

# IGS NEWS



## NEWSLETTER OF THE INTERNATIONAL GEOSYNTHETICS SOCIETY

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

VOLUME 32, No. 1

2016

## Content

<b>General Information for IGS Members</b> .....	2	Proceedings of FS-KGEO 2015 .....	23
Election for IGS Council: Term 2016 to 2020.....	2	Serviceability of geogrid reinforced base course layers – Lars Vollmert received the PhD for his contribution .....	23
Obituary Late Professor Fukuoka, Masami, Founding Member of IGS .....	5	<b>List of IGS Chapters</b> .....	24
Memories of Professor Masami Fukuoka .....	6	<b>Official Journals of the IGS</b> .....	26
<b>Technical Committees IGS-TC</b> .....	7	Geosynthetics International .....	26
IGS TC-B Activities Report .....	7	Geotextiles & Geomembranes .....	27
IGS TC-H Activities Report 2016-02.....	8	<b>Corporate Membership</b> .....	28
<b>Announcements of Regional Conferences of IGS</b> ...	9	Case studies – use the chance! .....	28
GeoAmericas 2016 3rd Pan-American Congress on Geosynthetics .....	9	Midshore I Landfill Exposed Geomembrane Cover, Easton, MD, USA .....	29
EuroGeo6 6 <sup>th</sup> European Regional Conference on Geosynthetics .....	11	Corporate Members of the IGS .....	30
GeoAsia6 6 <sup>th</sup> Asian Regional Conference on Geosynthetics .....	13	<b>IGS News Publisher, Editor and Chapter Correspondents</b> .....	36
<b>Announcements of Conferences under the Auspices of IGS</b> .....	14	<b>IGS Council</b> .....	37
3 <sup>rd</sup> International Conference on Transportation Geotechnics (3 <sup>rd</sup> ICTG 2016).....	14	<b>IGS Officers</b> .....	37
Geotechnical Frontiers 2017 .....	15	<b>IGS Membership Application</b> .....	38
<b>News from the IGS Chapters and the Membership</b> 15		<b>Calendar of Events</b> .....	39
News from the Australasian IGS Chapter (ACIGS) .....	16		
GEOS PERÚ 2015 – 3 <sup>rd</sup> National Conference on Geosynthetics .....	17		
24 <sup>th</sup> Geotechnical Conference of Torino (CGT 2016).....	18		
International Seminar on Natural Disaster Mitigation with Geosynthetics and other Advanced Methods.....	20		
15 <sup>th</sup> Asian Regional Conference on Soil Mechanics and Geotechnical Engineering (15ARC).....	21		
New German Recommendation for Geosynthetics in Earthworks for Road Constructions.....	22		

# Geo-Americas 2016

3<sup>RD</sup> PAN-AMERICAN CONFERENCE ON GEOSYNTHETICS  
10-13 APRIL 2016 • MIAMI BEACH • USA



## General Information for IGS Members

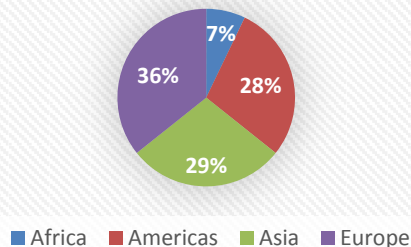
### Election for IGS Council: Term 2016 to 2020

Difficult to believe we are once again at an election for IGS Council. This election is the mid-term election wherein we elect 8 new council members who will sit on the council for a 4-year term from 2016 - 2020. The other 8 seats on council, plus the officers, are elected in a separate 4-year term cycle which runs in concert with the IGS International Conferences. The term of the current officers and additional 8 council members spans 2014 - 2018.

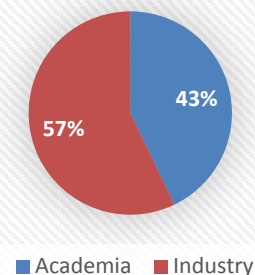
The council works to develop and maintain the various projects for the IGS in the areas of Education, Communication, Corporate Member Support and Technical Activity support. Council Members are liaisons between the central IGS and the chapters and individual members. It is therefore very helpful when the council has a balanced representation from each region and discipline, as well as balanced representation between industry and academia. I would like to thank each person who volunteers in this capacity. It's what makes the IGS work as well as it does with only one very hard working "staff" member!

#### Current IGS Council - Demographics

##### Council - Geographic Representation



##### 2015 Council - Professional Representation



## Retiring IGS Council Members

The following two members of the current IGS Council have served two consecutive 4 year terms and are ineligible to stand for election at this time. I would like to thank them both for their service to the council.

- Dennes Bergado – Professor, Thailand
- Jiro Kuwano – Professor, Japan

## Council Members Eligible to Run for the 2016 - 20 Term

Elected Council	Güler	Erol	Turkey	Europe	Running
Elected Council	Hornsey	Warren	Australia	Asia	Not running
Elected Council	Moraci	Nicola	Italy	Europe	Not running
Elected Council	Pimentel	Victor	Brazil	Americas	Running
Elected Council	Ramsey	Boyd	US	Americas	Running
Elected Council	von Maubeuge	Kent	Germany	Europe	Running
Coopted Council	Ziegler	Martin	Germany	Europe	Running

## Biographies of Candidates for the 2016 - 20 Term



**Francesco Fontana**

**Francesco Fontana**, 55 years old, is the CEO of Manifattura Fontana SpA, one of the eldest manufacturers of nonwoven geotextiles in Europe. With a juridical background, he is active on the geosynthetics market since 1985 and introduced many technical innovations for the applications of geotextiles and geocomposites.

He is taking part in the geosynthetics standards activities in UNI, CEN and ISO since nearly 20 years; in particular, he is currently leading the Italian delegation in the technical committee CEN TC/ 189, elaborating the CE rules for geosynthetics.

He is also president of AssiNGeo, the Italian Association of Geosynthetics Entrepreneurs, and vice-president of EAGM, the European Association of Geosynthetics

Manufacturers.

Moreover, he is currently serving in the board of AGI-IGS, i.e. the Italian chapter of IGS.



**Erol Güler**

**Erol Güler** is an IGS Council Member elected in 2012. He is a professor of geotechnical engineering at Bogazici University, Istanbul, Turkey since 1989. He is the Chairman of the 6<sup>th</sup> European Geosynthetic Congress (EuroGeo6) which will be held in Istanbul in September 2016. He acted as the Director of Environmental Sciences Institute of Bogazici University between 1996 and 1999 and as the Chairman of the Civil Engineering Department between 2004 and 2010. He was a visiting Fulbright Professor at the University of Maryland between 1989 and 1991. Prof. Güler is the leading geosynthetic scientist in Turkey, and is an IGS member since 1989. He founded the IGS Turkish Chapter in 2001 and served as its president until 2005, and was re-elected as president in 2011. He was the organizer for the first national geosynthetic

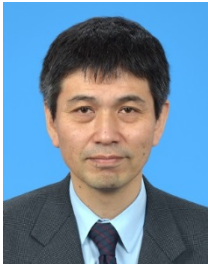
conference in 2004 and several others. He served as a lecturer on the “Educate the Educator” programs in Poland and Portugal on behalf of IGS. Prof. Güler has been a member of the International Standards Organization (ISO) Technical committee on geosynthetics as a representative of the Turkish Standards Institute since 2002. He is currently also the Convener of the WG2 of the ISO TC221 (Technical Committee on geosynthetics). He is also the Convener of the WG2 of the Geosynthetics Committee of the European Standards Organization, CEN TC189. Prof. Güler is currently an international member of the USA TRB Committee on Geosynthetics. In addition to his research work, Prof. Güler has extensive practical experience, including design work for numerous projects where geosynthetics have been used as reinforcement or liners. If re-elected to the IGS Council, Prof. Güler will continue to work to improve the dissemination of knowledge and promote an increased use of geosynthetics in close cooperation with academia and engineers.



**Hong Kwan  
(Hogan) Kim**

**Hong Kwan (Hogan) Kim** is a Technical Director in Textile and Polymer Testing Department at FITI Testing & Research Institute, Seoul, Korea. He obtained his Ph. D in Textile Engineering from Chonnam National University in 2004. His experience covers a diverse range of developing geosynthetics test methods, researching life time prediction of geomembranes for landfill liners and manufacturing geotextiles for separation for the past 17 years. He is recognized as an expert researcher of geosynthetic materials for MQC/MQA in Korea having published over 50 research papers as author or co-author and 3 books. His main interests are focused on evaluation of geosynthetics materials, development of test equipment and standardization of test methods. He has also served on the Board of Directors of the Korean Geosynthetics Society and IGS

Korean Chapter Secretariat. He currently is a technical committee member for TC221 (Geosynthetics) of Korean Industrial Standards, ASTM D35 and ISO TC221.



**Junichi  
Koseki**

**Junichi Koseki** is professor at the University of Tokyo, Japan. He worked at Public Works Research Institute from 1987 to 1994. After earning his PhD in Civil Engineering from the University of Tokyo in 1994, he was assigned as associated professor at Institute of Industrial Science, the University of Tokyo. He was promoted to professor in 2003, and moved within the same university to the Department of Civil Engineering in 2014.

He is a geotechnical engineer and his research interests cover dynamic behavior and seismic design of earth structures including geosynthetic-reinforced soil retaining walls, laboratory stress-strain testing of soils, deformation and strength properties of geo-materials, and soil liquefaction and its countermeasure.

He was the first-author of a keynote lecture on “Seismic Stability of Reinforced Soil Walls” presented at the 8ICG (Yokohama2006). He delivered the 2010-2011 Mercer lecture on “Use of geosynthetics to improve seismic performance of earth structures,” endorsed jointly by IGS and the International Society for Soil Mechanics and Geotechnical Engineering. He was also awarded the Best Geosynthetics International Paper for 2014 as a co-author of the paper entitled “Performance of reinforced soil walls during the 2011 Tohoku earthquake”.



**Kent von  
Maubeuge**

**Kent von Maubeuge**, IGS council member 2012 – 2016, was born in New York in 1957, lived in New York and Yokohama, before he moved to Germany. He studied civil engineering and obtained 1985 his Master of Science. Since then, he has worked with two major geosynthetic manufacturers and has been involved in research and development of all geosynthetics. For more than 25 years, he has been an active member of various associations, such as ASTM, DIN, CEN and ISO. He is also a member of ASTM International and is especially involved in standards for GCLs and is chairman of ASTM Committee D35.04 GCLs. Kent von Maubeuge is the convenor for the Working Group WG6 (Geosynthetic Barriers) for CEN Technical Committee TC 189 and chairman of the TC-Barrier Systems of IGS. He also serves

on the Board of Directors for the Geosynthetic Institute, Folsom, USA (since 2002) and lectures geosynthetics on two German universities. Kent has published and presented many international papers on geosynthetics and has contributed to numerous conferences throughout the world. For a German geosynthetics manufacturer (NAUE) he is Director of Product Marketing/Management and is also involved in international concerns. As an IGS Council member, Kent von Maubeuge is chairman of the Corporate Committee and the Technical Committee on Barrier Systems and will continue the internationally-minded work of the IGS. Kent is interested in the continuation of traditional IGS activities while helping to develop new activities which will aid in the expansion of knowledge and technological development of geosynthetics world wide.



**Boyd  
Ramsey**

**Boyd Ramsey** has been engaged with the geosynthetic, containment and waste disposal industries for nearly 20 years. He is currently the Technical Director – Asia Pacific, based in China, with [GSE Environmental LLC](#). He has been involved with the design and selection of containment systems at several of the world largest cities including [New York City](#) at the [Fresh Kills facility](#), in [Hong Kong](#), at the [NENT facility](#) and other regional landfills and hundreds of other municipal disposal sites in the United States and around the world. Additionally, he has been involved in hazardous waste disposal at sites in the USA such as the [Savannah River Superfund site](#) with the US Department of Energy and disposal facilities at the [Oak Ridge](#) and [Lawrence Livermore](#) National Laboratories and other locations.

He is a member of the current IGS Council, the Co-Chair of the [International Geosynthetics Society](#) Technical Committee on Barriers and also chairs the IGS Finance Committee. He served for over a decade on the Board of

Directors of the [Geosynthetic Institute](#) and has assisted in the creation of materials specifications, design guidance and methods of engineering practice that set the standard for geosynthetic materials around the globe. He is also the immediate past chairman of the [Geosynthetic Materials Association](#) the leading industry organization advancing the use of geosynthetics within the USA and other global markets.



Edoardo  
Zannoni

**Edoardo Zannoni** is registered Professional Engineer in South Africa. After he completed his MSc Eng in Italy, he moved to South Africa in 2009 working for Maccaferri Africa and today he is the Business Unit Manager: Geosynthetics and Johannesburg. He has experience in geotechnical and hydraulic, specializing in geosynthetic for soil reinforcements, basal reinforcements and ground improvements. He has gained experience through projects in South Africa and in other African countries including Mozambique, Angola, Botswana, Namibia, DRC, and Kenya. He joined GIGSA, the South African Chapter of the IGS in 2009 and he is now currently serving as President for the term 2015-2016. In 2012 Edoardo was co-opted onto the IGS Council and he is currently the African Activity Chair and he is chairing the

Outreach Programme. In 2013 he was the Technical Chair for GeoAfrica 2013 in Accra, Ghana. During his term in the IGS, he undertook several ambassadors' programs in Ghana, Tunisia and Egypt to support the formation of IGS Chapters. Edoardo is self-motivated and he strives to deliver his best all the time. He would like to see the IGS growing in Africa as there is the need of spreading the IGS Mission throughout Africa by the establishment of IGS Chapters and succeeding in the Outreach Programme.



Martin  
Ziegler

**Martin Ziegler** studied Civil Engineering at the University of Karlsruhe with extension course on rock and soil mechanics. In 1986 he finished his PhD-thesis "Displacement dependent earth pressure in sand". In 1987 he joined a big construction company where he was engaged in landfill, infrastructure and waterway projects. After 13 years in different positions and for several projects at different locations he left the company and became head of the Chair of Geotechnical Engineering at RWTH Aachen University in April 2000. Apart from tunnelling and geothermal applications, the functioning of geosynthetic reinforcement is one of his main research topics. Based on profound experimental tests he tries to explain the interaction between soil and geosynthetic reinforcement with simple but mechanically correct

models in order to overcome the still widespread preconceptions against such constructions. Since 2006 Prof. Ziegler is president of the section "Geosynthetics in Geotechnical Engineering (FS-KGEO)" of the German Geotechnical Society (DGGT). Simultaneously with this function, he is member of the board of DGGT and head of the German Chapter of IGS. From 2008 to 2012 he served as regular council member and from 2012 to 2016 as a co-opted council member. Since 2010 he is chair of the European Activities Committee of IGS.

#### **Election Procedure not needed!**

This time we have the situation that for 8 positions in the IGS Council we have 8 persons applying. Therefore and according to the IGS Handbook there is no need to hold an election procedure.

We congratulate the colleagues above and welcome them to the IGS Council!

First Meeting of the New IGS Council will be at EuroGeo6 held in Istanbul, Turkey 25 - 28 September 2016.

*Reported by*

*Elizabeth Peggs, IGS Secretary*

## **Obituary**

### **Late Professor Fukuoka, Masami, Founding Member of IGS**



Late  
Prof. Masami  
Fukuoka

Prof. Fukuoka passed away 27 January 2016 in Tokyo at his the age of 98. This is a great sadness for all of us who were instructed by him and worked with him.

Prof. Fukuoka was born 12 March 1917 in Okayama Prefecture, Japan. He studied Civil Engineering at the University of Tokyo, and in 1940 he entered the profession fully, taking up a post as a civil engineer for Japan's Public Works Research Institute (PWRI) of the Ministry of Internal Affairs.

During the Second World War, he he served in the Japanese military, an experience which included being near enough to the atomic bombing of Hiroshima on the morning of 6 August 1945 to be affected.

He returned to PWRI after the war ended, and his engineering acumen

was immediately needed. Japan experienced a series of severe earthquakes and floods, which further increased the damage the country's infrastructure had suffered during the war. It was one of the most difficult times in the history of Japan, he said to me when I was young.

As a civil engineer, in particular, as a geotechnical engineer, he worked to restore Japan's infrastructures from the effects of war and natural disasters. His strength of leadership was an especially important contribution to the design and construction of a great number of important infrastructures; and his work improved projects across a broad range of sectors, including those dealing landslides, road building and pavements, slope stability, flood control, river and coastal dyke engineering, ground investigation and soil test, earth pressure and retaining walls, rock-fill and earth-fill dams, ground subsidence, foundations of long-span bridges, earthquake geotechnical engineering and, eventually, geosynthetic engineering. The breadth of his work was extraordinary, considering how difficult it is to become a specialist in even one of these areas today.

After rising to serve as PWRI's director, he retired in 1970 and entered academia and became a full professor of Civil Engineering of the University of Tokyo, where I was studying as a doctoral candidate. In 1977, Prof. Fukuoka transitioned to a professorship at Tokyo University of Science where he remained until his retirement in 1986.

As his career progressed, he contributed greatly to multiple professional organizations. He helped establish the Japanese Geotechnical Society (JGS) in 1949 and served as President from 1976 – 1997. He was integral to Tokyo playing host to the 9<sup>th</sup> International Conference on Soil Mechanics and Foundation Engineering, then served as President of the International Society for Soil Mechanics and Foundation Engineering (now ISSMGE) from 1977 – 1981.

During this period, while at Tokyo University of Science, he started the research on geosynthetic-reinforced soil retaining walls and geomembrane lining at the bottom of reservoirs. The work led him to participate in the 2<sup>nd</sup> international conference on Geosynthetics (2ICG) in Las Vegas in 1982. This visit, in turn, led him to contribute to the establishment of the International Geosynthetics Society (IGS) in 1983, working with J. P. Giroud, and other geosynthetics field colleagues.

Prof. Fukuoka's work with the IGS founding cannot be overlooked. At that time, most of the geotechnical engineers in Japan did not recognize the importance of Geosynthetic Engineering. He established a technical committee on geosynthetics within the JGS in 1983, an act which led to an IGS chapter in Japan in 1985: the first IGS Chapter. It put the society on a path to grow healthily through establishing domestic and regional organizations (IGS Chapters) around the world. Today, there are 43 IGS Chapters.

It is important to emphasize the framework Prof. Fukuoka set up for the IGS Japanese Chapter. His vision has influenced the strong growth of the IGS overall. Foremost, he did not establish an independent Japanese Geosynthetics Society; rather, he made the group a chapter of IGS, and, thus, all individual and corporate members of the chapter were also IGS members. Secondly, he recognized the need to allow Japanese to be the primary language of the chapter members' activities within the chapter itself, even if English was the common language for larger, international engineering gatherings. To this domestic-industry-growing end, Prof. Fukuoka:

- Published the membership list in Japanese.
- Founded the Japanese-language publication "*Geotechnical Technical Information*", published three times per year, for sharing geosynthetic case histories, the latest technical information of geosynthetic engineering practice, research updates, and translated information from the IGS News.
- Established an annual two-day symposium on geosynthetic engineering, conducted in Japanese and with proceedings. These proceedings were eventually graded up to the annual *Geosynthetics Engineering Journal*, which contains peer-reviewed technical papers in Japanese or English.

The importance of these decisions has been validated by the healthy and strong activities of IGS Japan over the past 30 years; and Prof. Fukuoka's influence through that first IGS Chapter can be felt in the formation and activities of the next 42 national and regional chapters that have been added of the IGS since.

