood catastrophe!)
Email: igs-thailand@ait.ac.th or climatechange@ait.ac.th
www.set.ait.ac.th/acsig/sgcc2011

Calendar of Events

Shaking the Foundation of Geotechnical Engineering Education (SFGE) 2012
Galway, Ireland
4 - 6 July 2012
E-mail: bryan.mccabe@nuigalway.ie
www.sfge2012.com

11th ANZ 2012 Geomechanics Conference
Melbourne, Australia
15 - 18 July 2012
E-mail: nicole@leishman-associates.com.au
www.anz2012.com.au

Symposium on EXPERIMENTAL STUDIES WITH GEOSYNTHETICS in Conjunction with 15th International Conference on Experimental Mechanics (ICEM15)
Porto, Portugal
22 - 27 July 2012
Email: cvieira@fe.up.pt
www.paginas.fe.up.pt/clme/icem15/symposia.htm#SYMPOSIUM_Nº_4

6ICSE - 6th International Conference on Scour and Erosion
Paris, France
27 - 31 August 2012
E-mail: contact@icse-6-2012.com
www.icse-6.com

IS-Hokkaido 2012 - 2nd International Conference on Transportation Geotechnics
Sapporo, Hokkaido, Japan
10 - 12 September 2012.
E-mail: tc3conference@eng.hokudai.ac.jp
www.congress.coop.hokudai.ac.jp/tc3conference

7th International Conference in Offshore Site Investigation and Geotechnics: Integrated Geotechnologies, Present and Future
London, United Kingdom
12 - 14 September 2012
E-mail: peter.allan@geomarine.co.uk; zenon@tamu.edu

The Seventh Asian Young Geotechnical Engineers Conference (7AYGEC)
Tokushima, Japan
12 - 14 September 2012
E-mail: uzuoka@ce.tokushima-u.ac.jp
www.sites.google.com/site/7aygec/

EUROGEO5 - 5th European Geosynthetics Conference
Valencia, Spain
16 - 19 September 2012
E-mail: info@eurogeo5.org
www.eurogeo5.org

Short Courses
Expositions
Trade Shows

ISC'4 - 4th International Conference on Geotechnical and Geophysical Site Characterization
Pernambuco, Brazil
18 - 21 September 2012
E-mail: isc-4@factos.com.br
www.isc-4.com/index.php

32. Baugrundtagung with Exhibition „Geotechnik“
Mainz, Germany
26 - 29 September 2012
www.dggt.de

International Conference on Ground Improvement and Ground Control: Transport Infrastructure Development and Natural Hazards Mitigation Wollongong, New SouthWales, Australia
30 October - 2 November 2012
E-mail: icgi_2012@uow.edu.au
www.icgiwollongong.com

GEOSYNTHETICS ASIA 2012 (GA2012)
5th Asian Regional Conference on Geosynthetics
Bangkok, Thailand
10 - 14 December 2012
www.set.ait.ac.th/acsig/igs-thailand

First Pan-American Conference on Unsaturated Soils (Pam-Am UNSAT 2013)
Cartagena de Indias, Colombia
20 - 22 February 2013
E-mail: pana-munsat2013@uniandes.edu.co
www.panamun-sat2013.uniandes.edu.co

18th International Conference for Soil Mechanics and Geotechnical Engineering
Paris, France
1 - 5 September 2013
E-mail: vgauthier@lepublicsysteme.fr
www.issmge2013.org/

8th European Conference on Numerical Methods in Geotechnical Engineering (NUMGE14)
Delft, Netherlands, The
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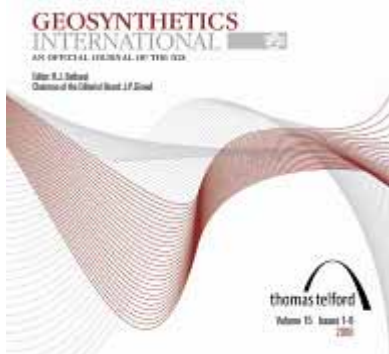
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Geosynthetics International is an official journal of the IGS and has established itself as a premier peer-reviewed journal on geosynthetics. The Journal publishes technical papers, technical notes, discussions, and book reviews on all topics relating to geosynthetic materials (including natural fiber products), research, behaviour, performance analysis, testing, design, construction methods, case histories, and field experience.