*Reported by*

*Fumio Tatsuoka, IGS Past President*

## Memories of Professor Masami Fukuoka

Professor Masami Fukuoka was a good friend. Starting with the organizing of the IGS at Las Vegas in 1982, we, Rosemary and I, knew Professor Fukuoka for many years. In Las Vegas he was a founding member of the IGS and through his leadership in the formation of the first chapter of the IGS, the Japanese chapter became that first of what is now many. Rosemary and I were fortunate to know and work with him.

Our relationship transformed from professional to personal at the Atlanta IGS International Conference. During the opening reception we noticed that Professor Fukuoka was standing in an alcove, isolated from the other guests. Approaching him we learned he was suffering an attack of gout and was desperate to keep people away from his foot. It was obvious we could help and we did. We shielded his foot while joining conversations other guests and fetching refreshments for ourselves and the professor. That was the beginning of a long friendship which ended with the last exchange of letters between Rosemary and Professor Fukuoka in 2013.

Over the years there were many highlights including a wrestling match between J.P. Giroud and Professor Fukuoka in a restaurant in Osaka. Well maybe Osaka, I am not too sure as it was quite festive. Another event was at a NAGS conference in Nashville, Tennessee where I had the pleasure of introducing the Professor and Dewey Tate, one of the founding principals of Tensar USA.

During those years there were a series of conferences on soil reinforcement in Fukuoka City and on two of those occasions Professor Fukuoka hosted our attendance at the championship round of the Fukuoka Sumo tournament. He was a great fan of Sumo and his narrative was very informative and made us more than informed, we became fans also. He took great delight in explaining the history of the two "Americans", actually a pair of giant and powerful Hawaiians, both of whom were Grand Champions.

Another highlight was an invitation to dinner. Accompanied by a student who attended to personal needs of the Professor, the Professor introduced us to one of Japans theme restaurants. This one focused on chicken and the main idea was to select a piece, place it in a pot of boiling water filled with vegetables and removing it when done to your taste. Over several courses the process was slow so conversation was in depth. Perhaps best of all, at the end the cooking water magically transformed into a delicious soup.

One last highlight was Professor Fukuoka meeting Rosemary in the lobby of the Green Hotel in Fukuoka. The occasion was the first time we attended the Fukuoka Soil Reinforcement conference and Rosemary was the first American lady of the IGS to persuade the Green Hotel to rent her a multiple tatami room for the sole occupancy of Rosemary and me. Professor Fukuoka was a regular visitor to the Green Hotel and was greatly surprised to discover we were also guests in that usually "bachelor" hotel.

Professor Fukuoka was an extraordinary man. His leadership in Japan and the IGS, and of course, in geosynthetics, cannot be given all the credit he deserves because mere words are inadequate. We are proud he was our friend.

*Reported by*

*Peter and Rosemary Stevenson*

---

## Technical Committees IGS-TC

---

### IGS TC-B Activities Report

The International Geosynthetics Society Technical Committee on Barrier Systems (IGS TCB) has been working to promote and distribute information on the newest developments in geosynthetics as a barrier.

Following the Berlin ICG (International Conference on Geosynthetics) in 2014 it was determined that the regulatory and governmental agencies were likely underrepresented at Berlin and the information and developments presented there were perhaps not reaching those regulators and other individual who could benefit by access to that information. In an effort to address this, copies of the proceedings of Berlin are being made available to regulators and governmental officials on a no charge basis. Chapters were welcomed to contact IGS to receive free copies for regulators in their countries; however the response was unfortunately low, so that the TCB decided to distribute remaining USB sticks. For those interested please now contact the TCB chair, vice-chairs or secretary for a complimentary copy. Copies of the proceedings are still available.

The TC-B has also been active in promoting sessions in conferences and soliciting and collecting papers on barrier topics of interest. This includes sessions (2015) as listed below:

- Geosynthetics 2015 Portland, Oregon, Geosynthetics 2015 event held 15-18 February 2015
- CRAMSG 16th 2015 event held in Tunisia, 27-30 April 2015
- September 14, 2015 in Edinburgh, Scotland during the ISSMGE European Conference.
- At the 15<sup>th</sup> Asian Regional Conference of Soil Mechanics and Geotechnical Engineering two TC B sessions were held (ISSMGE-15 ARC) on November 10<sup>th</sup>, 2015 in Fukuoka, Japan

A members' meeting was held on November 10<sup>th</sup> Tuesday from 12:15 to 13:15, Room 404, 4F, Fukuoka International Congress Center (15ARC Venue), Fukuoka, Japan

Items to be discussed: editing Wikipedia, activities of coal ash group, activities of mining group, contribution to upcoming conferences, etc.



Participants during the TC-B session listening to a question being presented to the speaker (Jorge Zornberg (left), Malek Bouazza (right))

At the ASCE GeoCongress to be held in Chicago, Illinois 14-18 August 2016 and at the three regional IGS upcoming conferences in 2016, namely GeoAmericas 2016 (Miami, 10-13 April 2016), EuroGeo 6 (Istanbul, 25-28 September 2016), GeoAsia 2016 (New Delhi, 8-11 November 2016) the TCB will be present and also chairing sessions.

The TCB finalized the text for a leaflet on Barrier systems. The final version accomplished by IGS is now online available or on request, and has been translated into French, Mandarin and Spanish. Please contact IGS for copies to be distributed within chapters or at conferences.

The TCB has recently decided to create two new sub-groups. One on barrier systems in mining applications and another one on barrier systems for coal ash disposal. Please contact the board of the TCB if you are interested to participate actively in these groups.

**For further information please contact:**

Kent von Maubeuge – TC-B chairman ([kvmaubeuge@naue.com](mailto:kvmaubeuge@naue.com))

Nathalie Touze-Foltz – TC-B vice-chair ([nathalie.touze@irstea.fr](mailto:nathalie.touze@irstea.fr))

Boyd Ramsey – TC-B vice-chair ([bramsey@gseworld.com](mailto:bramsey@gseworld.com))

Takeshi Katsumi – TC-B secretary ([katsumi.takeshi.6v@kyoto-u.ac.jp](mailto:katsumi.takeshi.6v@kyoto-u.ac.jp))

*Reported by*

*Kent von Maubeuge – Chair of TC-B*

## IGS TC-H Activities Report 2016-02

At the Council meeting held during 10ICG Conference in Berlin, in September 2014, Council Members Pietro Rimoldi and Sam Allen proposed the formation of a new Technical Committee on “Hydraulic Applications: Drainage, Erosion Control, Coastal Protection”.

The new Technical Committee will be denoted with the acronym: TCH.

TCH will be dedicated to the scientific and engineering development of geosynthetics systems and associated technologies as they relate to hydraulic applications. It will provide a forum for active participation by the members of IGS and will promote the dissemination of knowledge, technology, research findings, design and construction methodologies related to “Hydraulic Applications of Geosynthetics: Drainage, Erosion Control and Coastal Protection” in geotechnical and geoenvironmental engineering.

Activities may include but are not limited to: technical workshops with associated societies, preparation of white papers, technical session planning, organization & implementation, compilation of summaries of various relevant national and international regulations, recommendations for geosynthetic utilization in specific applications (e.g., Drainage, Erosion Control and Coastal Protection), project and research monitoring, conference and publication participation and attraction and involvement of young practitioners.

The aims and objectives of the new TCH were first presented during an open meeting held during Geosynthetics 2015 Conference at the Oregon Convention Centre in Portland, Oregon, USA, on February 16th 2015.

All IGS members and conference delegates were invited to join the meeting and contribute with ideas and proposals. Moreover all IGS members wishing to join TCH had the opportunity to be registered during the meeting.

The IGS Technical Committee on Hydraulic Applications (IGS TCH) was officially approved during the Council meeting held in Seoul, Korea, in June 2015.

The initial TCH Board is:

- - TCH chair: Pietro Rimoldi (Italy).
- - TCH co-chairs: Sam Allen (USA) and Chiwan Wayne Hsieh (Taiwan)



- - TCH secretary: Ian Fraser (UK).

Thereafter other two open meetings of TCH were held:

- During the 2<sup>nd</sup> International GSI Asia Geosynthetics Conference, held at the Textile Center in Seoul, Korea, on 24 June 2015
- During the XVI European Conference on Soil Mechanics and Geotechnical Engineering, held at Edinburgh International Conference Centre, Edinburgh, UK, on 14 September 2015

The three open meetings in Portland, Seoul, and Edinburgh attracted IGS members interested in the activities of TCH and in January 2016 the roster of TCH membership includes more than 50 IGS members from the 5 continents.

TCH has already planned the following activities:

- - Special Sessions will be organized at the next IGS Regional Conferences:
- - Drainage at GeoAmericas 2016 in Miami, USA, in April 2016,
- - Erosion Control at EuroGeo 6 in Istanbul, Turkey, in September 2016
- - Coastal at GeoAsia 2016 in Delhi, India in November 2016

All these Special Sessions are compiled as State-Of-The-Art sessions, with invited speakers only.

Content describing the TCH and its activities has been added into the TC section of new IGS website

A list of activities and deliverables will be organized, each one assigned to a TCH member as Leader.

TCH is looking to organize a Symposium on Hydraulic Applications of Geosynthetics in 2017.

Ideas and contributions to TCH are welcome from all Countries & Chapters and can be submitted by email at any time to TCH.

If you are interested in participating actively in TCH or for further information please contact the board of TCH:

Pietro Rimoldi, TCH Chair: [pietro.rimoldi@gmail.com](mailto:pietro.rimoldi@gmail.com)

Sam Allen, TCH Co-Chair: [sallen@tri-env.com](mailto:sallen@tri-env.com)

Chiwan Wayne Hsieh, TCH Co-Chairs: [cwh@mail.npust.edu.tw](mailto:cwh@mail.npust.edu.tw)

Ian Fraser, TCH Secretary: [ianfraser@tcs-geotechnics.co.uk](mailto:ianfraser@tcs-geotechnics.co.uk)

*Reported by*

*Pietro Rimoldi, Chair of TC-H*

---

## Announcements of Regional Conferences of IGS

---

### GeoAmericas 2016 3rd Pan-American Congress on Geosynthetics Miami Beach, USA, 10 – 13 April 2016

#### GeoAmericas 2016 Participants Represent 43 Countries

The **3<sup>rd</sup> Pan-American Regional Conference on Geosynthetics** will be held **10 – 13 April 2016** in Miami, Florida. More than 40 countries are represented in the registrations and the exhibit hall is sold out. The event follows successful editions in Mexico City (2008) and Lima (2012).

GeoAmericas 2016 is the first of three IGS Regional Conferences on Geosynthetics for the year, with the other two being EuroGeo 6 (September, Istanbul) and GeoAsia 6 (November, New Delhi).

The IGS North American Chapter is hosting GeoAmericas 2016. The event will take place at the Loews Miami Beach Hotel on historic Miami Beach. The facility offers direct access to the beach and the conference will take full advantage of this location with social events utilizing the beautiful location. The Loews will serve as the venue for all official GeoAmericas 2016 activities.

IGS Corporate Members have provided exceptional support for the conference. Key sponsorships have been provided by HUESKER and Solmax (Platinum Level sponsors); TMP Geosynthetics (Gold Level); and TDM Grupo, Tencate, and TRI Environmental (Silver Level).

Registration, more detailed information on the technical program, and the exhibitor list can be found at:

[www.GeoAmericas2016.org](http://www.GeoAmericas2016.org)

## The GeoAmericas 2016 Program

### Short Courses

GeoAmericas 2016 offers 13 full and half-day short courses on April 10. These sessions include beginner to expert courses, English and Spanish-language instructors, and even support for native Portuguese speakers in some sessions. Courses include:

- Geosynthetics 101 and Geosintéticos 101
- GRS-IBS for Accelerated Bridge Construction (English & Spanish sessions)
- Design of Paved and Unpaved Low Volume Roads (English & Spanish sessions)
- Slope Stability & Interface Friction Using Geosynthetics
- QA/QC of Inspection of Geosynthetic Reinforced MSE Walls
- Advances in Geosynthetics for Heap Leaching
- Design of Retaining Walls, Steep Slopes, and Embankments
- Advances and Trends in Containment Technologies
- Geosynthetic Test Procedures and Material Specifications
- Geomembrane Seams: Key Factors to Obtaining High-Quality Welds

### Technical Program

The GeoAmericas 2016 Technical Program includes 49 sessions with paper presentations, panel discussions, and training lectures.

- Transportation engineering (17 presentations, 2 training lectures, 1 panel discussion)
- Barriers and containment (31 presentations, 2 training lectures, 1 special session)
- Mining and energy (18 presentations)
- Retaining walls (25 presentations)
- Coastal engineering (12 presentations)
- Additional topics for sessions include drainage and filtration (16 presentations), testing (17), ground improvement (11), stability (9), design and modeling (16), world case histories (18), and issues and education.

The technical program is enhanced by special sessions organized by IGS Technical Committees on Barriers, Hydraulics, and Reinforcement.

Furthermore, the training lectures feature a range of highly regarded instructors and long-time contributors to the IGS and geosynthetics field: Kerry Rowe, Bob Holtz, Ryan Berg, Ed Kavazanjan, Chungsik Yoo, and Jorge Zornberg.

### Keynote Lectures

- **Dale Morris**, Senior Economic Advisor at the Royal Netherlands Embassy in Washington, DC, and **Nathalie Olijslager-Jaarsma**, Consul General of the Kingdom of the Netherlands in Miami. They will deliver a joint keynote lecture on climate change and coastal protection.
- **Dr. Neil Dixon** (Loughborough University, United Kingdom) will also deliver a keynote lecture on sustainability in geotechnical engineering and geosynthetics.
- **Dr. Robert Koerner, P.E.** (Geosynthetic Institute) on “Lifetime Predictions of Exposed Geotextiles & Geomembranes”
- **Dr. Jorge Zornberg** (University of Texas – Austin) Mercer Lecture: “Stabilization of Paved Roads Using Geosynthetics”

### Young Professionals Program

The International Geosynthetics Society (IGS) **Young Professionals Program** is hosting a GeoPrediction Competition, a special papers session, a career development panel discussion, and volleyball social on South Beach, to which the event hotel has direct access.

### Industry Meetings

The conference will feature a large range of meetings from essential engineering organizations. They include the International Geosynthetics Society (IGS) Council, the Geosynthetic Institute (GSI), the International Association of Geosynthetic Installers (IAGI), the Fabricated Geomembrane Institute (FGI), the Geosynthetic Materials Association (GMA), the Erosion Control Technology Council (ECTC), the International Erosion Control Association (IECA) Ibero-American Chapter, and the Federation of International Geo-Engineering Societies (FedIGS).

**Register online: [www.geoamericas2016.org](http://www.geoamericas2016.org)**

# EuroGeo6

## 6<sup>th</sup> European Regional Conference on Geosynthetics

### Istanbul, Turkey, 25 – 28 September 2016



The Turkish Chapter of IGS joyfully announces that the 6<sup>th</sup> EuroGeo Conference will be held on 25 - 28 September 2016, under the auspices of the IGS, in the unique city of Istanbul. After Maastricht (1996), Bologna (2000), Munich (2004), Edinburgh (2008) and Valencia (2012), the profession will convene in Istanbul.

Congress Venue will be the Istanbul Convention Center, located in a central region, which is called by the name of Congress Valley in Harbiye. Istanbul is situated in a location that international airlines may easily reach - Atatürk Airport (recommended) on the European Side and Sabiha Gökçen Airport on the Anatolian Side. Local transport to ICC is easy with mass transportation vehicles such as metro, tram, bus and metrobus.

Naturally, the main excitement of the Conference will be in its technical contributions. Undoubtedly, the time period between now and 2016 will bring new materials and reforms to the geosynthetics industry; all of these developments will be well reflected in the scientific program of the EuroGeo6 Conference.

We are looking forward to seeing academicians, manufacturers, practitioners and designers in the geosynthetics field at EuroGeo6. We want to extend a special invitation to engineers in general contracting firms, who will widely benefit from the Conference by learning more about the extraordinary financial and technical advantages geosynthetics provide. In an environment where the number of “Design-Build” and “Build-Operate-Transfer” types of contracts all around the world is multiplying, passing on such information to general contractors becomes of great importance.

As the months leading up to the Conference unfold, you will be provided with more information. We can guarantee that the EuroGeo6 Conference in 2016 will be an opportunity for all who attend to experience a valuable technical program, a magnificent city, and warm Turkish hospitality.

#### Important dates

<b>23 May 2016:</b>	Deadline for paper submission
<b>17 July 2016:</b>	Notification of paper acceptance, review comments provided
<b>15 August 2016:</b>	Early registration closes
	Deadline for revised paper submission
	Deadline for registration of at least one of the authors for paper to be published
<b>25 September 2016:</b>	Congress opens

#### Proposed Sessions for EuroGeo6

- Agricultural Applications
- Coastal Protection
- Direct and Life-Cycle Cost Savings
- Drainage and Filtration
- Durability
- Embankments on Soft Soils
- Environmental Benefits
- Geosynthetics as Formwork
- Hydraulic Applications
- Innovations and New Developments
- Landfills
- Lightweight Construction
- Mining
- Monitoring
- Pavements
- Physical and Numerical Models
- Polymeric and Clay Geosynthetic Barriers
- Properties and Testing
- Quality Control and Quality Assurance
- Reinforced Walls and Slopes
- Roads, Railroads and Other Transportation Applications
- Seismic Applications
- Sustainability
- Unpaved Roads
- Wastewater and Fresh Water Storage

A new lecture series has been accepted by IGS to be delivered at each Regional European Geosynthetics Conference. The lecture series has been named as L.M.N.S. lecture after E. Leflaive (Chairman, France), A. McGown (United Kingdom), J. Nieuwenhuis (Netherlands) and M. Sotton (France) who were the four-members of the organizing committee of the first International Conference of Geosynthetics which took place in Paris, France, in April 1977. The first L.M.N.S. Lecture will be delivered by Dr. Daniele Cazzuffi.



Daniele  
Cazzuffi

### **L.M.N.S. Lecture: Evolution in design of geotextile filters**

Dr. Cazzuffi has been involved in research and design programs, regarding the use of geosynthetics, soil, vegetation, and special materials in many practical applications in Italy and abroad, particularly in the field of civil, geotechnical and environmental engineering, with special reference to dams, reservoirs and tunnels, slope stabilization and erosion protection, landfills and contaminated sites applications.

He is author or co-author of more than 200 publications and an active member of many different national and international technical committees.

In 1998 Daniele Cazzuffi was first elected as Vice President of IGS and then in 2002 as president of IGS for a period of four years. He is now the President of the IGS Italian Chapter (AGI-IGS).

Finally, during the 10th International Conference on Geosynthetics held in September 2014 in Berlin, Germany, he was awarded with the IGS Honorary Membership, the most important recognition at the worldwide level of the International Geosynthetics Society for his dedication and compelling progress in geosynthetics engineering.

Meanwhile also the keynote lecturers and their topics are fixed.



Philippe  
Delmas

### **Keynote Lecture of Gourc and Delmas: The Behaviour of "Alive" Earthworks with Geosynthetics after Several Decades**

Dr. Delmas is a full Professor and the Chair of Geotechnics in Cnam, Paris, France. After his PhD Thesis on geotextiles in LIRIGM, Grenoble, France, he began to work at Laboratoire central des Ponts et Chaussées France for 13 years. His main area of interest was Slope stabilities and Geosynthetics. He worked 15 years as Vice President in Polyfelt Group Geotechnics, Research & Development. He attended many committees as Chairman and worked in the organising committees. He also has been the Chairman of the French Chapter of Geosynthetics (CFG) between the

years 1996 – 1998. His current research area is Geotextiles and related products requirement.