Geosynthetics International is only published electronically starting Volume 10 (2003) by Thomas Telford and is free to IGS Members. All others, e.g., corporations, companies, and university libraries, can subscribe at a rate of £ 421 / US\$ 870. An individual rate for those non-members whose organization subscribes, but would like an additional personal subscription (including the update CD) will be available for £ 60 / US\$ 108.

The update CD is issued annually as part of the subscription for non-IGS Members and includes all papers published in that year. IGS Members can opt to buy the CD for US\$ 100.

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Geosynthetics International: Best Papers for 2010

Geosynthetics International is an official journal of the International Geosynthetics Society and serves the mandate of the society to disseminate important technical developments to its members.

We are delighted to announce the best paper in Volume 17 (2010) based on votes cast by the Editorial Board Members. In this competition the Editor and Editorial Board Chairman were not eligible for this award and did not vote.

The "Best *Geosynthetics International* Paper for 2010" award goes to:

Zornberg, J. G., Bouazza, A. & McCartney, J. S. (2010).
Geosynthetic capillary barriers: current state of knowledge.
Geosynthetics International, 17, No. 5, 273 – 300.

The following paper was voted runner-up and thus receives honourable mention as "one of the best papers published in Geosynthetics International in 2010":

Kongkitkul, W., Tatsuoka, F., Hirakawa, D., Sugimoto, T., Kawahata, S. & Ito, M. (2010).
Time histories of tensile force in geogrid arranged in two full-scale high walls.
Geosynthetics International, 17, No. 1, 12 – 33.

We thank the members of the Editorial Board for participating in the best paper selection process and congratulate the authors of these excellent papers. Each paper reflects the high standards of the Journal and is an important contribution to our geosynthetics discipline.

Geosynthetics International is published by Thomas Telford Ltd. All IGS members have free access to these papers.

Reported by
R.J. Bathurst, Editor and J.P. Giroud, Chairman of the Editorial Board

Content of Volume: 18, Issue: 4 (August 2011)

Experiment and analysis of strength behaviour of soil reinforced with horizontal-vertical inclusions, pp. 150–158 (9), J. Hou; M.X. Zhang; A.A. Javadi; M.Y. Peng

Numerical assessment of vibration damping effect of soilbags, pp. 159–168 (10), B. Ye; D. Muramatsu; G.L. Ye; F. Zhang

Prediction of the vertical permeability of needle-punched nonwoven geotextiles by fractal geometry theory, pp. 169–177 (9), L. Liu; L. Ji; F. Guo; J. Yu

Experimental study of a shallow strip footing on geogrid-reinforced sand bed above a void, pp. 178–195 (18), S.N. Moghaddas Tafreshi; O. Khalaj; M. Halvae

GCL hydration under simulated daily thermal cycles, pp. 196–205 (10), R. Kerry Rowe; M.T. Rayhani; W.A. Take; G. Siemens; R.W.I. Brachman

Please find the download of the articles at:

<http://www.icevirtuallibrary.com/content/issue/gein/18/4>

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Geotextiles & Geomembranes



Geotextiles and Geomembranes is dedicated to the mission of the IGS, which is to promote the scientific and engineering development of geotextiles, geomembranes, related products, and associated technologies.

The Journal publishes technical papers, technical notes, discussions, and book reviews on all topics relating to geosynthetics, research, behaviour, performance analysis, testing, design, construction methods, case histories, and field experience.

Papers should be submitted electronically as a Microsoft Word or pdf file to: kerry@civil.queensu.ca

Please ensure the text is double spaced, there is an abstract with keywords included, and tables and figures are at the end following the text. Please check the Journal's instructions for authors for additional information regarding submissions. The Journal strives to provide the authors with quick, constructive reviews, and we appreciate the author's hard work in addressing these comments and quick return

of revised papers.

Geotextiles and Geomembranes is now available free in electronic format to IGS Members. To activate free access and to create your personal account, you will need your IGS Membership Number. If you do not know your Membership Number, please contact the IGS Secretariat at IGSSec@geosyntheticssociety.org

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A hardcopy of *Geotextiles and Geomembranes* is available at a reduced subscription rate to individual and Corporate Members of the IGS. Individual IGS Members may subscribe at an 84% discount: US\$170 for six issues. IGS

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Geotextiles & Geomembranes: Best papers in 2010

The high flow of excellent papers being submitted to *Geotextiles and Geomembrane* continues and G&G was aging the highest impact journal in Geotechnical Engineering with an impact factor of 2.590*. Following the Editorial Board meeting held in Yokohama in September 2006 it was decided that it would be desirable to recognise some of the best papers published in *Geotextiles and Geomembranes*. We started with Volume 23 and have selected the Best paper in each subsequent year. This year the Editorial Board were charged with selecting what they considered to be the "Best Paper" published in *Geotextiles and Geomembranes* in Volume 28, 2010. Papers were considered for their contribution to the discipline in terms of providing significant new insights and/or of being of high potential impact on the discipline. All Technical Articles, except those co-authored by the Editor, were eligible. The selection of winning papers was decided based on a vote of the Editorial Board members.

Following a rigorous review of the papers I am pleased to announce that the clear winner for the Best Paper for 2010 was:

- Ten year creep puncture study of HDPE geomembranes protected by needle-punched nonwoven geotextiles by Robert M. Koerner, Y.G. Hsuan, George R. Koerner and David Gryger, *Geotextiles and Geomembranes*, 28(6): 503-513

Three papers were selected for Honourable Mention

- Tailings-nonwoven geotextile filter compatibility in mining applications by , Ennio M. Palmeira, Elder A. Beirigo, and Maria G. Gardoni, *Geotextiles and Geomembranes*, 28(2): 136-148
- Deformation behavior of clay cap barriers of hazardous waste containment systems: Full-scale and centrifuge tests by J.P. Gourc, S. Camp, B.V.S. Viswanadham and S. Rajesh, *Geotextiles and Geomembranes*, 28(3):281-291
- Numerical parametric investigation of infiltration in one-dimensional sand geotextile columns by Greg Siemens and Richard J. Bathurst, *Geotextiles and Geomembranes*, 28(5):460-474,

as runners-up and hence being judged to be amongst the three best papers published in *Geotextiles and Geomembranes* in 2010. Congratulations to all of the authors for their very significant contribution to the geosynthetics discipline.

Reported by
R. Kerry Rowe, Editor

Content of Volume 29, Issue 5 (October 2011)

Editorial

Geotextiles and Geomembranes: Best papers in 2009, Pages 447-, R. Kerry Rowe

Articles

Design of reinforced embankments on soft clay deposits considering the viscosity of both foundation and reinforcement, Pages 448 - 461, R. Kerry Rowe, C. Taechakumthorn

Static liquefaction behavior of saturated fiber-reinforced sand in undrained ring-shear tests, Pages 462-471, Jin Liu, Gonghui Wang, Toshitaka Kamai, Fanyu Zhang, Jun Yang, Bin Shi

A new procedure for measuring geosynthetic friction with an inclined plane, Pages 472-482, L. Briançon, H. Girard, J.P. Gourc

Uniaxial compressive behavior of scrapped tire and sand-filled wire netted geocell with a geotextile envelope, Pages 483-490, Stéphane Lambert, François Nicot, Philippe Gotteland

Earth pressure coefficients for design of geosynthetic reinforced soil structures, Pages 491-501, Castorina Silva

Vieira, Maria de Lurdes Lopes, Laura M. Caldeira

Experiments with water and slurries in hanging geotextile bags: A further appraisal, Pages 502-513, J. Richard Weggel, Jacob Dortch, Valerie Zofchak Merida

Performance of an earth wall stabilized with bearing reinforcements, Pages 514-524, Suksun Horpibulsuk, Cherd-sak Suksiripattanapong, Anek Niramitkornburee, Avirut Chinkulkijniwat, Theerasak Tangsutthinon

Content of Volume 29, Issue 6 (December 2011)

Articles

Factors affecting GCL hydration under isothermal conditions, Pages 525-533, M.T. Rayhani, R.K. Rowe, R.W.I. Brachman, W.A. Take, G. Siemens

Laboratory investigation of thermally induced desiccation of GCLs in double composite liner systems, Pages 534-543, Farzad M. Azad, R. Kerry Rowe, Abbas El-Zein, David W. Airey

Consolidation enhanced membrane behavior of a geosynthetic clay liner, Pages 544-556, Jong-Beom Kang, Charles D. Shackelford

Design of non-woven geotextiles for coal refuse filtration, Pages 557-566, John D. Quaranta, Rajesh Tolikonda

Centrifuge model study on low permeable slope reinforced by hybrid geosynthetics, Pages 567-580, D.V. Raisinghani, B.V.S. Viswanadham