Jean-Pierre  
Gourc

Prof. Gourc is presently Emeritus Professor at the Grenoble University, going on with researches on geotechnical engineering, geosynthetics, geomechanics, and bio-hydro-mechanics of waste & landfill confinement. He has authored more than 200 technical papers on Geosynthetics and Environmental Engineering. He is also the Coordinator of different Research Inter-laboratories Programmes on Landfills and Geosynthetics-Soil structures. His fields of interest are biodegradable waste, geomechanics, slope stability, geosynthetics and landfill cap barriers. He has attended many international conferences and workshops.



Nicola Moraci

### **Keynote Lecture: Geosynthetics Interface Properties under Static and Dynamic Loads**

Prof Moraci is full professor of Geotechnical Engineering, and Head of Department of Civil, Energy, Environmental and Materials Engineering (DICEAM) at the Mediterranean University of Reggio Calabria. He is also the new President of the Italian Geotechnical Society (AGI). Currently, Moraci is involved in the formation of a school of excellence at the Mediterranean University of Reggio Calabria that will focus on international research in the fields of geosynthetic and geotechnical engineering. In 2008, he has been awarded as IGS Award winner for his researchers on the pullout behaviour of geosynthetics. He has authored and co-authored

more than 150 national and international publications.

His fields of interest include geosynthetic engineering, soil reinforcement, landslide and slope stability, embankments and dams, in situ testing and laboratory testing, soil improvement and environmental geotechnics.



Chungsik Yoo

### **Keynote Lecture: Geosynthetics in Underground Constructions**

Dr. Chungsik Yoo is a Professor of Civil and Environmental Engineering at Sungkyunkwan University in Korea. Prof. Yoo has received 2010 the IGS Award on outstanding engineers in geosynthetics fields. He has also authored and co-authored over 150 technical papers focusing on modeling, geotechnical laboratory and field testing. He is currently an Executive Council member of IGS, Korean Tunnelling Association, Korean Geotechnical Society, and Korean Geosynthetic Society.

His works mainly focused on Geosynthetics, Numerical simulation of geostuctures, Tunnelling and Deep excavation, Unsaturated soil and Use of Information Technology in Geotechnical Design Works.



Martin Ziegler

### **Keynote Lecture: Geosynthetic Reinforcement Applications**

Prof Ziegler studied Civil Engineering at the University of Karlsruhe particularly on rock and soil mechanics. Prof. Ziegler is now the holder of the Chair of Geotechnical Engineering and the head of the Institute of Foundation Engineering, Soil Mechanics, Rock Mechanics and Waterways Construction at RWTH University. Besides he is a member of numerous boards and committees, in many of them he is the board member and chairman. Since 2006 Prof. Ziegler is president of the section "Geosynthetics in Geotechnical Engineering (FS-KGEO)" of the German Geotechnical Society (DGGT). He is also the head of the German Chapter of the IGS.

His works focused on Soil and Hydraulic Engineering, Disposal Site and Remediation Technology and Infrastructural Projects. Application of geosynthetic reinforcement is one of his main research topics. He also works on the interaction between soil and geosynthetic reinforcement.

#### **For more information**

Please consult the conference website, <http://www.eurogeo6.org/en/> for the latest announcements.

Contact [info@eurogeo6.org](mailto:info@eurogeo6.org) with questions.

## **GeoAsia6** **6<sup>th</sup> Asian Regional Conference on Geosynthetics** **New Delhi, India, 8 – 11 November 2016**



India is a fast developing economy requiring large scale infrastructures. Liberalization of the economy has further facilitated planning and execution of many large scale infrastructures, including roads, railways, power and water resources, which will further promote applications of Geosynthetics for infrastructural works. Spending in XII Plan (2012 - 17) in infrastructure is estimated to be USD 01 Trillion, which is expected to grow for infrastructure activities for the XIII Plan (2017 - 2022).

6<sup>th</sup> Asian Regional Conference would be a step towards providing opportunity for exchange of experiences, practices and collaborations to facilitate flow of appropriate technology to enable successful implementation of infrastructure projects. It will be organized by the Indian IGS Chapter under the auspices of the IGS.

#### **Main Theme of the Conference**

Geosynthetics for Infrastructure Development

#### **Sub-Themes**

- Roads and Railways
- Hydraulic Applications
- Ground Improvement
- Reinforced Application
- Coastal and River Bank Erosion
- Environmental Applications
- Underground Structures (Tunnels, Excavations, etc.)

- Natural Fibre Geotextiles
- Geosynthetic Testing

### Call for papers

All concerned wishing to present paper(s) on sub-themes/allied sub-themes of the Conference are requested to send the synopsis(es) of their proposed paper(s) in English to the Conference Secretariat.

Only original contributions that have not been published, or presented at other events, need to be submitted.

### Important Dates

Submission of revised papers after review

**15 July 2016**

### Workshops/Short Courses

IGS Training Courses and Workshops on the relevant issues of interest are planned for the days of the meetings of IGS Council and IGS Committees Meetings, preceding the conference.

### Keynote and Theme Lectures

Internationally renowned experts will be invited to deliver keynote and theme lectures.

### Exhibition

It is proposed to organize an Exhibition, concurrent to the Technical Sessions. Corporate Members of IGS will be given preference and allowed discount of 25% on the normal tariff.

### Technical Visits

They will be planned to major Geosynthetics/Geotechnical Projects

**For full conference information and to submit your abstract please visit the conference website :**

[www.geosyntheticsasia.in](http://www.geosyntheticsasia.in)

---

## Announcements of Conferences under the Auspices of IGS

---

### 3<sup>rd</sup> International Conference on Transportation Geotechnics (3<sup>rd</sup> ICTG 2016)

**Guimarães, Portugal, 04 - 07 September 2016**

The Transportation Geotechnics International Conference series began under the auspices of ISSMGE-TC3 and was initiated in 2008 at the University of Nottingham, UK, as an International event designed to address the growing requirements of infrastructure for societies.

The 2<sup>nd</sup> International Conference on Transportation Geotechnics took place in 2012, at Sapporo, Japan, under the [ISSMGE-TC202](#) that follows the TC3 activities for the period 2009-2013. To continue the success of these conferences and the output of [ISSMGE-TC202](#), the 3<sup>rd</sup> was scheduled for 2016, at Guimarães, Portugal. Following the previous one, the challenges addressed by this conference will include a better understanding of the interactions of geotechnics on roads, rails, airports, harbours and other ground transportation infrastructure with the goal of providing safe, economic, environmental, reliable and sustainable infrastructures.

The 3<sup>rd</sup> ICTG will be composed of workshops and several types of sessions (including one dedicated to Young Transportations Geotechnics Engineers), as well as a technical exhibition, for a better dissemination of findings and best practices. A special attention will be paid to the publication of all the peer review papers that will be submitted to be indexed by Scopus and ISI Thomson Reuters Conference Proceedings Citation Index. On behalf of the organizing committee I am honoured to invite you to the 3<sup>rd</sup> ICTG in the City of Guimarães, UNESCO World Heritage (September 4-7, 2016).

Main lectures will be the **Proctor Lecture (ISSMGE – TC202)** given by Prof. Buddhima Indraratna (Australia) and the **Mercer Lecture (Tensar, IGS)** given by Prof. Jorge Zornberg (USA)

The conference themes are:

- Optimized geomaterial (including hydraulically bound materials and asphalt mixtures) use, reuse and recycling  
- T. Edil, N. Consoli, A. Dawson
- Unsaturated soil mechanics in transportation geotechnics – D. Toll, E. Alonso
- Foundations and earth structures – A. Gomes Correia, H. Brandl
- Slope stability, stabilisation, and asset management – S. Glendinning
- Mechanistic-empirical design (road, railways and airfields) – C. Schwartz, D. Brill, S. Costa d'Aguiar
- Rail track substructures, including transition zones. – W. Powrie, M. Shahim

- Subsurface sensing for transportation infrastructure – S. Nazarian, A. Loizos
- Macro and Nanotechnology applied to transportation geotechnics – M. Alves, J.M. Fleureau
- Sustainability in transportation geotechnics – I. AllQadi, M. Winter
- Case histories – J. Koseki, J. Oliveira, J. Liu

#### Further information

is available at the following webpage: <http://www.civil.uminho.pt/3rd-ICTG2016/index.php>

Reported by

António Gomes Correia (University of Minho, ISSMGE-TC202), Chairman of the conference (taken from webpage)

## Geotechnical Frontiers 2017

### Orlando, Florida, USA, 12 - 15 March 2017

Geotechnical Frontiers 2017 is a conference and trade show for the geotechnical, civil, and geo-professional communities. This specialty conference held every six years (GeoFrontiers 2005 in Austin, Texas and 2011 in Dallas) is a partnership with IFAI's biennial Geosynthetics conference and the annual GeoCongress of ASCE's Geo-Institute. This event is where the industry unites to share developments in geotechnical engineering and technologies. The four-day event is organized by the Industrial Fabrics Association International's Geosynthetic Materials Association and the American Society of Civil Engineer's [Geo-Institute](#). It is supported by the North American Geosynthetics Society under the auspices of the International Geosynthetics Society.

#### Call for Abstracts!

##### Abstract Submission Timeline:

- Abstracts due: March 8, 2016
- Acceptance notification: April 22, 2016

#### For more information please contact:

Barbara Connett, Secretary General:

[bjconnett@ifai.com](mailto:bjconnett@ifai.com)

## News from the IGS Chapters and the Membership

### Kerry Rowe Elected to National Academy of Engineering



Kerry Rowe

Prof. Kerry Rowe has made numerous, substantial contributions to barrier systems research, education, and regulation during his 30+ year career. The US-based National Academy of Engineering agrees. In February, NAE elected Dr. Rowe to its membership. He is one of just 22 other engineers from outside the United States to gain induction into the Academy this year.

It is a prestigious and well-earned achievement. He is one of only 232 engineers from outside the United States to have received this honor since the organization was established in the 1960s. (American engineers account for 2,275 of the NAE's members.) And, Dr. Rowe is one of only two Canadians to be honored by NAE for civil engineering.

The Academy, in its statement, cited Rowe for "advances in knowledge of the performance of waste containment facilities."

Dr. Rowe is currently Professor and Canada Research Chair in Geotechnical and Geoenvironmental Engineering at Queen's University. He has spent the lion's share of his career at the institution and helped transform it into a globally known research facility, especially in regards to geosynthetics.

"My initial work was in landfills and the research we have done has affected regulations and the design and construction of landfills around the world," said Dr. Rowe to the Queen's Gazette, a publication of Queen's. "This work, conducted by a team which includes colleagues and students past and present, has made a difference and this is what is being recognized by my election as a foreign member of NAE; it is recognition of the entire team."

He called the NAE election "one of the biggest deals in my professional career" and ranked it alongside being named a fellow of the UK-based Royal Society.

National Academy of Engineering members represent a diverse range of engineering fields: aerospace, bioengineering, chemical, mechanical, etc.

In recent years, Rowe's barrier systems research has swung considerably to mining engineering and how geosynthetic barrier systems perform over time and under a variety of conditions (climates, fluids to contain, exposure, etc.). The GeoEngineering Centre, a joint venture between Queen's University and Royal Military College in Kingston, Ontario, pool knowledge and resources to help advance many of these research initiatives.

The National Academy of Engineering will hold an awards ceremony in Washington DC in October. Other geosynthetics field contributors who have been elected to the NAE include Dr. Robert Koerner (1998), Dr. David Daniel (2000), Dr. Rudy Bonaparte (2007), Dr. Allen Marr (2008), Dr. JP Giroud (2009), and Dr. Craig Benson (2012).

*Dr. Rowe will deliver a training lecture at GeoAmericas 2016 (April 10 – 13, Miami) on "Factors Affecting the Performance of GCLs Both Alone and in Composite Liners."*

Reported by

Chris Kelsey, IGS News Editorial Board Member and Editor Geosynthetica

## News from the Australasian IGS Chapter (ACIGS)



The Australasian Chapter of the International Geosynthetics Society (ACIGS) thanks and acknowledges the leadership and contribution made by the retiring President Professor **Malek Bouazza**. Professor Bouazza was the president from 2013 and was instrumental in arranging the 7<sup>th</sup> International Congress on Environmental Geotechnics which was held in Melbourne. Accordingly a new President has been elected; Mr **Graham Fairhead** has accepted this role. Mr Fairhead is the Managing Director of Fabtech Australia, an Australian Geosynthetics installation company and

IGS corporate member. Fabtech has been a supporter of the Australian Chapter for the last four years.

The Australasian chapter membership base is actively involved with over 6 main industry associations representing the following sectors - Water, Waste and Environmental, Road, Rail and Mining. Australian ACIGS key members continue to be active across a wide range of sectors in the Australian market, in the pursuit of continuous education and awareness of Geosynthetics. The rapid acceptance of geosynthetics in non-traditional sectors has attracted various well known academics from Europe and North America to assist with delivering key notes presentations to specific industry associations and closed group seminars.

The Chapter has been represented at a number of conferences in 2015 including; 6<sup>th</sup> Australian Landfill and Transfer Stations Conference & Expo, 27-30 July 2015, Canberra, Australia organised by Waste Management Association of Australia (WMAA), and IHHA 2015 (11th International Heavy Haul Association Conference), 21 - 24 June 2015, Perth, Australia, organised by IHHA (International Heavy Haul Association).

ACIGS vice president **Mike Sadlier**, and **Brendan Swift**, the ACIGS member, presented at the 13th Asian Textile Conference 3<sup>rd</sup> November 2015 at Deakin in Geelong discussing coated fabric geomembranes.

ACIGS secretary **Amir Shahkolahi** presented a paper at the 3rd International Erosion Control Conference, 19 - 23 Oct 2015, Sydney, Australia on the *Advanced Permanent Erosion Control with Turf Reinforcement Mats (TRMs)*. In addition, Amir was on the technical committee for the WasteQ 2015, QLD Regional Waste Management conference on 9-11 September 2015, Cairns, Australia, and also presented a paper with the title of "*Innovation in landfill cap lining system in North QLD to reduce the costs and environmental effects*" at the WasteQ 2015 conference.

Further activities and involvement by ACIGS members include: Rail Track Association Australia (RTAA) conference and field days where a paper was presented demonstrating the use of geosynthetics in rail applications, Water Industry Operators Association (WIOA) Water Industry Operators conference where a paper was presented at the conference, presentation at the PWI NWOA (Public works sector) Technical meeting, and Australian Asphalt and Pavements Association (AAPA) where a paper was presented by a local member demonstrating increased performance in pavements using geosynthetic solutions.

As the international involvement by the ACIGS members, the technical paper from Australia about landfill lining systems by the ACIGS secretary and colleagues, **Amir Shahkolahi et al.**, has been awarded 3<sup>rd</sup> place in the International Solid Waste Association (ISWA) Publication Award 2015. The paper has been presented at the 7<sup>th</sup> International Congress on Environmental Geotechnics in Melbourne.



Graham Fairhead, new president of ACIGS





Kerry Rowe, international speaker at Global Synthetics' seminar series in Australia

Australian corporate members had an effective role in educating the industry in 2015. **Global Synthetics** organised a seminar series around Australia about Coated GCLs, with the title of "A New Development in Liner Technology, Latest Research & Design". The international guest speaker was **Professor Kerry Rowe** from Queens University, Canada.

**Geofabrics Australasia** organised a seminar series around Australia and New Zealand in 2015 on "Understanding and Harnessing the Stabilisation Effect of Geogrids in Pavement Designs". The international guest speaker was **Dr. Jie Han** from University of Kansas, U.S.



Jie Han, international speaker at Geofabrics Australia's seminar series

To support the industry, the Queensland government, Department of Transport and Main Roads (TMR), has developed and issued three new standards and specifications in 2015, being; "Geotextiles for Paving Applications, **MRTS57**", "Subgrade Reinforcement using Pavement Geosynthetics, **MRTS58**", and "High Strength Geosynthetic Reinforcement in Road Embankments, **MRTS100**". These specifications have been completed with the cooperation of the geosynthetic industry including geosynthetic suppliers and designers.

ACIGS appreciates the support from all individual and corporate members during 2015, in addition to the supportive role of other organisations specially "**Golder Associates**" and "**Ernst & Young**", which have been an important key to our success during these years.

*Reported by  
Amir Shahkolahi, Secretary of Australian IGS chapter*

## GEOS PERÚ 2015 – 3<sup>rd</sup> National Conference on Geosynthetics Lima, Peru, 03 - 06 March 2015

Date: 03 -06 March, 2015  
Location: Los Delfines Hotel, Lima, Peru  
Type of event: Conference  
Number of participants: 243 attendants  
Participation of IGS members and/or officials: Four (4) international lecturers: Braja Das, George Koerner, Sam Allen, Jorge Zornberg.

### Content of the Technical Part

- Advances on Geosynthetics in uses and applications in Peru.

### Highlights

Three one-day courses:

- **Mechanically Stabilized Earth (MSE) Walls, Berms and Slopes**  
Instructor: George Koerner  
This one-day course was focused on the inspection, monitoring, maintenance and design of MSE walls, berms and slopes reinforced with geogrids and geotextiles. It focuses on all aspects of the technology.
- **Flexible Pavement Design: The History and Future with Mechanical Stabilization**  
Instructor: William Vavrik  
History & Basics of AASHTO Pavement Design. Use of Geosynthetics in Pavement Design. Benefits of Base Stabilization and Optimization. Economics of Pavement – Life Cycle Cost Analysis. Design for Base Stabilization. The Future of Pavement Design.
- **Quality Assurance for Geosynthetic Installations**  
Instructor: Sam Allen  
Responsibilities, appreciation of role, professional considerations and on-site protocol, conflict resolution. Polymers to products, material properties, product manufacturing. Geomembranes & Geomembrane Seam Specifications. Geosynthetic Clay Liners (types, manufacturing, installation). Design and Construction Issues (GCLs, Geomembranes, Drainage Geocomposites).

### Social events

- Dinner with lecturers and instructors

## Next Conference

Upcoming Conference: IV National Conference on Geosynthetics - GEOS PERÚ 2017  
Date: March, 2017 (there is not a fixed data yet)  
Location: Lima, Perú  
Type of event: Conference  
For further information: [presidencia@igsperu.org](mailto:presidencia@igsperu.org); [asistentepresidencia@igsperu.org](mailto:asistentepresidencia@igsperu.org)

Reported by  
Augusto Alza, President of Peruvian IGS Chapter

## 24<sup>th</sup> Geotechnical Conference of Torino (CGT 2016)

Torino, Italy, 25-26 February 2016

The 24<sup>th</sup> edition of the Geotechnical Conference of Torino (CGT 2016), devoted to “Design, Construction & Controls of Soil Improvement Systems”, was held in Torino (Italy) from the 25<sup>th</sup> to the 26<sup>th</sup> of February 2016. The conference was organized by the Geotechnical Group of Politecnico di Torino and the Italian Geotechnical Society (AGI: Associazione Geotecnica Italiana), in cooperation with Ordine degli Ingegneri di Torino, and was held under the auspices of IGS and ISSMGE.

The conference was opened with the special addresses by several authorities, including R. Frank (ISSMGE president) and D. Cazzuffi (IGS Past President), and dealt with the most recent advancements in soil improvement techniques that have been pursued by geotechnical engineers under the pressure of recent requirements for civil constructions and of environmental protection and safeguard issues.