Commentary

Discussion of "Geosynthetic-encased stone columns: Analytical calculation model" by Bostjan Pulko, Bojan Majes, and Janko Logar, *Geotextiles and Geomembranes* 29 (2011) 29–39, Pages 581-583, Majid Khabbazian, Christopher L. Meehan, Victor N. Kaliakin

Reply

Reply to the discussion by Khabbazian, M., Meehan, C.L., and Kaliakin, V.N., on "Geosynthetic-encased stone columns: Analytical calculation model" [*Geotextiles and Geomembranes* 29(1), 2011, pp. 29–39], Pages 584-587, Boštjan Pulko, Bojan Majes, Janko Logar

Technical Notes

Pullout tests conducted on clay reinforced with geogrid encapsulated in thin layers of sand, Pages 588-595, M.R. Abdi, M.A. Arjomand

Biaxial tensile behavior of spunbonded nonwoven geotextiles, Pages 596-599, Amit Rawal, Aditya Kochhar, Ashish Gupta

Content of Volume 30, Issue 1 (February 2012)

Editorial

Editorial, Page 1, Dennes T. Bergado

Special Issue Articles

A new approach to evaluate the long-term designing normal pressure of geonets using a short-term accelerated compressive creep test method, Pages 2-7, M.S. Mok, E. Blond, J. Mylnarek, H.Y. Jeon

Geotextile tubes as submerged dykes for shoreline management in Malaysia, Pages 8-15, E.C. Lee, R.S. Douglas

Soft ground improvement via vertical drains and vacuum assisted preloading, Pages 16-23, B. Indraratna, C. Rujikiatkamjorn, A.S. Balasubramaniam, G. McIntosh

Effects of climate change on geo-disasters in coastal zones and their adaptation, Pages 24-34, K. Yasuhara, H. Komine, S. Murakami, G. Chen, Y. Mitani, D.M. Duc

Innovative methods for dike construction – An overview, Pages 35-42, J. Chu, S.W. Yan, W. Li

Reduction of climate-damaging gases in geotechnical engineering practice using geosynthetics, Pages 43-49, G. Heerten

Rain-triggered landslide hazards and mitigation measures in Thailand: From research to practice, Pages 50-64, J.S.M. Fowze, D.T. Bergado, S. Soralum, P. Voottipreux, M. Dechasakulsom

Please find the download of the articles at:

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The Bombay Textile Research Association (BTRA) was set up in the year 1954 as a Co-operative Research Association. BTRA is a premier institute for R & D in Textiles and allied Sciences. It is located at Ghatkopar, Mumbai in sylvan surrounding with easy accessibility. The aim of the organisation is to provide day-to-day technological inputs to the industry and meet the Science & Technological objectives set at the national level. The Institute also provides solutions to various technical and techno-economical problems faced by the industry in a cost effective and stipulated time frame.

BTRA has very good infrastructure comprising pilot plants [New Nonwoven Pilot Plant [Hydroentanglement by Fleissner], Non-woven Plant [needle-punch type by Dilo], Chemical Processing Plant, Polymers Extrusion [Spin-draw Melt Spinning] Plant and Plasma treatment machine for Textiles and Polymers] for conducting trials and evaluation, sophisticated testing and measuring instruments and Library. Its laboratories are accredited as per ISO/IEC 17025-2005 standards. Also, one of its laboratory viz., Geotech laboratory is accredited as per Geosynthetics Institute (GSI), Folsom, Pennsylvania, USA under the GAI – LAP Accreditation Programme for the 24 tests of geosynthetics products.

Its activities consist of undertaking (i) research projects on process and product developments, (ii) providing technical consultancy services in the areas of textile manufacturing including technical textiles, (iii) providing testing services involving physical and chemical properties, eco-testing, microbiological properties, geotextiles testing, Nonwovens/composites/technical textiles testing, polymer testing, etc. and (iv) conducting training programmes and disseminating information through various conferences / seminars / workshops.

BTRA is extensively working in the area of nonwovens / technical textiles, since 1987. Full fledge pilot plant consists of needle punching, thermal bonding and chemical bonding facilities were set up in 1987, thanks to grant from Ministry of Textiles, Govt. of India. Manpower was trained in product development and testing of different technical textiles products / nonwovens. BTRA is working actively with manufacturers for development of non-woven products and their testing. BTRA has more than two decades of experience in product development and testing of non-wovens / technical textiles.