E. Alonso, R. Frank and P. Van Impe (from left to right). Discussion at the end of I Session devoted to “Introductory Lectures”.

these problematic aspects, after the introductory lectures given by E. Alonso on modelling compacted materials and by P. Van Impe on compaction control tests in calcareous sands, two conference sessions were devoted to “Improvement of State Parameters” and “Soil Structure and Phases Modification”, respectively.

In these sessions, invited lectures were delivered by C. Menkiti (“Compaction and compensation grouting”), W. Sondermann (“Ground improvement by vibro-compaction and vibro-replacement”), D. Adam (“Dynamic roller compaction for

In spite of the advancements in terms of instrument and equipment for direct and indirect control and for the verification of final performances of the soil improvement methods, some of these operations still remain problematic, referring in particular to both the methods that modify the state parameters of soil (e.g. density and confining stress) and those targeted to modify the structure and the composition of the soil phases (e.g. grouting and freezing).

With the aim of facing



C. Menkiti, M. Manassero and W. Sondermann (from left to right). Discussion during the II Session devoted to “Improvement of State Parameters”.

earthworks and roller-integrated continuous compaction control: State of the art overview and recent developments”), P. Liausu (“Heavy tamping: dynamic compaction and dynamic replacement”), M. Manassero (“Injection of expanding polyurethane resins”), A. Bertero and G. Viggiani (“Artificial ground freezing: case studies, technological development, and fundamental research”), M. Topolnicki (“General overview and advances in Deep Soil Mixing”), R. Zumsteg and M. Ploetze (“Recent advances in chemical modification of clays”).

Also environmental and seismic requirements (i.e. liquefaction potential reduction) and the regulatory framework, established by the Eurocodes application to the design procedure for soil improvement methods, were analyzed and discussed within this conference that had, among its main aims, that of considering in particular the European reality to be compared with those of the rest of the world.

In particular, in the session devoted to “Seismic and Environmental Aspects” invited lectures were delivered by K. Stokoe (“Effectiveness of inhibiting liquefaction triggering by shallow ground improvement methods: field shaking trials with T-Rex at one area in Christchurch, New Zeland”), C. Asioli (“Compaction grouting and sub-horizontal drainage to prevent soil liquefaction”), S. Jefferis (“Polymer alternatives to bentonite excavation support fluids: technical and environmental benefits”).



R. Lancellotta, T. Orr, R. Frank, V. Pane, A. Flora, S. Aversa, L. Caldeira, E. Olinic, E. Fratolocchi and D. Cazzuffi (from left to right). Round Table devoted to “Standardization Rules and Related Trends in Europe”.

The last session, devoted to “Regulations and Codes”, was opened by the invited lecture of T. Orr (“European standards applied to the design and execution of soil improvement systems”) and was continued by a Round Table on “Standardization Rules and Related Trends in Europe” that was animated by a number of invited experts: S. Aversa, L. Caldeira, D. Cazzuffi, R. Frank, A. Flora, E. Fratolocchi, R. Lancellotta, E. Olinic and V. Pane.

The first edition of the CGT was organized in 1970 and since then this conference represents a unique occasion for the upgrade and the debate within the geotechnical engineers’ community, with special attention not only to academic research, but also to practitioners’ problems and technological advancements.

The conference had almost 200 participants from several private, public institutions and universities, with a remarkable presence of international experts. The Proceedings, published by Pàtron Editore, collect all 14 invited papers.

*Reported by*

*Mario Manassero & Andrea Dominijanni, IGS members, and by Sebastiano Foti & Guido Musso, local organizing committee*

# International Seminar on Natural Disaster Mitigation with Geosynthetics and other Advanced Methods

International Geosynthetics Society Philippines, September 2015



The **International Seminar** was held on 27 – 28 August 2015 at NEC, University of the Philippines, Diliman, Quezon City, Philippines. There were 97 participants from across the country with 58 from the academic institutions and 39 practicing engineers from private and public sectors.

The resource persons were:

**Dr Martin Wieland**, Senior Dam and Earthquake Engineering Expert, Hydropower Plants and Water Department, Business Unit, Poyry Energy Inc. Switzerland. He also has been the Chairman of the Committee on Seismic Aspects of Dam Design, International Commission on Large Dams (ICOLD) from 1999 until 2015. Beyond that he is also the Chairman of the Earthquake Committee of the Swiss Dam Society. He lectured on seismic design criteria and earthquake effects on large dams.

**Prof Dennes Bergado**, retired Professor and distinguished Adjunct Professor of Geotechnical and Earth Resources Engineering at the Asian Institute of Technology, Thailand and well-known consultant in Asia on ground improvement techniques, in-situ testing, geotechnical disaster mitigation and probabilistic/numerical methods in geotechnical engineering, lectured on soil erosions in river banks and coastal areas; and landslides due to climate change caused by global warming and their mitigations using geosynthetics.

**Prof Jiro Kuwano**, Chair of Asian Activities Committee of IGS and Professor at Graduate School of Science and Engineering at the Saitama University, Saitama, Japan, lectured on seismic stability of reinforced soil walls including the effects of earthquake and tsunami on reinforced earth structures.

The lectures were of great interest to participants considering the many questions after each presentation. Even during the break there were still questions and all were responded to by the resource persons to the satisfaction of everyone.



For a copy of the lecture materials please contact: Dr. Roberto S. Soriano IGS - Philippines Secretary, [gsphilsec@gmail.com](mailto:gsphilsec@gmail.com)

Ongoing activities of the IGS Philippines Chapter:

- IGS-Philippines Student Chapter
- Educate the Educator Program

Reported by

Engr. Mark Morales, President of IGS-Philippines Chapter

## 15<sup>th</sup> Asian Regional Conference on Soil Mechanics and Geotechnical Engineering (15ARC)

Fukuoka, Japan, 09 – 13 November 2015



The 15<sup>th</sup> Asian Regional Conference took place in Fukuoka, Japan, from date 9<sup>th</sup> to 13<sup>th</sup> of November, 2015, co-organized by the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) and the Japanese Geotechnical Society (JGS), under the auspices of several international and national institutions including International Geosynthetics Society (IGS). It attracted **929** participants from **34** countries and **560** papers were accepted. The conference theme of “Innovations and Sustainability”, which indicates not only new technologies and methods in geotechnical engineering but also the sustainability of human resources in the geotechnical engineering community, is recently attracting heavy concern from the engineering discipline.

There were **7** plenary and **86** parallel sessions including TC or ATC organized sessions. All the accepted papers were provided the opportunity to make an oral presentation, and more than **400** papers were presented in the parallel technical sessions. The invited lectures were delivered as follows;

- Prof. Kok Kwang Phoon (Singapore): Statistical Characterization of Geotechnical Information
- Prof. Gang Zheng (China): Ground Deformation Control due to Underground Construction in China
- Prof. S. Mohsen Haeri (Iran): Hydro-Mechanical Behavior of Collapsible Soils in Unsaturated Soil Mechanics Context
- Prof. Dong-Soo Kim (Korea): Evaluation of Seismic Loads on Structures Considering Soil-Foundation-Structure Interaction via Centrifuge
- Prof. Gautam N. Gandhi (India): Hazardous Waste Management by Geosynthetic Lined Landfill
- Prof. Masayuki Hyodo (Japan): Challenge for Methane Hydrate Production by Geotechnical Engineering
- Prof. Jorge Gabriel Zornberg (USA): New Frontiers of Geosynthetics Application in Geotechnical Engineering (Mercer Lecture)

In addition to the USBs distributed to the conference participants, the accepted papers including invited lectures have been electronically published with DOI from Japanese Geotechnical Society Special Publication (JGSSP). JGSSP is the publication series newly launched by JGS, freely accessible from [www.jstage.jst.go.jp/browse/jgssp](http://www.jstage.jst.go.jp/browse/jgssp). The accepted papers for 15ARC are published in JGSSP Volume 2, Nos. 1-80.

There are several presentations related to geosynthetics. First of all, Mercer Lecture was given by Professor Jorge Zornberg as listed above. Second, six Geosynthetics Sessions were held thanks to the contribution of three committees of IGS as follows, where 42 papers were presented.

- Session “**Geosynthetics - Materials and interactions**,” organized by IGS Asian Activity Committee, chaired by Prof. Chungsik Yoo (Sungkyunkwan University) with 7 paper presentations (available at JGSSP Vol.2, No.65: <https://www.jstage.jst.go.jp/browse/jgssp/2/65/contents>),
- Session “**Geosynthetics - Foundation engineering**,” organized by IGS TC on Reinforcement, chaired by Prof. Yoshihisa Miyata (National Defence Academy) with 7 paper presentations (available at JGSSP Vol.2, No.67: <https://www.jstage.jst.go.jp/browse/jgssp/2/67/contents>),
- Session “**Geosynthetics - Geotechnical earthquake engineering**,” organized by IGS TC on Reinforcement, chaired by Dr.-Ing. Dimiter Alexiew (Huesker) with 7 paper presentations (available at JGSSP Vol.2, No.68: <https://www.jstage.jst.go.jp/browse/jgssp/2/68/contents>),
- Session “**Geosynthetics - EPS, geocell and fiber reinforcement**,” organized by IGS Asian Activity Committee, chaired by Prof. Nozomu Kotake (Kagawa National College of Technology) with 7 paper presentations (available at JGSSP Vol.2, No.66: <https://www.jstage.jst.go.jp/browse/jgssp/2/66/contents>),
- Session “**Geosynthetics - Mechanical and general aspects of barriers**,” organized by IGS TC on Barrier Systems, co-chaired by Mr. Kent P. von Maubeuge (NAUE GmbH & Co. KG) and Prof. Takeshi Katsumi (Kyoto University) with 7 paper presentations (available at JGSSP Vol.2, No.69: <https://www.jstage.jst.go.jp/browse/jgssp/2/69/contents>),
- Session “**Geosynthetics - Containment performance**,” organized by IGS TC on Barrier Systems, co-chaired by Mr. Boyd Ramsey (GSE) and Dr. Nathalie Touze-Foltz (IRSTEA) with 7 paper presentations (available at JGSSP Vol.2, No.70: <https://www.jstage.jst.go.jp/browse/jgssp/2/70/contents>).



Presidential address at Opening Ceremony by ISSMGE President Prof. Roger Frank



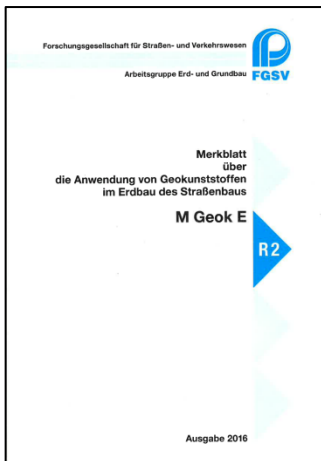
Mercer Lecturer: Prof. Jorge G. Zornberg



Friendship during banquet ("SAKE barrel Opening")

Reported by  
Jun Otani, Chair of 15ARC

## New German Recommendation for Geosynthetics in Earthworks for Road Constructions



The working group AA 5.4 "Geosynthetics" of the German Road and Transportation Research Association (FGSV) and AK 5.3 of the special section and German IGS Chapter of the German Geotechnical Society (DGGT) (chairman: Albert Lippert, Munich) presented an updated version of the recommendation from 2005 in March 2016. The title is "M Geok E - Merkblatt über die Anwendung von Geokunststoffen im Erdbau des Straßenbaus" and is available in German only.

Technical delivery terms and checklists that will also update the versions from 2005 will follow soon.

For further information see the webpage of the publisher <http://www.fgsv-verlag.de>

Reported by  
Gerhard Bräu, co-chair of German IGS chapter

## Proceedings of FS-KGEO 2015

On 26 March 2015, like every two years, the national Geosynthetics Conference FS-KGeo 2015 took place in Munich, organized by the DGGT (German Geosynthetics Society), the German IGS Chapter and the Zentrum Geotechnik of the Technical University Munich. We reported about this event already in IGS News 3/2015.

Now the proceedings are available at the German Geotechnical Society ([www.dggt.de](http://www.dggt.de), email: [service@dggt.de](mailto:service@dggt.de))

Reported by

Gerhard Bräu, co-chair of German IGS chapter

### Serviceability of geogrid reinforced base course layers – Lars Vollmert received the PhD for his contribution

The quantification of the contribution of geogrids to the serviceability of base course layers has been a hot topic for over 20 years. Currently, the differentiation of reinforcement at small deformations in base course layers, also called stabilization or mechanically stabilized soil, is discussed within several international working groups. Following on this topic for over 8 years parallel to his full-time job at NAUE and BBG, Germany, Lars Vollmert and his colleagues have managed to make a significant contribution regarding the understanding about the influence of geogrids. On 19 February 2016, he received his PhD degree for his work titled “Serviceability of geogrid reinforced base course layers under cyclic-dynamical loads” at the Clausthal University of Technology ([www.tu-clausthal.de](http://www.tu-clausthal.de)).

For his doctorate, a series of field measurements in an asphalt paved road and a concrete block paved road, reinforced by geogrids, has been carried out. The data obtained from the long-term monitoring program has led to an improved understanding regarding the interaction of geogrids and base course aggregate in the serviceability limit state. Following a mechanical understanding, sophisticated full-scale field test series with a variation of geogrid stiffness, layout of the reinforcement, height of construction, subgrade strength as well as cyclic triaxial testing of reinforced samples have documented the contribution of geogrids to an improved serviceability limit state, even at very low deformations. “Rather than improved stiffness of the reinforced samples, the application of stiff geogrids results in a reduction of the accumulated plastic strains of approx. 30% even at very limited deformations, which explains most of the internationally well-known observations”, Lars Vollmert sums up the findings of his long-term study.



For further information please contact: [lvollmert@bbgeo.com](mailto:lvollmert@bbgeo.com)

## List of IGS Chapters

Country	Name of IGS Chapter Year of Foundation	IGS Chapter President	webpage further email address
Argentina	Argentinean Chapter 2009	Dr. Marcos Montoro <a href="mailto:marcos_montoro@yahoo.com.ar">marcos_montoro@yahoo.com.ar</a>	<a href="http://www.igsargentina.com.ar/">www.igsargentina.com.ar/</a> <a href="mailto:Amir@globalsynthetics.com">Amir@globalsynthetics.com</a>
Australia and New Zealand	Australasian Chapter 2002	Graham Fairhead <a href="mailto:gfairhead@fabtech.com.au">gfairhead@fabtech.com.au</a>	
Belgium	Belgian Chapter 2001	Prof. Jan Maertens <a href="mailto:jan.maertens.bvba@skynet.be">jan.maertens.bvba@skynet.be</a>	
Brazil	Brazilian Chapter 1997	Eng. Lavoisier Machado <a href="mailto:igsbrasil@igsbrasil.org.br">igsbrasil@igsbrasil.org.br</a>	<a href="http://www.igsbrasil.org.br">www.igsbrasil.org.br</a>
Chile	Chilean Chapter 2006	Dr. Felipe Villalobos <a href="mailto:avillalobos@ucsc.cl">avillalobos@ucsc.cl</a>	<a href="mailto:Fernando.Castillo.castillofernando072@gmail.com">Fernando Castillo castillofernando072@gmail.com</a>
China	Chinese Chapter 1990	Prof. Li, Guangxin <a href="mailto:postmaster@ccigs.com.cn">postmaster@ccigs.com.cn</a>	<a href="mailto:c_axu@tongji.edu.cn">c_axu@tongji.edu.cn</a> <a href="http://ligx@tsinghua.edu.cn">ligx@tsinghua.edu.cn</a>
Chinese Taipei	Chinese Taipei Chapter of the IGS	Dr. Chou, Nelson N.S. <a href="mailto:nchou1031@gmail.com">nchou1031@gmail.com</a>	<a href="mailto:yuancl@mail.sinotech.com.tw">yuancl@mail.sinotech.com.tw</a>
Colombia	Colombian Chapter 2013	Prof. Bernardo Caicedo Hormaza <a href="mailto:bcaicedo@uniandes.edu.co">bcaicedo@uniandes.edu.co</a>	<a href="mailto:di.nerassoa@gmail.com">di.nerassoa@gmail.com</a>
Czech Republic	Czech Chapter 2003	Eng. Lumír Miča <a href="mailto:igs@igs.cz">igs@igs.cz</a>	<a href="http://www.igs.cz">www.igs.cz</a>
Finland	Finish Chapter 2011	Minna Leppänen <a href="mailto:igsfin.secretary@gmail.com">igsfin.secretary@gmail.com</a>	<a href="mailto:minna.leppanen@tut.fi">minna.leppanen@tut.fi</a>
France	French Chapter 1993	Jean-Pierre Magnan <a href="mailto:francois.caquel@orange.fr">francois.caquel@orange.fr</a>	
Germany	German Chapter 1993	Dr.-Ing. Martin Ziegler <a href="mailto:service@dggt.de">service@dggt.de</a>	<a href="http://www.gb.bv.tum.de/fachsektion/fs-kgeo.htm">www.gb.bv.tum.de/fachsektion/ s-kgeo.htm</a> <a href="mailto:ziegler@geotechnik.rwth-aachen.de">ziegler@geotechnik.rwth- aachen.de</a>
Ghana	Ghana Chapter 2012	Prof. Samuel I.K. Ampadu <a href="mailto:skampadu.coe@knust.edu.gh">skampadu.coe@knust.edu.gh</a>	<a href="mailto:jkkemeh@hotmail.com">jkkemeh@hotmail.com</a>
Greece	HGS, Greek Chapter 2005	Prof. Dimitrios K. Atmatzidis <a href="mailto:dka@upatras.gr">dka@upatras.gr</a>	under complete reconstruction!
Honduras	Honduran Chapter – Hon- duran Society of Geosyn- thetics 2013	MSc. Ing. Danilo Sierra D. <a href="mailto:sierradiscua@yahoo.com">sierradiscua@yahoo.com</a>	<a href="mailto:rigo-go-berito.moncada.lopez@gmail.com">rigo- go- berito.moncada.lopez@gmail.co m</a>
India	Indian Chapter 1988	Dr. G.V. S. Suryanarayana Raju <a href="mailto:cbip@cbip.org">cbip@cbip.org</a>	<a href="mailto:dr.gvsraju@gmail.com">dr.gvsraju@gmail.com</a>
Indonesia	INA-IGS, the Indonesian Chapter 1992	Gouw Tjie Liong <a href="mailto:amelia.ina.igs@gmail.com">amelia.ina.igs@gmail.com</a>	<a href="mailto:ameliamakmur@gmail.com">ameliamakmur@gmail.com</a> <a href="mailto:gouw2007@gmail.com">gouw2007@gmail.com</a>
Iran	Iranian Chapter 2013	Dr. Kazem Fakharian <a href="mailto:kfakhari@yahoo.com">kfakhari@yahoo.com</a>	<a href="mailto:hoseingh@yahoo.com">hoseingh@yahoo.com</a>
Italy	AGI-IGS, the Italian Chap- ter 1992	Dr. Ing. Daniele Cazzuffi <a href="mailto:agi@associazionegeotecnica.it">agi@associazionegeotecnica.it</a>	<a href="http://www.associazionegeotecnica.it/~agi/cazzuffi@cesi.it">www.associazionegeotecnica.it/ ~agi/ cazzuffi@cesi.it</a>
Japan	Japanese Chapter 1985	Dr. Hiroshi Miki <a href="mailto:miki-egri@nifty.com">miki-egri@nifty.com</a>	<a href="http://www.soc.nii.ac.jp/jcigs/jkuwano@mail.saitama">www.soc.nii.ac.jp/jcigs/ jkuwano@mail.saitama</a>
Kazakhstan	Kazakhstanian Chapter 2012	Zhusupbekov Askar Zhagparovich <a href="mailto:astana-geostroi@mail.ru">astana-geostroi@mail.ru</a>	<a href="mailto:krasavka5@mail.ru">krasavka5@mail.ru</a>
Korea	KC-IGS, The Korean Chapter 1993	Prof. Chungsik Yoo <a href="mailto:csyoo@skku.edu">csyoo@skku.edu</a>	<a href="http://www.kgss.or.kr/index2.asp">www.kgss.or.kr/index2.asp</a>
Malaysia	Malaysian Chapter – Per- tubuhan IGS Malaysia (MyIGS) 2013	Dr. Fauziah Ahmad <a href="mailto:cefahmad@yahoo.com">cefahmad@yahoo.com</a>	<a href="mailto:Cj.jong@tencate.com">Cj.jong@tencate.com</a>
Mexico	Mexican Chapter	Jose Luis Toledo Macias	<a href="http://www.igsmexico.org">www.igsmexico.org</a>



Country	Name of IGS Chapter Year of Foundation	IGS Chapter President	webpage further email address
	2006	<a href="mailto:jltm64@yahoo.com.mx">jltm64@yahoo.com.mx</a>	<a href="mailto:contacto@igsmexico.org">contacto@igsmexico.org</a>
<b>Morocco</b>	Moroccan Chapter 2014	Houssine Ejjaouani <a href="mailto:ejjaouani@lpee.ma">ejjaouani@lpee.ma</a>	<a href="http://www.cmg-asso.com/">www.cmg-asso.com/</a>
<b>The Netherlands</b>	Netherlands Chapter 1992	Dr. Ir. A. H. de Bondt <a href="mailto:mail@ngo.nl">mail@ngo.nl</a>	<a href="http://www.ngo.nl">www.ngo.nl</a> <a href="http://adebondt@ooms.nl">adebondt@ooms.nl</a>
<b>North America</b>	North American Geosynthetic Society (NAGS) (Canada, USA) 1986	John Henderson <a href="mailto:j.henderson@tencate.com">j.henderson@tencate.com</a>	<a href="http://www.nags-igs.org">www.nags-igs.org</a> <a href="mailto:bmackey@s2li.com">bmackey@s2li.com</a>
<b>Norway</b>	Norwegian Chapter of IGS 2008	Aina Anthi <a href="mailto:aina.anthi@vegvesen.no">aina.anthi@vegvesen.no</a>	<a href="mailto:tseday.damtew@vegvesen.no">tseday.damtew@vegvesen.no</a>
<b>Pakistan</b>	Pakistanian Chapter of IGS 2011	Lt. Col (Retd) Muhammad Raza <a href="mailto:colraza@syntechfibres.com">colraza@syntechfibres.com</a>	<a href="mailto:dawood@neduet.edu.pk">dawood@neduet.edu.pk</a>
<b>Panama</b>	Panama Chapter 2014	Amador Hassell <a href="mailto:amador.hassell@utp.ac.pa">amador.hassell@utp.ac.pa</a>	
<b>Peru</b>	Peruvian Chapter 2001	Eng. Augusto V. Alza <a href="mailto:administracion@igsperu.org">administracion@igsperu.org</a>	<a href="http://www.igsperu.org">www.igsperu.org</a> <a href="mailto:aalza@tdm.com.pe">aalza@tdm.com.pe</a>
<b>Philippines</b>	Philippine Chapter 2007	Mr. Mark Morales <a href="mailto:mark.k.morales@gmail.com">mark.k.morales@gmail.com</a>	<a href="mailto:paul_navarro_javier@yahoo.com">paul_navarro_javier@yahoo.com</a>
<b>Poland</b>	Polish Chapter 2008	Dr. Jacek Kawalec <a href="mailto:jacek.kawalec@vp.pl">jacek.kawalec@vp.pl</a>	<a href="mailto:jakub.m.bryk@gmail.com">jakub.m.bryk@gmail.com</a>
<b>Portugal</b>	Portuguese Chapter 2003	Jose Luis Machado do Vale <a href="mailto:jose.vale@carpitech.com">jose.vale@carpitech.com</a>	<a href="http://www.spgeotecnia.pt/igs/">www.spgeotecnia.pt/igs/</a>
<b>Romania</b>	Romanian Chapter 1996	Christina Feodorov <a href="mailto:cristina.feodorov@iridexgroup.ro">cristina.feodorov@iridexgroup.ro</a>	<a href="mailto:adiol@utcb.ro">adiol@utcb.ro</a>
<b>Russia</b>	Russian Chapter of IGS (RCIGS) 2008	Dr. Andrey Ponomaryov <a href="mailto:ofrikhter@mail.ru">ofrikhter@mail.ru</a>	<a href="mailto:andreyfab@mail.ru">andreyfab@mail.ru</a>
<b>Slovakia</b>	Slovakian Chapter of IGS 2011	Dr. Radovan Baslik <a href="mailto:radobaslik@gmail.com">radobaslik@gmail.com</a>	<a href="mailto:branis-lav.prelovsky@maccaferri.sk">branis-lav.prelovsky@maccaferri.sk</a>
<b>South Africa</b>	South African Chapter 1995	Edoardo Zannoni <a href="mailto:edoardo.zannoni@maccaferri.co.za">edoardo.zannoni@maccaferri.co.za</a>	<a href="http://www.gigsa.org">www.gigsa.org</a> <a href="mailto:inyirenda@gseworld.com">inyirenda@gseworld.com</a>
<b>Spain</b>	Spanish Chapter 1999	Angel Leiro López <a href="mailto:pabad@cetco.es">pabad@cetco.es</a>	<a href="http://www.igs-espana.com">www.igs-espana.com</a> <a href="mailto:aleiro@cedex.es">aleiro@cedex.es</a>
<b>Thailand</b>	Thai Chapter 2002	Prof. Suksun Horpibulsuk <a href="mailto:suksun@g.sut.ac.th">suksun@g.sut.ac.th</a>	<a href="http://www.set.ait.ac.th/acsig/igs-thailand">www.set.ait.ac.th/acsig/igs-thailand</a>
<b>Turkey</b>	Turkish Chapter 2001	Dr. Fazli Erol Guler <a href="mailto:eguler@boun.edu.tr">eguler@boun.edu.tr</a>	<a href="http://www.geosentetiklerdernegi.org">www.geosentetiklerdernegi.org</a>
<b>United Kingdom</b>	U.K. Chapter 1987	Dr. Gary J. Fowmes <a href="mailto:g.j.fowmes@lboro.ac.uk">g.j.fowmes@lboro.ac.uk</a>	<a href="http://www.igs-uk.org">www.igs-uk.org</a>
<b>Vietnam</b>	Vietnamese Chapter – International Geosynthetic Society – Vietnam Chapter (VCIGS) 2013	Dr. Nguyen Hoang Giang <a href="mailto:giangnh@nuce.edu.vn">giangnh@nuce.edu.vn</a>	<a href="mailto:trantrunghieu@utt.edu.vn">trantrunghieu@utt.edu.vn</a>

**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

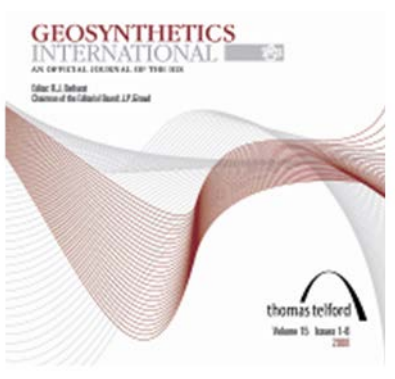
---

# Official Journals of the IGS

---

## Electronic Journals Free to IGS Members

### Geosynthetics International



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 ICE Publishing (Thomas Telford) and is free to IGS Members. All others, e.g., corporations, companies, and university libraries, can subscribe at a rate of £590 / US\$ 960.

Visit the Journal's web site given below for subscription information and instructions for accessing the latest issues.

Papers should be not published in full elsewhere and should be sent to:

Professor R.J. Bathurst, Editor Geosynthetics International  
GeoEngineering Centre at Queen's-RMC, Civil Engineering Department  
13 General Crerar, Sawyer Building, Room 2414  
Royal Military College of Canada  
Kingston, Ontario K7K 7B4  
E-mail: [bathurst-r@rmc.ca](mailto:bathurst-r@rmc.ca)

For subscription details visit the Journal's web site at <http://www.icevirtuallibrary.com/content/serial/gein> or contact:

Sales Department, ICE Publishing 1 Great George Street, Westminster, London SW1P  
3AA UK Tel: +44 (0)20 7665 2460 [sales@icepublishing.com](mailto:sales@icepublishing.com)

### Content of Volume: 22, Issue: 6 (December 2015)

[Best Geosynthetics International Paper for 2014](#), R. J. Bathurst

[Method to increase seam efficiency for woven geotextile materials](#), W. Guo, J. Chu, B. Zhou

[Numerical studies on the performance of hybrid-geosynthetic-reinforced soil slopes subjected to rainfall](#), D. Bhattacharjee, B. V. S. Viswanadham

[Full-scale load test and finite-element analysis of soft ground improved by geotextile-encased granular columns](#), I. Hosseinpour, M. S. S. Almeida, M. Riccio

[Evaluation of a calculation method for embankments reinforced with geocells over soft soils using finite-element analysis](#), J. O. Avesani Neto, B. S. Bueno, M. M. Futai

[The application of water-absorbing geocomposites to support plant growth on slopes](#), K. Lejcuś, J. Dąbrowska, D. Garlikowski, M. Śpitalniak

[Infiltration into unsaturated reinforced slopes with nonwoven geotextile drains sandwiched in sand layers](#), J. N. Thuo, K. H. Yang, C. C. Huang

[Note of Appreciation to Paper Reviewers](#)

**Please find the download of the articles at:**

<http://www.icevirtuallibrary.com/content/issue/gein/22/6>

**For the IGS members to have FREE access to the papers they MUST log in through the IGS website.**

### Content of Volume: 23, Issue: 1 (February 2016)

[Ultimate bearing capacity of saturated reinforced horizontal ground](#), C.-C. Huang

[Slope stabilisation using EPS block geofoam with internal drainage system](#), O. Akay

[An analytical solution for contaminant extraction in a radial flow field using PVD-enhanced system](#), H.-Y. Wang, X.-W. Tang, Q. Tang, Y. Wang, P.-L. Gan

[Behaviour of anchored geosynthetic-reinforced slopes subjected to seepage in a geotechnical centrifuge](#), A. Rajabian, B. V. S. Viswanadham

[Monitoring and numerical modelling of an instrumented mechanically stabilised earth wall](#), N. Cristelo, C. Félix, M. L. Lopes, M. Dias

[Interface shear properties of geosynthetics and construction and demolition waste from large-scale direct shear tests](#), C. S. Vieira, P. M. Pereira

Please find the download of the articles at:

<http://www.icevirtuallibrary.com/content/issue/gein/23/1>

For the IGS members to have FREE access to the papers they MUST log in through the IGS website.

## 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](mailto: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](mailto:IGSSec@geosyntheticssociety.org)

For instructions on how to activate access and create your personal account, go the web site provided below.

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 Corporate Members may subscribe at a 64% discount: US\$396 for six issues. Please indicate that you are an IGS Member when requesting the special price.

For editorial enquiries contact:

Dr. R. Kerry Rowe, Editor *Geotextiles and Geomembranes*  
c/- GeoEngineering Centre at Queen's-RMC  
Department of Civil Engineering  
Queen's University  
Kingston, ON, Canada K7L 3N6  
Tel (613) 533-3113, Fax (613) 533-3128  
[rowe.gng@queensu.ca](mailto:rowe.gng@queensu.ca)

For more information on obtaining electronic and hard copy subscriptions to *Geotextiles and Geomembranes* please go to the following IGS web site: [www.geosyntheticssociety.org/](http://www.geosyntheticssociety.org/)

For direct connection to the home page of the journal with the possibility to download PDF-files of the full papers (IGS members and abonnents only) please follow the link at the end of the following content listing.

### Content of Volume 44, issue 1 (February 2016)

[Numerical and physical modeling of geofoam barriers as protection against effects of surface blast on underground tunnels](#), Anirban De, Alberto N. Morgante, Thomas F. Zimmie

[Model tests on geotextile-encased granular columns under 1-g and undrained conditions](#), Yung-Shan Hong, Cho-Sen Wu, Yi-Sheng Yu

[Road surface permanent deformations with a shallowly buried steel-reinforced high-density polyethylene pipe under cyclic loading](#), Zhigang Cao, Jie Han, Changjie Xu, Deep K. Khatri, Ryan Corey, Yuanqiang Cai

[Mitigating the bridge end bump problem: A case study of a new approach slab system with geosynthetic reinforced soil foundation](#), Qiming Chen, Murad Abu-Farsakh

[Transient hydraulic behavior of two GMBs–GCLs composite liners](#), H. Bannour, N. Touze-Foltz, P. Pierson

[Application of EPS geofoam in attenuating ground vibrations during vibratory pile driving](#), D.S. Liyanapathirana, S.D. Ekanayake

[Experimental and numerical studies of the performance of the new reinforcement system under pull-out conditions](#), M. Mosallanezhad, S.H. Sadat Taghavi, N. Hataf, M.C. Alfaro

[Experimental study on performance of geosynthetic-reinforced soil model walls on rigid foundations subjected to static footing loading](#), Chengzhi Xiao, Jie Han, Zhen Zhang

[Performance evaluation of geogrid reinforced soil walls with marginal backfills through centrifuge model tests](#), S. Balakrishnan, B.V.S. Viswanadham

[Evaluation of permanent deformation of geogrid reinforced asphalt concrete using dynamic creep test](#), Sina Mirzapour Mounes, Mohamed Rehan Karim, Ali Khodaii, Mohamad Hadi Almasi

[Electrical resistance method for assessing spatial variation of water content in geosynthetics clay liners at laboratory scale](#), Hossam M. Abuel-Naga, Abdelmalek Bouazza

[Vertical-drain consolidation using stone columns: An analytical solution with an impeded drainage boundary under multi-ramp loading](#), G.H. Lei, C.W. Fu, C.W.W. Ng

## Content of Volume 44, issue 2 (April 2016)

[Three-dimensional reinforced slopes: Evaluation of required reinforcement strength and embedment length using limit analysis](#), Yufeng Gao, Shangchuan Yang, Fei Zhang, Ben Leshchinsky

[Modelling of deformable structures in the general framework of the discrete element method](#), Anna Effeindzourou, Bruno Chareyre, Klaus Thoeni, Anna Giacomini, François Kneib

[Tensile force of geogrids embedded in pile-supported reinforced embankment: A full-scale experimental study](#), R.P. Chen, Y.W. Wang, X.W. Ye, X.C. Bian, X.P. Dong

[Microgrid inclusions to increase the strength and stiffness of sand](#), Ben Leshchinsky, T. Matthew Evans, Jordan Vesper

[Statistical-experimental study of geosynthetics performance on reflection cracking phenomenon](#), Fereidoon Moghadas Nejad, Saeid Asadi, Shahab Fallah, Morteza Vadood

[Centrifuge evaluation of the time-dependent behavior of geotextile-reinforced soil walls](#), Carina Maia Lins Costa, Jorge Gabriel Zornberg, Benedito de Souza Bueno, Yuri Daniel Jatobá Costa

[Study of a small scale tyre-reinforced embankment](#), Lihua Li, Henglin Xiao, Pedro Ferreira, Xilin Cui

[Numerical and field test verifications for the deformation behavior of geotextile tubes considering 1D and areal strain](#), Hyeong-Joo Kim, Myoung-Soo Won, Jay C. Jamin, Jeong-Hoon Joo

Please find the download of the articles at:

<http://www.sciencedirect.com/science/journal/02661144>

For IGS members to have FREE access to the G&G journal articles they MUST log in through the IGS website.

---

## Corporate Membership

---

### Case studies – use the chance!

All corporate members are invited to announce a case study at any time. For each issue 3 to 4 case studies are planned to be placed in (up to 1 page with pictures). If there are more announcements we will place them on a list and will use them on a “first come, first serve” basis. A corporate member may have a second case study published if the list is finished with corporate members not been considered yet. As we know that some of our corporate members are very hard-working on such a type of publication, please be aware that the only possibility to prevent a publication series by one company is to send in your own case study!

With a distribution of more than 3000 samples/downloads of IGS News this is a good promotion of the geosynthetics technique and your company. We would be happy if this chance is used frequently.

*Reported by*

*Gerhard Bräu, IGS News Editor*

## Midshore I Landfill Exposed Geomembrane Cover, Easton, MD, USA



### PROJECT SPECIFICATION

Maryland Environmental Service (MES) owns and maintains the Midshore Regional Solid Waste System in a region that serves 140,000 residents on the eastern shore of Maryland's Chesapeake Bay. The 175 acre (708,200m<sup>2</sup>) Midshore I closed in 2010 after operating successfully for 20 years. MES chose to cover the landfill with an Exposed Geomembrane Cover (EGC.) Designed to protect the environment and minimize the need for ongoing maintenance, the EGC also allows for future use of the landfill.



Anchor installation through the HDPE geomembrane with a light hydraulic breaker.

### SOLUTION

The EGC design specified an HPDE 60mm geomembrane liner secured with Platipus Percussive Driven Earth Anchors (PDEA) as a cost effective and easily installed alternative to traditional vertical trenching. The Platipus anchor assembly was manufactured with components to meet the holding capacity and 20-year design life required by Geosyntec Consultants/MES in this highly corrosive environment. The anchor was driven through the liner and into 4-5 feet

(1.2 – 1.5m) of compacted waste. The pull out resistance was then field tested to meet the engineered wind and LFG uplift requirements of 1,800 lbs (8kN). Once the anchor assembly was fully installed and tested, an HDPE patch was placed over to create an impermeable system.



Aerial view of the completed project. Inset photos show the anchor once installed and after placement of the HDPE patch to seal the geomembrane.