In 2008, the Ministry of Textiles, Government of India, recognized BTRA as a Centre of Excellence for Geotech, based on its earlier experience, expertise and facility in this field. BTRA setup a new laboratory with all testing facilities, in March 2009, for geosynthetic products such as Geotextiles, Geomembranes, Geocomposites, Gabions, Geosynthetic Clay Liner, Geogrids, Prefabricated Vertical Drain etc. It is also accredited by NABL as per ISO/IEC 17025:2005 standards.



BTRA is strengthening its information resources on Geotech by procuring various books and international test methods such as ASTM, INDA, EDANA, ISO, etc. related to this field. Apart from testing and development, BTRA provides training to users / entrepreneurs in Geotech as well as in technical textiles. Also consultancy is provided to entrepreneurs to start a new manufacturing plant for geosynthetics by preparing project proposal productwise.

Dr. A.N. Desai (Director)

THE BOMBAY TEXTILE RESEARCH ASSOCIATION

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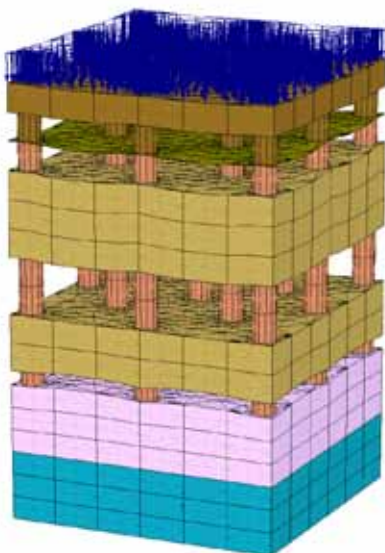
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JETSJ GEOTECNIA, LDA, is a company based in Lisbon, Portugal, and founded in 2004, mainly focused on the design, training and technical support of geotechnical engineering solutions, including the extensive use of geosynthetics.

The main goal is the satisfaction of our clients under a partnership attitude, helping them to achieve the best technical, environmental and economic solutions.

LOAD TRANSFER PLATFORMS

A load transfer platform (LTP) over two layers of biaxial geogrids, founded over jet grouting columns, was designed at the “Terreiro do Trigo” dockyard, in Lisbon, Portugal. The LTP allowed the construction of a 4m height fill, over a soft muddy alluvium layer with about 20m of average thickness, for the dockyard filling.



The qualifications, experience and motivation of our staff, enable the development of innovative geotechnical solutions, assisted by the most updated tools and technologies. These key factors have allowed the design of solutions combining high-level safety standards with superior quality, durability, environmental and economic concerns.

PAVEMENT FOUNDATION

A slope stabilization structure was designed at the A8 Motorway, close to Alfazeirão, in Portugal. In order to prevent differential settlements between the new and the existent pavement, a biaxial geogrid was installed.



The biaxial geogrid was installed over a LWA aggregates fill, allowing the decrease of the fill overall weight, but leading to the increase of the differential deformability between the existent and the new pavement foundation. To compensate this situation a biaxial geogrids was designed and installed.



JetSJ Geotecnia, Lda, is certified according to the Norm NP EN ISO 9001:2008 "Quality Management System Requirements".

In this profile information a few design solutions using geosynthetics are pointed out: load transfer platforms (LTP), earth reinforced walls and pavement foundation.

EARTH REINFORCED WALL

Two earth reinforced walls, with a maximum overall height of about 20m, were designed at the Marão Mountain Motorway, at Amarante, Portugal.



Those walls were built in order to allow the widening of the existing main road (IP4) platform. The walls included precast facing panels and a granular fill, founded over a LTP, allowing the transmission of the fill and motorway loads to soil - cement (CSM) foundation panels. The walls facing panels were stabilized with polyester high tenacity strips, protected, by durability reasons, with a polyethylene sheet. The LTP was formed by a high resistance polypropylene geotextile.

URL: www.jetsj.pt

Corporate Profile – Siver Une-104, Spain

IGS Corporate Members are encouraged to publish a Corporate Profile in IGS News. The criteria for the preparation and submission of Corporate Profiles are available from the Editor. There is no charge for having a Corporate Profile published; it is a benefit of corporate membership.



Corporate Profile – Siverune-104 S.L. Integrated quality management, Spain

Siverune-104, S.L. is a company specialized in the **Integrated Control of Quality** acting in water tight constructions, from the initiation until their finish, targeting the supervision of each task for its correct realization.