### Further information

Platipus Earth Anchoring Systems, Kingsfield Business Centre, Philanthropic Road, Redhill, Surrey, RH1 4DP, England, [info@platipus-anchors.com](mailto:info@platipus-anchors.com), [www.platipus-anchors.com](http://www.platipus-anchors.com)

## Corporate Members of the IGS

Company Name	Country	Contact Email	Website
ABG LIMITED	United Kingdom	<a href="mailto:liz@abgltd.com">liz@abgltd.com</a>	<a href="http://www.abgltd.com">www.abgltd.com</a>
ACE GEOSYNTHETICS CO., LTD.	Taiwan (R.O.C.)	<a href="mailto:claire.hung@geoace.com">claire.hung@geoace.com</a>	<a href="http://www.geoace.com">www.geoace.com</a>
AGRU KUNSTSTOFFTECHNIK GMBH	Austria	<a href="mailto:office@agru.at">office@agru.at</a>	<a href="http://www.agru.at">www.agru.at</a>
ALYAF INDUSTRIAL COMPANY LTD	Saudi Arabia	<a href="mailto:info@alyaf.com">info@alyaf.com</a>	<a href="http://www.alyaf.com">www.alyaf.com</a>
ANDEX DEL NORTE S.A.	Peru	<a href="mailto:jesus.cardozo@andex.com.pe">jesus.cardozo@andex.com.pe</a>	<a href="http://www.andex.com.pe">www.andex.com.pe</a>
ANHUI HUIFENG NEW SYNTHETIC MATERIALS CO. LTD.	China	<a href="mailto:may_hf@ahhuifeng.com.cn">may_hf@ahhuifeng.com.cn</a>	<a href="http://www.hfgeosynthetics.com">www.hfgeosynthetics.com</a>
AQUATAN (PTY) LTD.	South Africa	<a href="mailto:mikew@aquatan.com">mikew@aquatan.com</a>	<a href="http://www.aquatan.com">www.aquatan.com</a>
AQUATERRA CONSULTANTS LTD.	Hong-Kong, China	<a href="mailto:ni-gel.wightman@aquaterra.com.hk">ni-gel.wightman@aquaterra.com.hk</a>	<a href="http://www.aquaterra.com.hk">www.aquaterra.com.hk</a>
ASAHI GEOTECHNOLOGIES CO., LTD.	Japan	<a href="mailto:miura.nb@om.asahi-kasei.co.jp">miura.nb@om.asahi-kasei.co.jp</a>	<a href="http://www.asahi-kasei.co.jp">www.asahi-kasei.co.jp</a>
ASHIMORI INDUSTRY CO., LTD.	Japan	<a href="mailto:hiroyuki_sakuragi@ashimori.co.jp">hiroyuki_sakuragi@ashimori.co.jp</a>	<a href="http://www.ashimori.co.jp">www.ashimori.co.jp</a>
ASSOCIATION OF RRR CONSTRUCTION SYSTEM, THE	Japan	<a href="mailto:okamoto@igi.co.jp">okamoto@igi.co.jp</a>	<a href="http://www.rrr-sys.gr.jp">www.rrr-sys.gr.jp</a>
ATARFIL S.L.	Spain	<a href="mailto:mgirones@atarfil.com">mgirones@atarfil.com</a>	<a href="http://www.atarfil.com">www.atarfil.com</a>
AXTER COLETANCHE INC.	Canada	<a href="mailto:bbreul@axtercoletanche.com">bbreul@axtercoletanche.com</a>	<a href="http://www.coletanche.com">www.coletanche.com</a>
BEAULIEU TECHNICAL TEXTILES	Belgium	<a href="mailto:kris.coen@bintg.com">kris.coen@bintg.com</a>	<a href="http://www.ideal-group.com">www.ideal-group.com</a>
BEIJING GEOENVIRON ENGINEERING AND TECHNOLOGY, INC.	China (People's Republic)	<a href="mailto:LiuLiqi1960@yahoo.com.cn">LiuLiqi1960@yahoo.com.cn</a>	<a href="http://www.gnlining.com">www.gnlining.com</a>
BMC GULF TRADING & CONTRACTING LLC	United Arab Emirates	<a href="mailto:info@bmc-gulf.com">info@bmc-gulf.com</a>	<a href="http://www.bmc-gulf.com">www.bmc-gulf.com</a>
BOMBAY TEXTILE RESEARCH ASSOCIATION, THE	India	<a href="mailto:btralibrary@yahoo.co.uk">btralibrary@yahoo.co.uk</a>	<a href="http://www.btraindia.com">www.btraindia.com</a>
BONAR GEOSYNTHETICS KFT. (GEO-TIPPTEX LTD.)	Hungary	<a href="mailto:tipptex@tipptex.hu">tipptex@tipptex.hu</a>	<a href="http://www.geotipptex.hu">www.geotipptex.hu</a>
BONAR NATPET	Saudi Arabia	<a href="mailto:tgkirgkis@bonarnatpet.com">tgkirgkis@bonarnatpet.com</a>	<a href="http://www.bonarnatpet.com">www.bonarnatpet.com</a>
BONAR TECHNICAL FABRICS N.V.	Belgium	<a href="mailto:geotextiles@bonartf.com">geotextiles@bonartf.com</a>	<a href="http://www.bonartf.com">www.bonartf.com</a>
BRAWLER INDUSTRIES	USA	<a href="mailto:mwaltner@brawler.com">mwaltner@brawler.com</a>	<a href="http://www.brawler.com">www.brawler.com</a>
CELESUR SISTEMAS DE IMPERMEABILIZACION, S.L.	Spain	<a href="mailto:calidad-medioambiente@celesur.com">calidad-medioambiente@celesur.com</a>	<a href="http://www.celesur.com">www.celesur.com</a>
CETCO LINING TECHNOLOGIES	USA	<a href="mailto:scott.solotorovsky@cetco.com">scott.solotorovsky@cetco.com</a>	<a href="http://www.cetco.com">www.cetco.com</a>
CETEAU BV	Netherlands, The	<a href="mailto:info@ceteau.com">info@ceteau.com</a>	<a href="http://www.ceteau.com">www.ceteau.com</a>
CIDELSA	Peru	<a href="mailto:rsantiago@cidelsa.com">rsantiago@cidelsa.com</a>	<a href="http://www.cidelsa.com">www.cidelsa.com</a>
COFRA BV	Netherlands, The	<a href="mailto:j.dijkstra@cofra.nl">j.dijkstra@cofra.nl</a>	<a href="http://www.cofra.nl">www.cofra.nl</a>
COLAS S. A.	France	<a href="mailto:gautier@campus.colas.fr">gautier@campus.colas.fr</a>	<a href="http://www.colas.com">www.colas.com</a>
CONCRETE CANVAS	United Kingdom	<a href="mailto:will.crawford@concretcanvas.co.uk">will.crawford@concretcanvas.co.uk</a>	
CORIPA S.A.	Argentina	<a href="mailto:info@coripa.com.ar">info@coripa.com.ar</a>	<a href="http://www.coripa.com.ar">www.coripa.com.ar</a>
CORYS GEOSYNTHETICS LLC	U.A.E.	<a href="mailto:jrowson@corys.ae">jrowson@corys.ae</a>	<a href="http://www.corys.ae">www.corys.ae</a> ; <a href="http://www.geosynthetics.corys">www.geosynthetics.corys</a>

Company Name	Country	Contact Email	Website
			<a href="#">.ae</a>
DAEHAN I. M. CO., LTD.	Korea	<a href="mailto:daehan@geosko.com">daehan@geosko.com</a>	<a href="http://www.geosko.com">www.geosko.com</a>
DAEJUNG CO., LTD	Korea	<a href="mailto:djgeo@daejung.net">djgeo@daejung.net</a>	
DAEYOUN GEOTECH CO., LTD.	Korea	<a href="mailto:kouc85@gmail.com">kouc85@gmail.com</a>	<a href="http://dygtex.en.ec21.com">http://dygtex.en.ec21.com</a>
DALIAN GEO-LINK GEOSYNTHETICS CO. LTD.	China	<a href="mailto:dothan@geo-textile.com">dothan@geo-textile.com</a>	<a href="http://www.geotextile.com">www.geotextile.com</a>
DUPONT DE NEMOURS (LUXEMBOURG) SARL	Luxembourg	<a href="mailto:Nicolas.Laidie@dupont.com">Nicolas.Laidie@dupont.com</a>	<a href="http://www.dupont.com">www.dupont.com</a>
EAST COAST EROSION BLANKETS	USA	<a href="mailto:diane@eastcoasterosion.com">diane@eastcoasterosion.com</a>	<a href="http://www.eastcoasterosion.com">www.eastcoasterosion.com</a>
ECOFIBRE s.r.l.	Italy	<a href="mailto:f.niccolai@ecofibre.it">f.niccolai@ecofibre.it</a>	<a href="http://www.ecofibre.it/">http://www.ecofibre.it/</a>
EDILFLOOR SPA	Italy	<a href="mailto:b.stefani@edilfloor.com">b.stefani@edilfloor.com</a>	<a href="http://www.edilfloor.com">www.edilfloor.com</a>
ENGINEERED POLYMER TECHNOLOGIES	USA	<a href="mailto:esilva@epttech.com">esilva@epttech.com</a>	
EUROBENT SP. Z O.O	Poland	<a href="mailto:a.kolodko@eurobent.com">a.kolodko@eurobent.com</a>	<a href="http://www.eurobent.com">www.eurobent.com</a>
EUROIZOL GEOSYNTHETICS LLC	Ukraine	<a href="mailto:anna@euroizol.com">anna@euroizol.com</a>	<a href="http://www.geosvit.com.ua">www.geosvit.com.ua</a>
EXEED GEOTEXTILE LLC	United Arab Emirates	<a href="mailto:tpeters@primegeotextile.ae">tpeters@primegeotextile.ae</a>	<a href="http://www.exeed.ae">www.exeed.ae</a>
FABTECH	Australia	<a href="mailto:gfairhead@fabtech.com.au">gfairhead@fabtech.com.au</a>	<a href="http://www.fabtech.com.au">www.fabtech.com.au</a>
FECON - FOUNDATION ENGINEERING & UNDERGROUND CONSTRUCTION	Vietnam	<a href="mailto:info@fecon.com.vn">info@fecon.com.vn</a>	<a href="http://www.fecon.com.vn">www.fecon.com.vn</a>
FEICHENG LIANYI ENGINEERING PLASTICS CO.	China	<a href="mailto:geogrid@live.com">geogrid@live.com</a>	<a href="http://en.sdlianyi.com/">http://en.sdlianyi.com/</a>
FIBERTEX NONWOVENS	Denmark	<a href="mailto:MB@fibertex.com">MB@fibertex.com</a>	<a href="http://www.fibertex.com">www.fibertex.com</a>
FILMTEx SAS	Colombia	<a href="mailto:nrodriguez@filmtex.com">nrodriguez@filmtex.com</a>	<a href="http://www.filmtex.com">www.filmtex.com</a>
FIRESTONE SPECIALTY PRODUCTS COMPANY LLC	USA	<a href="mailto:MartinyDavid@FirestoneBP.com">MartinyDavid@FirestoneBP.com</a>	<a href="http://www.firestonesp.com">www.firestonesp.com</a>
FITI TESTING AND RESEARCH INSTITUTE	Korea	<a href="mailto:hogankim@fiti.re.kr">hogankim@fiti.re.kr</a>	<a href="http://www.fiti.re.kr">www.fiti.re.kr</a>
FONTANA INTERNATIONAL GMBH	Austria	<a href="mailto:g.puehringer@fontana-international.com">g.puehringer@fontana-international.com</a>	<a href="http://www.fontana-international.com">www.fontana-international.com</a>
GARWARE-WALL ROPES, LTD.	India	<a href="mailto:mvoffice@garwareropes.com">mvoffice@garwareropes.com</a>	<a href="http://www.garwareropes.com">www.garwareropes.com</a>
GEOCELLULAR SYNTHETICS CO. LTD.	China	<a href="mailto:jerry@geo-ecoweb.com">jerry@geo-ecoweb.com</a>	<a href="http://www.geo-ecoweb.com">www.geo-ecoweb.com</a>
GEOFABRICS AUSTRALASIA PTY LTD.	Australia	<a href="mailto:b.swifte@geofabrics.com.au">b.swifte@geofabrics.com.au</a>	<a href="http://www.geofabrics.com.au">www.geofabrics.com.au</a>
GEOFABRICS LTD.	United Kingdom	<a href="mailto:gdonald@geofabrics.com">gdonald@geofabrics.com</a>	<a href="http://www.geofabrics.com">www.geofabrics.com</a>
GEOFABRICS NZ LTD.	New Zealand	<a href="mailto:sales@geofabrics.co.nz">sales@geofabrics.co.nz</a>	<a href="http://www.geofabrics.co.nz">www.geofabrics.co.nz</a>
GEOFELT GMBH	Austria	<a href="mailto:geofelt@geofelt.com">geofelt@geofelt.com</a>	<a href="http://www.geofelt.com">www.geofelt.com</a>
GEOGLOBE EUROPE LTD.	Bulgaria	<a href="mailto:eng.dept@geoglobegroup.com">eng.dept@geoglobegroup.com</a>	
GEOMAS	Turkey	<a href="mailto:coksayar@geomas.com.tr">coksayar@geomas.com.tr</a>	<a href="http://www.geomas.com.tr">www.geomas.com.tr</a>
GEOPLASTEXTEL SAS	Colombia	<a href="mailto:santia-go.giraldo@plastextil.com.co">santia-go.giraldo@plastextil.com.co</a>	<a href="http://www.geoplastextil.com">www.geoplastextil.com</a>
GEPOLIMEROS SAS	Colombia	<a href="mailto:geopolimerosltda@yahoo.com">geopolimerosltda@yahoo.com</a>	
GEOSYNTHETIC MATERIALS ASSOCIATION (GMA)	USA	<a href="mailto:lpassus@ifai.com">lpassus@ifai.com</a>	<a href="http://www.ifai.com">www.ifai.com</a>
GEOSYNTHETICS TECHNOLOGIES CO., LTD.	Saudi Arabia	<a href="mailto:geogrid@latifia.com">geogrid@latifia.com</a>	<a href="http://www.g-tex.net/flash_index.html">www.g-tex.net/flash_index.html</a>

Company Name	Country	Contact Email	Website
GEOSYSTEM CO. LTD.	Japan	<a href="mailto:m_aoshima@geosystem.co.jp">m_aoshima@geosystem.co.jp</a>	<a href="http://www.geosystem.co.jp">www.geosystem.co.jp</a>
GEOTECHNICAL SYSTEMINDO, PT	Indonesia	<a href="mailto:info@ptgsi.com">info@ptgsi.com</a>	<a href="http://www.ptgsi.com">www.ptgsi.com</a>
GEOTEXAN	Spain	<a href="mailto:jaguilar@geotexan.com">jaguilar@geotexan.com</a>	<a href="http://www.geotexan.com">www.geotexan.com</a>
G&G PARTNERS SRL	Italy	<a href="mailto:giudit-ta.farina@gegpartners.com">giudit-ta.farina@gegpartners.com</a>	<a href="http://www.gegpartners.it">www.gegpartners.it</a>
GIDROKOR CONSTRUCTION COMPANY LTD.	Russia	<a href="mailto:yakovlev@gidrokor.ru">yakovlev@gidrokor.ru</a>	<a href="http://www.gidrokor.ru">www.gidrokor.ru</a>
GLOBAL SYNTHETICS	Australia	<a href="mailto:info@globalsynthetics.com.au">info@globalsynthetics.com.au</a>	<a href="http://www.globalsynthetics.com.au">www.globalsynthetics.com.au</a>
GSE ENVIRONMENTAL LLC	USA	<a href="mailto:bramsey@gseworld.com">bramsey@gseworld.com</a>	<a href="http://www.gseworld.com">www.gseworld.com</a>
GSE LINING TECHNOLOGY GMBH	Germany	<a href="mailto:sbaldauf@gseworld.com">sbaldauf@gseworld.com</a>	<a href="http://www.gseworld.com">www.gseworld.com</a>
HAINING JIHUA COMPOSITE MATERIAL CO. LTD.	China (People's Republic)	<a href="mailto:geosynthetics@hotmail.com">geosynthetics@hotmail.com</a>	<a href="http://www.geojh.com">www.geojh.com</a>
HANOI INDUSTRIAL TEXTILE JSC - HAICATEX	Vietnam	<a href="mailto:haicatex@hn.vnn.vn">haicatex@hn.vnn.vn</a>	<a href="http://www.haicatex.com.vn/">www.haicatex.com.vn/</a>
HIGH STIFFNESS POLYETHYLENE PIPES ASSOCIATION	Japan	<a href="mailto:jouji_hinobayashi@daipla.co.jp">jouji_hinobayashi@daipla.co.jp</a>	<a href="http://www.kotaikyo.jp">www.kotaikyo.jp</a>
HOCK TECHNOLOGY CO. LTD	China (People's Republic)	<a href="mailto:export@sdhock.com">export@sdhock.com</a>	<a href="http://www.sdhock.com">www.sdhock.com</a>
HONGXIANG NEW GEO-MATERIAL CO., LTD.	China	<a href="mailto:hongxiang@hongxiangchina.com">hongxiang@hongxiangchina.com</a>	<a href="http://www.hxgufen.com">www.hxgufen.com</a>
HUESKER SYNTHETIC GMBH.	Germany	<a href="mailto:grandin@huesker.de">grandin@huesker.de</a>	<a href="http://www.huesker.de">www.huesker.de</a>
HUIKWANG CORPORATION	Taiwan (R.O.C.)	<a href="mailto:johnnie@huikwang.com">johnnie@huikwang.com</a>	<a href="http://www.huikwang.com">www.huikwang.com</a>
HULS ASIA SDN BHD	Malaysia	<a href="mailto:ragu@hulsmalaysia.com">ragu@hulsmalaysia.com</a>	<a href="http://www.hulsmalaysia.com">www.hulsmalaysia.com</a>
I-CORP INTERNATIONAL, Inc.	USA	<a href="mailto:icorp@geosynthetic.com">icorp@geosynthetic.com</a>	<a href="http://www.geosynthetic.com">www.geosynthetic.com</a>
INTEGRATED GEOTECHNOLOGY INSTITUTE	Japan	<a href="mailto:y_tamura@igi.co.jp">y_tamura@igi.co.jp</a>	<a href="http://www.igi.co.jp">www.igi.co.jp</a>
INTERMAS NETS S.A.	Spain	<a href="mailto:jgutierrez@intermasgroup.com">jgutierrez@intermasgroup.com</a>	<a href="http://www.intermas.com">www.intermas.com</a>
INTERTAPE POLYMER GROUP	USA	<a href="mailto:rbennett@itape.com">rbennett@itape.com</a>	<a href="http://www.itape.com">www.itape.com</a>
INTER WRAP INC.	Canada	<a href="mailto:cmills@interwrap.com">cmills@interwrap.com</a>	<a href="http://www.interwrap.com">www.interwrap.com</a>
ISTANBUL TEKNİK INSAAT	Turkey	<a href="mailto:export@istanbulteknik.com">export@istanbulteknik.com</a>	<a href="http://www.istanbulteknik.com">www.istanbulteknik.com</a>
JAPAN SPUNBOND - TORAY CORP.	Japan	<a href="mailto:zz-esaki@unitika.co.jp">zz-esaki@unitika.co.jp</a>	
JAYLON PTY LTD.	Australia	<a href="mailto:wrees@jaylon.com.au">wrees@jaylon.com.au</a>	<a href="http://www.jaylon.com.au">www.jaylon.com.au</a>
JETSJ - GEOTECNIA, LDA	Portugal	<a href="mailto:apinto@jetsj.pt">apinto@jetsj.pt</a>	<a href="http://www.jetsj.pt">www.jetsj.pt</a>
JIANGSU HANOVO New Material Co. Ltd.	China (People's Republic)	<a href="mailto:sales@hanovo.com.cn">sales@hanovo.com.cn</a>	<a href="http://www.hanovo.com.cn">www.hanovo.com.cn</a>
JUTA A.S.	Czech Republic	<a href="mailto:vagnerm@juta.cz">vagnerm@juta.cz</a>	<a href="http://www.juta.cz">www.juta.cz</a>
KAJIMA CORPORATION - KAJIMA TECHNICAL RESEARCH INSTITUTE	Japan	<a href="mailto:yt@kajima.com">yt@kajima.com</a>	<a href="http://www.kajima.co.jp">www.kajima.co.jp</a>
KAYTECH ENGINEERED FABRICS	South Africa	<a href="mailto:garth@kaytech.co.za">garth@kaytech.co.za</a>	<a href="http://www.kaytech.co.za">www.kaytech.co.za</a>
KURARAY CO., LTD.	Japan	<a href="mailto:noriko_Kawasima@kuraray.co.jp">noriko_Kawasima@kuraray.co.jp</a>	<a href="http://www.kuraray.co.jp">www.kuraray.co.jp</a>
LAYFIELD ENVIRONMENTAL SYSTEMS	Canada	<a href="mailto:erangel@layfieldgroup.com">erangel@layfieldgroup.com</a>	<a href="http://www.layfieldgroup.com">www.layfieldgroup.com</a>
LEISTER TECHNOLOGIES AG	Switzerland	<a href="mailto:thomas.furrer@leister.com">thomas.furrer@leister.com</a>	<a href="http://www.leister.com/geo">www.leister.com/geo</a>
MACCAFERRI (MALAYSIA) SDN BHD	Malaysia	<a href="mailto:mm@maccaferri-asia.com">mm@maccaferri-asia.com</a>	<a href="http://www.maccaferri.com.my">www.maccaferri.com.my</a>
MACCAFERRI DE ARGENTINA S.A.	Argentina	<a href="mailto:info@maccaferri-arg.com.ar">info@maccaferri-arg.com.ar</a>	<a href="http://www.maccaferri-">www.maccaferri-</a>



Company Name	Country	Contact Email	Website
			<a href="http://arg.com.ar">arg.com.ar</a>
MACCAFERRI DE CENTROAMERICA	Costa Rica	<a href="mailto:sramirez@maccaferri.co.cr">sramirez@maccaferri.co.cr</a>	<a href="http://www.maccaferri.co.cr">www.maccaferri.co.cr</a>
MACCAFERRI DO BRASIL LTDA	Brazil	<a href="mailto:maccaferri@maccaferri.com.br">maccaferri@maccaferri.com.br</a>	<a href="http://www.maccaferri.com.br">www.maccaferri.com.br</a>
MACCAFERRI INDONESIA	Indonesia	<a href="mailto:mi@maccaferri.co.id">mi@maccaferri.co.id</a>	<a href="http://www.maccaferri.co.id">www.maccaferri.co.id</a>
MAEDA KOSEN CO. LTD.	Japan	<a href="mailto:yokota@mdk.co.jp">yokota@mdk.co.jp</a>	<a href="http://www.mdk.co.jp">www.mdk.co.jp</a>
MAEDA KOSEN VIETNAM Co. Ltd.	Vietnam	<a href="mailto:tsunoda@mdk-vn.vn">tsunoda@mdk-vn.vn</a>	<a href="http://vtown.vn/company/maeda-kosen-vietnam.html">http://vtown.vn/company/maeda-kosen-vietnam.html</a>
MANAS GEO TECH INDIA PVT LTD	India	<a href="mailto:info@manasgeotextile.com">info@manasgeotextile.com</a>	<a href="http://www.manasgeotextile.com">www.manasgeotextile.com</a>
MANIFATTURA FONTANA S.P.A.	Italy	<a href="mailto:info@drefon.com">info@drefon.com</a>	<a href="http://www.manifatturafontana.net">www.manifatturafontana.net</a>
MAPEI S.P.A.	Italy	<a href="mailto:mapei@mapei.it">mapei@mapei.it</a>	<a href="http://www.mapei.com">www.mapei.com</a>
MATTEX GEOSYNTHETICS	United Arab Emirates	<a href="mailto:philippe.g@mattex.com">philippe.g@mattex.com</a>	<a href="http://www.mattex.com">www.mattex.com</a>
MEGAPLAST	India	<a href="mailto:gaurav.jain@megaplast.in">gaurav.jain@megaplast.in</a>	<a href="http://www.megaplast.in/">http://www.megaplast.in/</a>
MINERVA - GEOSYNTHETICA.NET	USA	<a href="mailto:elizabeth@geosynthetica.net">elizabeth@geosynthetica.net</a>	<a href="http://www.geosynthetica.net">www.geosynthetica.net</a>
MITSUBISHI PLASTICS, INC.	Japan	<a href="mailto:akinaga.takuya@md.mpi.co.jp">akinaga.takuya@md.mpi.co.jp</a>	<a href="http://www.mpi.co.jp">www.mpi.co.jp</a>
MITSUI CHEMICALS INDUSTRIAL PRODUCTS, INC.	Japan	<a href="mailto:yoko.akana@mitsui-chem.co.jp">yoko.akana@mitsui-chem.co.jp</a>	<a href="http://jp.mitsuichem.com">http://jp.mitsuichem.com</a>
NARVIN GOSTAR PARSIAN	Iran	<a href="mailto:info@ngp-co.com">info@ngp-co.com</a>	<a href="http://www.ngp-co.com">www.ngp-co.com</a>
NAUE GMBH & CO. KG	Germany	<a href="mailto:kvmaubeuge@naue.com">kvmaubeuge@naue.com</a>	<a href="http://www.naue.com">www.naue.com</a>
NEWGRIDS LIMITED.	United Kingdom	<a href="mailto:contact@newgrids.com">contact@newgrids.com</a>	<a href="http://www.newgrids.com">www.newgrids.com</a>
NINGBO HONGHUAN GEOTEXTILE CO., LTD.	China (People's Republic)	<a href="mailto:ivan@nbhonghuan.com">ivan@nbhonghuan.com</a>	<a href="http://www.geotextile-fabric.com">www.geotextile-fabric.com</a>
OBAYASHI CORPORATION	Japan	<a href="mailto:takahashi.shinichi@obayashi.co.jp">takahashi.shinichi@obayashi.co.jp</a>	<a href="http://www.obayashi.co.jp">www.obayashi.co.jp</a>
OFFICINE MACCAFERRI S.P.A.	Italy	<a href="mailto:UTP@maccaferri.com">UTP@maccaferri.com</a>	<a href="http://www.maccaferri.com">www.maccaferri.com</a>
OJSC "494 UNR"	Russia	<a href="mailto:unrmarket@prudon.ru">unrmarket@prudon.ru</a>	<a href="http://www.unrhs.com">www.unrhs.com</a>
OKASAN LIVIC CO. LTD.	Japan	<a href="mailto:konami@okasanlivic.co.jp">konami@okasanlivic.co.jp</a>	<a href="http://www.okasanlivic.co.jp">www.okasanlivic.co.jp</a>
PIETRUCHA	Poland	<a href="mailto:export@pietrucha.pl">export@pietrucha.pl</a>	<a href="http://www.pietrucha.pl">www.pietrucha.pl</a>
PLATIPUS ANCHORS LIMITED	United Kingdom	<a href="mailto:darren@platipus-anchors.com">darren@platipus-anchors.com</a>	<a href="http://www.platipus-anchors.com">www.platipus-anchors.com</a>
POLYFABRICS AUSTRALIA	Australia	<a href="mailto:glenn@polyfabrics.com.au">glenn@polyfabrics.com.au</a>	<a href="http://www.polyfabrics.com.au">www.polyfabrics.com.au</a>
POLYTEX S.A.	Peru	<a href="mailto:ejarufe@polytex.cl">ejarufe@polytex.cl</a>	<a href="http://www.polytex.cl">www.polytex.cl</a>
POUSHESH GOSTAR PASARGAD	Iran	<a href="mailto:geo.pgpc@yahoo.com">geo.pgpc@yahoo.com</a>	
PRESTO GEOSYSTEMS	USA	<a href="mailto:bill.handlos@prestogeo.com">bill.handlos@prestogeo.com</a>	<a href="http://www.prestogeo.com">www.prestogeo.com</a>
PRESTO-RUS	Russia	<a href="mailto:info@prestoru.ru">info@prestoru.ru</a>	<a href="http://www.presto.ru">www.presto.ru</a>
PT BREMA BRATA	Indonesia	<a href="mailto:office@brema-brata.com">office@brema-brata.com</a>	<a href="http://www.brema-brata.com">www.brema-brata.com</a>
PT MULTIBANGUN REKATAMA PATRIA	Indonesia	<a href="mailto:mrpatria@indo.net.id">mrpatria@indo.net.id</a>	<a href="http://www.multibangunpatria.com">www.multibangunpatria.com</a>
PT.MUTIARACAHAYA PLASTINDO	Indonesia	<a href="mailto:yenny@mutiaracahaya.com">yenny@mutiaracahaya.com</a>	
PT TETRASA GEOSININDO	Indonesia	<a href="mailto:office@geosinindo.co.id">office@geosinindo.co.id</a>	<a href="http://www.geosinindo.co.id">www.geosinindo.co.id</a>
RAVEN INDUSTRIES	USA	<a href="mailto:tom.stoebner@ravenind.com">tom.stoebner@ravenind.com</a>	<a href="http://ravenind.com/">http://ravenind.com/</a>
REINFORCED EARTH COMPANY, THE	USA	<a href="mailto:rbloom-field@reinforcedearth.com">rbloom-field@reinforcedearth.com</a>	<a href="http://www.reinforcedearth.com">www.reinforcedearth.com</a>
RENOLIT IBERICA	Spain	<a href="mailto:este-ban.hernandez@renolit.com">este-ban.hernandez@renolit.com</a> ; <a href="mailto:valerie.hardy@renolit.com">valerie.hardy@renolit.com</a>	<a href="http://www.renolit.com">www.renolit.com</a>

Company Name	Country	Contact Email	Website
RKW AGRI GmbH & CO. KG	Germany	<a href="mailto:marion.link@rkw-group.com">marion.link@rkw-group.com</a>	<a href="http://www.rkw-group.com">www.rkw-group.com</a>
ROWAD INTERNATIONAL GEOSYNTHETICS CO.LTD	Saudi Arabia	<a href="mailto:info@rowadgeo.com">info@rowadgeo.com</a>	<a href="http://www.rowadgeo.com">www.rowadgeo.com</a>
SAGEOS - CTT GROUP	Canada	<a href="mailto:eblond@gcttg.com">eblond@gcttg.com</a>	<a href="http://www.sageos.com">www.sageos.com</a>
SAMYANG CORPORATION	Korea	<a href="mailto:juhwan.ahn@samyang.com">juhwan.ahn@samyang.com</a>	<a href="http://www.samyang.com">www.samyang.com</a>
SERVICIOS DE INGENIERIA GEOSINTETICA S.A. (SIGSA)	Costa Rica	<a href="mailto:geosigsa@ice.co.cr">geosigsa@ice.co.cr</a>	
SHANDONG HAoyang NEW ENGINEERING MATERIAL	China	<a href="mailto:geomaterial@163.com">geomaterial@163.com</a>	
SHENZHEN SHENG YI ENVIRONMENTAL CO., LTD.	China (People's Republic)	<a href="mailto:shengyi@sz-shengyi.com">shengyi@sz-shengyi.com</a>	<a href="http://www.sz-shengyi.com">www.sz-shengyi.com</a>
SIBUR GEOSINT LLC	Russia	<a href="mailto:SubbotinKA@sibur.ru">SubbotinKA@sibur.ru</a>	<a href="http://sibur.com/">http://sibur.com/</a>
SIPLAST ICOPAL	France	<a href="mailto:frppy@icopal.com">frppy@icopal.com</a>	<a href="http://www.siplast-international.com/">www.siplast-international.com/</a>
SIVERUNE 104	Spain	<a href="mailto:direccion@siverune104.com">direccion@siverune104.com</a>	<a href="http://www.siverune104.com">www.siverune104.com</a>
SKZ-GERMAN PLASTICS CENTER	Germany	<a href="mailto:h.zanzinger@skz.de">h.zanzinger@skz.de</a>	<a href="http://www.skz.de">www.skz.de</a>
SKAPS INDUSTRIES	USA	<a href="mailto:perry@skaps.com">perry@skaps.com</a>	<a href="http://www.skaps.com">www.skaps.com</a>
SOLMAX INTERNATIONAL ASIA PACIFIC SDN. BHD.	Malaysia	<a href="mailto:dtan@solmax.com">dtan@solmax.com</a>	<a href="http://www.solmax.com">www.solmax.com</a>
SOLMAX INTERNATIONAL, INC.	Canada	<a href="mailto:dberube@solmax.com">dberube@solmax.com</a>	<a href="http://www.solmax.com">www.solmax.com</a>
SOTRAFA, S.A.	Spain	<a href="mailto:geo@sotrafa.com">geo@sotrafa.com</a>	<a href="http://www.sotrafa.com">www.sotrafa.com</a>
STRATA	USA	<a href="mailto:lstocker@geogrid.com">lstocker@geogrid.com</a>	<a href="http://www.geogrid.com">www.geogrid.com</a>
SWISS ASSOCIATION FOR GEOSYNTHETICS SVG	Switzerland	<a href="mailto:Imad.Lifa@htwchur.ch">Imad.Lifa@htwchur.ch</a>	<a href="http://www.geotex.ch">http://www.geotex.ch</a>
TAIAN MODERN PLASTIC CO., LTD	China (People's Republic)	<a href="mailto:info@tmpgeosynthetics.com">info@tmpgeosynthetics.com</a>	<a href="http://www.tamodern.com">www.tamodern.com</a>
TAIYO KOGYO CORPORATION (SUN)	Japan	<a href="mailto:MT001304@mb.taiyokogyo.co.jp">MT001304@mb.taiyokogyo.co.jp</a>	<a href="http://www.taiyokogyo.co.jp">www.taiyokogyo.co.jp</a>
TALTEX GEOSYNTHETICS INC.	United Kingdom	<a href="mailto:taltex@taltex.co.uk">taltex@taltex.co.uk</a>	<a href="http://www.taltex.ae/">http://www.taltex.ae/</a>
TECHFAB INDIA INDUSTRIES LTD.	India	<a href="mailto:anant@techfabindia.com">anant@techfabindia.com</a>	<a href="http://www.techfabindia.com">www.techfabindia.com</a>
TECNOLOGIA DE MATERIALS S. A.	Peru	<a href="mailto:contactenosperu@tdm.com.pe">contactenosperu@tdm.com.pe</a>	<a href="http://www.tdm.com.pe">www.tdm.com.pe</a>
TEKNINDO GEOSISTEM UNGGUL, PT	Indonesia	<a href="mailto:info@geosistem.co.id">info@geosistem.co.id</a>	<a href="http://www.geosistem.co.id">www.geosistem.co.id</a>
TELE TEXTILES LATVIA	Latvia	<a href="mailto:mihaela@teletextiles.no">mihaela@teletextiles.no</a>	<a href="http://www.teletextiles.com">www.teletextiles.com</a>
TEMA TECHNOLOGIES AND MATERIALS SRL	Italy	<a href="mailto:nico-la.busatta@temacorporation.com">nico-la.busatta@temacorporation.com</a>	<a href="http://www.temacorporation.com">www.temacorporation.com</a>
TENAX S.P.A.	Italy	<a href="mailto:mariangela.motta@tenax.net">mariangela.motta@tenax.net</a>	<a href="http://www.tenax.net">www.tenax.net</a>
TENCATE GEOSYNTHETICS EUROPE GMBH	Austria	<a href="mailto:j.gruber@tencate.com">j.gruber@tencate.com</a>	<a href="http://www.tencate.com">www.tencate.com</a>
TENCATE GEOSYNTHETICS NORTH AMERICA	USA	<a href="mailto:j.henderson@tencate.com">j.henderson@tencate.com</a>	<a href="http://www.tencate.com">www.tencate.com</a>
TENSAR GEOSYNTHETICS (CHINA) LTD.	China (People's Republic)	<a href="mailto:David@tensar.com.cn">David@tensar.com.cn</a>	<a href="http://www.tensar.com.cn">www.tensar.com.cn</a>
TENSAR INTERNATIONAL CORPORATION	USA	<a href="mailto:icavanaugh@tensarcorp.com">icavanaugh@tensarcorp.com</a>	<a href="http://www.tensarcorp.com">www.tensarcorp.com</a>
TENSAR INTERNATIONAL LIMITED	United Kingdom	<a href="mailto:CRigby@tensar.co.uk">CRigby@tensar.co.uk</a>	<a href="http://www.tensar.co.uk">www.tensar.co.uk</a>
TERRAFIX	Canada	<a href="mailto:bherlin@terrefixgeo.com">bherlin@terrefixgeo.com</a>	<a href="http://www.terrefixgeo.com">http://www.terrefixgeo.com</a>

Company Name	Country	Contact Email	Website
			<a href="#">m/</a>
TERRAM	United Kingdom	<a href="mailto:sean.kearsley@avintiv.com">sean.kearsley@avintiv.com</a>	<a href="http://www.terram.com">www.terram.com</a>
TERRE ARMÉE INTERNATIONALE	France	<a href="mailto:nicolas.freitag@terre-armee.com">nicolas.freitag@terre-armee.com</a>	<a href="http://www.terre-armee.com">www.terre-armee.com</a>
TESSILBRENDA SRL	Italy	<a href="mailto:antonio.perissinotto@tessilbrenda.com">antonio.perissinotto@tessilbrenda.com</a>	<a href="http://www.tessilbrenda.it">www.tessilbrenda.it</a>
TEXINOV	France	<a href="mailto:jpducot@texinov.fr">jpducot@texinov.fr</a>	<a href="http://www.texinov.fr">www.texinov.fr</a>
TEXOFIB	Saudi Arabia	<a href="mailto:ctic@cticltd.com">ctic@cticltd.com</a>	<a href="http://www.texofib.com">www.texofib.com</a>
THRACE NONWOVENS & GEOSYNTHETICS	Greece	<a href="mailto:papagiannis@thraceplastics.gr">papagiannis@thraceplastics.gr</a>	<a href="http://www.thraceplastics.gr">www.thraceplastics.gr</a>
TITAN ENVIRONMENTAL CONTAINMENT	Canada	<a href="mailto:john@titanenviro.ca">john@titanenviro.ca</a>	<a href="http://www.titanenviro.ca">www.titanenviro.ca</a>
TOKYO PRINTING INK MFG.CO.LTD.	Japan	<a href="mailto:dobokugijyutu@tokyoink.co.jp">dobokugijyutu@tokyoink.co.jp</a>	<a href="http://www.tokyoink.co.jp">www.tokyoink.co.jp</a>
TOKYU CONSTRUCTION CO. LTD.	Japan	<a href="mailto:tomita.yuuichi@tokyu-cnst.co.jp">tomita.yuuichi@tokyu-cnst.co.jp</a>	<a href="http://www.tokyu-cnst.co.jp">www.tokyu-cnst.co.jp</a>
TRI/ENVIRONMENTAL INC.	USA	<a href="mailto:sallen@tri-env.com">sallen@tri-env.com</a>	<a href="http://www.tri-env.com">www.tri-env.com</a>
UNITED GEOSYNTHETICS (THAILAND)	Thailand	<a href="mailto:unitedgeo.t@gmail.com">unitedgeo.t@gmail.com</a>	
URETEK	Italy	<a href="mailto:alberto.paschetto@uretek.it">alberto.paschetto@uretek.it</a>	<a href="http://www.uretek.it">www.uretek.it</a>
VIETNAM GEOTEXTILES JOINT STOCK COMPANY	Vietnam	<a href="mailto:amshanoi@gmail.com">amshanoi@gmail.com</a>	
VIGANÒ PAVITEX S.P.A.	Italy	<a href="mailto:m.resmini@pavitex.com">m.resmini@pavitex.com</a>	<a href="http://www.pavitex.com">www.pavitex.com</a>
VIGOR MERGER	Thailand	<a href="mailto:weeraya-d@vigormerger.com">weeraya-d@vigormerger.com</a>	<a href="http://www.civilmastergroup.com/vigor_merger.html">http://www.civilmastergroup.com/vigor_merger.html</a>
WESTERN ENVIRONMENTAL LINER	USA	<a href="mailto:shane@westernliner.com">shane@westernliner.com</a>	<a href="http://www.westernliner.com">www.westernliner.com</a>