Due to our capacity to establish and execute a quality control of all the processes developed, we are in the

position to issue a **Certification of good Performance of Works**. Siverune-104, S.L. is an associated member of the **International Geosynthetic Society (IGS)**, the **Technologic Institute Textile (AITEX)**, and actually undergoes, for various test proceedings, the process of accreditation, directed by the **National Company for Accreditations (ENAC)**.

Design, Technical Assistance and Quality Controls in Projects, cooperating with technical Departments of Public Administrations, assisting Engineering offices and large Enterprises:

- ~ Conciliation of int. standards (**EN ISO** and **ASTM**).
- ~ Assisting to job site managements with regard to the technical evaluation of tender bids, the acceptance/rejection of materials, others.
- ~ Technical geophysical recognitions of the sub soil, using the **electrical tomography (MRI)**, to enable layout and elaboration of projects, in accordance with the soil structures.



Technician doing field test

Actions within our own laboratory: Analyzing geosynthetic products, their posterior interpretation.



Nueva Rendija dump. Mejorada del Campo, Madrid

Systems for final surveys:

- ~ Application of fix or mobile leak detection systems, as well as high voltage electromagnetic leak surveys.
- ~ Undertaking of rectification actions.

Realizations of Environmental impact evaluations, design of schemes for monitoring and Environmental vigilances

Controls of quality and assistance to job site managements:

- ~ Application of standards, **UNE-EN ISO 10320**, **UNE-EN ISO 9862**.
- ~ Verifications of hot welded seams, joining HDPE panels, as per standards **UNE 104304** and **UNE 104481-3-2**.
- ~ Verifications of hot extruded welding's on HDPE panels, as per standards **UNE 104425**, **annex C**.
- ~ With our topographic equipment, carrying out definitions and layouts on the ground, fixing geologic references and topographic data.
- ~ Sample guardianship services.

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PLEASE ENSURE WE HAVE YOUR CURRENT E-MAIL ADDRESS!**

The International Geosynthetics Society

OBJECTIVES OF THE IGS

The International Geosynthetics Society was formed with the following objectives:

- to collect, evaluate, and disseminate knowledge on all matters relevant to geotextiles, geomembranes, related products, and associated technologies;
- to improve communication and understanding regarding geotextiles, geomembranes, related products, and associated technologies, as well as their applications;
- to promote advancement of the state of the art of geotextiles, geomembranes, related products, and associated technologies; and
- to encourage, through its Members, the harmonization of test methods, and equipment and criteria for geotextiles, geomembranes, related products, and associated technologies.

WHY BECOME A MEMBER OF THE IGS?

First, to contribute to the development of our profession.

By becoming an IGS Member you can:

- help support the aims of the IGS, especially the development of geotextiles, geomembranes, related products, and associated technologies;
- contribute to the advancement of the art and science of geotextiles, geomembranes, related products, and their applications;
- provide a forum for designers, manufacturers, and users, where new ideas can be exchanged and contacts improved; and
- become increasingly informed, involved, and influential in the field of geotextiles, geomembranes, related products, and associated technologies.

Second, to enjoy the benefits.

The following benefits are now available to all IGS Members:

- the online IGS Membership Directory, updated in real time;
- the newsletter, IGS News, published three times per year;
- free electronic issues of Geosynthetics International and Geotextiles & Geomembranes;
- 19 IGS Mini Lecture Series are available online;
- information on test methods and standards;
- discount rates on the purchase of any future documents published by the IGS and on the registration cost of all international, regional, or national conferences organized by or under IGS auspices;
- preferential treatment at conferences organized by or under the auspices of the IGS; and
- the possibility of being granted an IGS award.

Please check whether there is a local IGS Chapter in your country (list at page 27)! otherwise please use the online form at <http://www.geosyntheticssociety.org> or the following

IGS Membership Application

Membership of the Society is open to Individuals or Corporations "...engaged in, or associated with, the research, development, teaching, design, manufacture or use of geotextiles, geomembranes and related products or systems and their applications, or otherwise interested in such matters." The annual fee for membership is (US) \$45 for Individual Members and (US) \$1000 for Corporate Members. Individuals or Corporations who voluntarily contribute a minimum of (US) \$200 annually to the Society, in excess of their membership dues, will be mentioned in the IGS Membership Directory in a separate list as benefactors.

Send this completed form to:

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