## 6<sup>th</sup> EUROPEAN GEOSYNTHETICS CONGRESS 25 - 28 September 2016 - ISTANBUL, TURKEY



## 6<sup>th</sup> Asian Regional Conference on Geosynthetics Geosynthetics for Infrastructure Development 8-11 November 2016, New Delhi [India]

---

# IGS News Publisher, Editor and Chapter Correspondents

---

## IGS News is published by:

International Geosynthetics Society  
Office of the Secretariat:  
The International Geosynthetics Society  
1934 Commerce Lane, Suite #4  
Jupiter, FL 33458 USA  
TEL: +1.561.768.9489 FAX: +1.561.828.7618  
Email: [IGSsec@geosyntheticssociety.org](mailto:IGSsec@geosyntheticssociety.org)

## IGS News Editor

Gerhard Bräu  
Technische Universität München–Zentrum Geotechnik  
Baumbachstrasse 7, 81245 München, Germany  
Tel: +49-89-289-27139, Fax: +49-89-289-27189  
Email: [g.braeu@tum.de](mailto:g.braeu@tum.de)

## Editorial Board

Sam Allen, Chair of IGS Communication Committee  
Gary Fowmes, Vice Chair of IGS UK Chapter  
Erol Güler, Chair of IGS News Council Task Force  
Russel Jones, IGS President  
Chris Kelsey, [geosynthetic.net](http://geosynthetic.net)  
Irene Nyirenda, IGS Young Members Committee  
Elizabeth Peggs, IGS Secretary  
Kent von Maubeuge, Chair of IGS Corporate Members Committee

## IGS News Chapter Correspondents and contact persons

Argentina	Verónica Rocío Moratto	<a href="mailto:rocio.moratto@uns.edu.ar">rocio.moratto@uns.edu.ar</a>
Australasia	Graham Fairhead	<a href="mailto:gfairhead@fabtech.com.au">gfairhead@fabtech.com.au</a>
Belgium	Frans De Meerleer	<a href="mailto:frans.texion@skynet.be">frans.texion@skynet.be</a>
Brazil	André Estêvão Silva	<a href="mailto:tesouraria@igsbrasil.org.br">tesouraria@igsbrasil.org.br</a>
Chile	Fernando Castillo	<a href="mailto:castillofernando072@gmail.com">castillofernando072@gmail.com</a>
China	Chao Xu	<a href="mailto:c_axu@tongji.edu.cn">c_axu@tongji.edu.cn</a>
Colombia	Natalia Erasso	<a href="mailto:geosinteticos.colombia@gmail.com">geosinteticos.colombia@gmail.com</a>
Czech Republic	Petr Hubik	<a href="mailto:igs@igs.cz">igs@igs.cz</a>
Finland	Minna Leppänen	<a href="mailto:minna.leppanen@tut.fi">minna.leppanen@tut.fi</a>
France	Nathalie Touze-Foltz	<a href="mailto:nathalie.touze@irstea.fr">nathalie.touze@irstea.fr</a>
Germany	Gerhard Bräu	<a href="mailto:g.braeu@bv.tum.de">g.braeu@bv.tum.de</a>
Ghana	John Kemah	<a href="mailto:jkkemeh@hotmail.com">jkkemeh@hotmail.com</a>
Greece	Anastasios Kollios	<a href="mailto:akollios@edafomichaniki.gr">akollios@edafomichaniki.gr</a>
Honduras	Alex Galindo	<a href="mailto:alexgalindom@gmail.com">alexgalindom@gmail.com</a>
India	A.C. Gupta	<a href="mailto:acgupta@cbip.org">acgupta@cbip.org</a>
Indonesia	Amelia Makmur	<a href="mailto:ameliamakmur@gmail.com">ameliamakmur@gmail.com</a>
Iran	Hosein Ghasinedjad	<a href="mailto:hoseingh@yahoo.com">hoseingh@yahoo.com</a>
Italy	Laura Carbone	<a href="mailto:Lauracarbon86@gmail.com">Lauracarbon86@gmail.com</a>
Japan	Jun Otani	<a href="mailto:junotani@kumamoto-u.ac.jp">junotani@kumamoto-u.ac.jp</a>
Kazakhstan	Assel Tulebekova	<a href="mailto:krasavka5@mail.ru">krasavka5@mail.ru</a>
Korea	Myoung-Soo Won	<a href="mailto:wondain@kunsan.ac.kr">wondain@kunsan.ac.kr</a>
Malaysia	Daniel Tan	<a href="mailto:dtan@solmax.com">dtan@solmax.com</a>
Mexico	Ana Ferraez	<a href="mailto:anaferraez@gmail.com">anaferraez@gmail.com</a>
Morocco		
the Netherlands	Shaun O'Hagan	<a href="mailto:s.ohagan@planet.nl">s.ohagan@planet.nl</a>
North America	L. David Suits	<a href="mailto:Nagsdirector05@gmail.com">Nagsdirector05@gmail.com</a>
Norway	Aina Anthi	<a href="mailto:aina.anthi@vegvesen.no">aina.anthi@vegvesen.no</a>
Pakistan		
Panama	Alexis Vergara	<a href="mailto:avergara@maccaferri.co.cr">avergara@maccaferri.co.cr</a>
Peru	Augusto Alza	<a href="mailto:aalza@grupotdm.com">aalza@grupotdm.com</a>
Philippines	Mark Morales	<a href="mailto:mark.k.morales@gmail.com">mark.k.morales@gmail.com</a>
Poland	Jacek Kawalec	<a href="mailto:jacek.kawalec@vp.pl">jacek.kawalec@vp.pl</a>
Portugal	Castorina Silva Vieira	<a href="mailto:cvieira@fe.up.pt">cvieira@fe.up.pt</a>
Romania	Andrei Olteanu	<a href="mailto:adiol@utcb.ro">adiol@utcb.ro</a> / <a href="mailto:olteanu.andrei@gmail.com">olteanu.andrei@gmail.com</a>
Russia	Vladimir Klevko	<a href="mailto:vlivkl@mail.ru">vlivkl@mail.ru</a>
Slovakia	Rado Baslik	<a href="mailto:radobaslik@gmail.com">radobaslik@gmail.com</a>
South Africa	Johann Le Roux	<a href="mailto:secretary@gigsa.org">secretary@gigsa.org</a>
Spain	Pedro L. Abad	<a href="mailto:Pedro.Abad@cetco.es">Pedro.Abad@cetco.es</a>
Thailand	Tawatchai Tanchaisawat	<a href="mailto:tawatchai.t@gmail.com">tawatchai.t@gmail.com</a> / <a href="mailto:igs-thailand@ait.ac.th">igs-thailand@ait.ac.th</a>
Turkey	Orkun Akkol	<a href="mailto:orkunakkol@orientresearch.com">orkunakkol@orientresearch.com</a>
United Kingdom	Gary Fowmes	<a href="mailto:G.J.Fowmes@lboro.ac.uk">G.J.Fowmes@lboro.ac.uk</a>
Vietnam	Tran Viet Hung	<a href="mailto:tranviethung@utc.edu.vn">tranviethung@utc.edu.vn</a>
West Pacific	Chung Lu Yuan	<a href="mailto:yuancl@mail.sinotech.com.tw">yuancl@mail.sinotech.com.tw</a>

---

## IGS Council

---

### Elected in 2014

Ian Fraser (UK)  
Chiwan Wayne Hsieh (Taiwan)  
Takeshi Katsumi (Japan)  
K. Rajagopal (India)  
Pietro Rimoldi (Italy)  
Nathalie Touze-Foltz (France)

### Co-opted in 2014

Jacques Cote (Canada)  
Jacek Kawalec (Poland)  
Flavio Montez (Brazil)  
Elizabeth Peggs (USA)

### Co-opted in 2012

M. Ziegler (Germany)

### Invited, non-voting members

Sam Allen (USA)  
Gerhard Bräu (Germany)  
Chao Xu (P.R.China)  
Edoardo Zannoni (South Africa)

### Elected in 2012

D.T. Bergado (Thailand)  
Erol Guler (Turkey)  
Warren Hornsey (Australia)  
Jiro Kuwano (Japan)  
Nicola Moraci (Italy)  
Victor Pimentel (Brazil)  
Boyd Ramsey (USA)  
Kent von Maubeuge (Germany)

---

## IGS Officers

---

### President

Dr. Russell Jones  
Golder Associates (UK) Limited  
Attenborough House,  
Browns Lane Business Park,  
Stanton-on-the-Wolds, Nottingham-  
shire, NG12 5BL  
UNITED KINGDOM  
Tel: 44 115 937 1111  
Fax: 44 115 937 1100  
Email: [rjones@golder.com](mailto:rjones@golder.com)

### Vice-President

Prof. Chungsik Yoo  
Sungkyunkwan University  
Dept. of Civil & Envir. Engr. Pro-  
fessor  
300 Chun-chun Dong, Jan-An Gu  
Suwon, Kyong-Gi Do 440-746  
KOREA  
Tel: 82 031 290 7518  
Fax: 82 031 290 7549  
Email: [csyoo@skku.edu](mailto:csyoo@skku.edu)

### Immediate Past-President

Jorge G. Zornberg, PhD., P.E.  
The University of Texas at Austin  
Civil, Architectural & Environmental  
Engineering Department  
1 Univ. Station C1792  
Rm ECJ9, 227G  
Austin, Texas 78712-0280 USA  
Tel: 1/512 232 3595  
Fax: 1/512 471 6548  
Email: [zornberg@mail.utexas.edu](mailto:zornberg@mail.utexas.edu)

### Treasurer

Peter Legg  
Consulting Principal,  
Geo-Environmental Engineers  
28 8th Avenue  
Northmead  
Benoni, 1501  
SOUTH AFRICA  
Tel: 27 (0)11 425 1197  
Fax: 27 (0)11 425 1197  
Email: [peterlegg@telkomsa.net](mailto:peterlegg@telkomsa.net)

### Secretary

Elizabeth Peggs  
[geosynthetica.net](http://geosynthetica.net)  
1934 Commerce Lane, Suite 4  
Jupiter, Florida, USA 33458  
Tel +1 561 768-9487  
Fax +1 561 828 7618  
Email: [elizabeth@geosynthetica.net](mailto:elizabeth@geosynthetica.net)

**Visit the IGS Website:**

[www.geosyntheticssociety.org](http://www.geosyntheticssociety.org)

**IGS MEMBERSHIP REQUIRES ELECTRONIC COMMUNICATION –  
PLEASE ENSURE WE HAVE YOUR CURRENT E-MAIL ADDRESS!**



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 24)!  
 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:

The International Geosynthetics Society, 1934 Commerce Lane,  
 Suite #4, Jupiter, FL 33458, USA  
 TEL: +1.561.768.9489 FAX: +1.561.828.7618  
 Email: [IGSsec@geosyntheticssociety.org](mailto:IGSsec@geosyntheticssociety.org)

Attach your business card or fill in your address (print or type if possible), as you wish it to appear in the next IGS Membership Directory.

Title (circle one): Mr. Ms. Dr. Prof. Other: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Email: \_\_\_\_\_

Company, Division, Function (if applicable): \_\_\_\_\_

Eligibility (connection with geotextiles, geomembranes, related products or associated technologies): \_\_\_\_\_

Position/Title: \_\_\_\_\_

Keyword (up to 25): \_\_\_\_\_

Address (Street or Postal Box): \_\_\_\_\_

Membership fee: Individual (US) \$ 45,  
 Corporate (US) \$1000,  
 Benefactor (minimum (US) \$ 200

City: \_\_\_\_\_ Province/State: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_

## Calendar of Events

Event	Location	Date	E-Mail, Website
<b>3<sup>rd</sup> PanAmerican Regional Conference on Geosynthetics – GeoAmericas 2016</b>	<b>Miami South Beach, USA</b>	<b>10 - 13 Apr 2016</b>	<b><a href="mailto:NAGSDirector05@gmail.com">NAGSDirector05@gmail.com</a> <a href="mailto:epiggs@minervatri.com">epiggs@minervatri.com</a> <a href="http://www.GeoAmericas2016.org">www.GeoAmericas2016.org</a></b>
IX international Scientific and Technical Conference – Waterproofing and Roofing Materials	Moskau, Russia	27 – 28 Apr 2016	<a href="mailto:events@alitinform.ru">events@alitinform.ru</a> <a href="http://infocem.info/">http://infocem.info/</a> , <a href="http://aquastop.ru">http://aquastop.ru</a>
First South African Geotechnical Conference	Sun City, South Africa	05 - 06 May 2016	<a href="mailto:info@geotechnicaldivision.co.za">info@geotechnicaldivision.co.za</a> <a href="http://www.geotechnicaldivision.co.za">www.geotechnicaldivision.co.za</a>
Underground Construction Prague 2016	Prague, Czech Republic	23 - 25 May 2016	<a href="mailto:ps2016@satra.cz">ps2016@satra.cz</a> <a href="http://www.ucprague.com">http://www.ucprague.com</a>
NGM 2016, The Nordic Geotechnical Meeting	Reykjavik, Iceland	25 - 28 May 2016	<a href="mailto:has@vegagerdin.is">has@vegagerdin.is</a> <a href="http://www.ngm2016.com">www.ngm2016.com</a>
International Mini Symposium Chubu (IMS-Chubu)	Nagoya, Aichi, Japan	26 - 28 May 2016	<a href="mailto:kokusai@jiban.or.jp">kokusai@jiban.or.jp</a> <a href="http://www.jiban.or.jp/index.php?option=com_content&amp;view=article&amp;id=1737:2016052628&amp;catid=16:2008-09-10-05-02-09&amp;Itemid">www.jiban.or.jp/index.php?option=com_content&amp;view=article&amp;id=1737:2016052628&amp;catid=16:2008-09-10-05-02-09&amp;Itemid</a>
SEAGC2016	Subang Jaya, Selangor, Malaysia	31 May - 03 Jun 2016	<a href="mailto:seagc2016@gmail.com">seagc2016@gmail.com</a> / <a href="mailto:choy.iemtc@gmail.com">choy.iemtc@gmail.com</a> <a href="http://www.mygeosociety.org/SEAGC2016">www.mygeosociety.org/SEAGC2016</a>
Fourth International Conference on New Developments in Soil Mechanics and Geotechnical Engineering	Nicosia, North Cyprus, Turkey	02 - 04 Jun 2016	<a href="mailto:zm2016@neu.edu.tr">zm2016@neu.edu.tr</a> , <a href="mailto:zm2016@kibris.net">zm2016@kibris.net</a> <a href="http://zm2016.neu.edu.tr/">http://zm2016.neu.edu.tr/</a>
12 <sup>th</sup> International Symposium on Landslides	Naples, Italy	12 - 19 Jun 2016	<a href="mailto:agi@associazionegeotecnica.it">agi@associazionegeotecnica.it</a> <a href="http://www.isl2016.it">www.isl2016.it</a>
1 <sup>st</sup> International Conference on Natural Hazards & Infrastructure: Protection, Design, Rehabilitation	Chania, Crete, Greece	28 - 30 Jun 2016	<a href="mailto:secretary@iconhic2016.com">secretary@iconhic2016.com</a> <a href="http://iconhic2016.com/">http://iconhic2016.com/</a>
GeoChina 2016	Shandong, China	25 - 27 Jul 2016	<a href="mailto:geochina.sec@gmail.com">geochina.sec@gmail.com</a> <a href="http://geochina2016.geoconf.org/">http://geochina2016.geoconf.org/</a>
8 <sup>th</sup> Asian Young Geotechnical Engineering Conference (8 AYGEC)	Astana, Kazakhstan	05 - 07 Aug 2016	<a href="mailto:astana-geostroi@mail.ru">astana-geostroi@mail.ru</a> <a href="http://kgs-astana.wix.com/8aygec">http://kgs-astana.wix.com/8aygec</a>
5 <sup>th</sup> African Young Geotechnical Engineering Conference	Kumasi, Ghana	10 - 12 Aug 2016	<a href="mailto:5aygec16@gmail.com">5aygec16@gmail.com</a>
1 <sup>st</sup> International Conference on Energy Geotechnics ICEGT 2016	Kiel, Germany	29 - 31 Aug 2016	<a href="mailto:secretary@icegt-2016.de">secretary@icegt-2016.de</a> <a href="http://www.iceg-2016.de/">http://www.iceg-2016.de/</a>
3 <sup>rd</sup> ICTG International Conference on Transportation Geotechnics	Guimaraes, Portugal	04 - 07 Sep 2016	<a href="mailto:agc@civil.uminho.pt">agc@civil.uminho.pt</a> <a href="http://www.webforum.com/tc3">www.webforum.com/tc3</a>
Fifth International Conference on Geotechnical and Geophysical Site Characterisation (ISC'5)	Gold Coast, QLD, Australia	05 - 09 Sep 2016	<a href="mailto:hannah@laevents.com.au">hannah@laevents.com.au</a> <a href="http://www.isc5.com.au">www.isc5.com.au</a>
13 <sup>th</sup> Baltic States Geotechnical Conference	Vilnius, Lithuania	15 - 17 Sep 2016	<a href="mailto:danute.slizyte@vgtu.lt">danute.slizyte@vgtu.lt</a> <a href="http://www.13bsqc.lt">www.13bsqc.lt</a>
<b>EuroGeo 6 – European Regional Conference on Geosynthetics</b>	<b>Istanbul, Turkey</b>	<b>25 – 29 Sep 2016</b>	<b><a href="mailto:info@eurogeo6.org">info@eurogeo6.org</a> <a href="http://www.eurogeo6.org">www.eurogeo6.org</a></b>
69 <sup>th</sup> Annual Canadian Geotechnical Conference - GeoVancouver2016	Vancouver, British Columbia, Canada	02 - 05 Oct 2016	<a href="mailto:mzergoun@thurber.ca">mzergoun@thurber.ca</a> <a href="http://www.geovancouver2016.com">http://www.geovancouver2016.com</a>
9 <sup>th</sup> All-Ukrainian Scientific-Technical Conference “Soil Mechanics, Geotechnics and Foundation Engineering”: “Geotechnical Innovations and Implementation of Eurocodes in Ukraine”	Dnipropetrovsk, Ukraine	11 - 13 Oct 2016	<a href="mailto:iepi@pgasa.dp.ua">iepi@pgasa.dp.ua</a> <a href="http://www.niisc.com">www.niisc.com</a>
XVIII Brazilian Conference on Soil Mechanics and Geotechnical Engineering - COBRAMSEG 2016	Belo Horizonte, MG, Brazil	19 - 22 Oct 2016	<a href="mailto:contato@cobramseg2016.com.br">contato@cobramseg2016.com.br</a> <a href="http://www.cobramseg2016.com.br/">http://www.cobramseg2016.com.br/</a>
SFGE 2016 – Shaping the Future of Geotechnical Education – International Conference on Geo-Engineering Education	Belo Horizonte, MG, Brazil	20 - 22 Oct 2016	<a href="mailto:sfge2016@cobramseg2016.com.br">sfge2016@cobramseg2016.com.br</a> / <a href="mailto:michele.calvello@gmail.com">michele.calvello@gmail.com</a> <a href="http://cobramseg2016.com.br/index.php/sfge-sobre/?lang=en">http://cobramseg2016.com.br/index.php/sfge-sobre/?lang=en</a>
V South American Young Geotechnical Engineers Conference - SAYGEC/GEOJOVEM 2016	Belo Horizonte, MG, Brazil	20 - 22 Oct 2016	<a href="mailto:geojovem@cobramseg2016.com.br">geojovem@cobramseg2016.com.br</a> <a href="http://www.cobramseg2016.com.br">http://www.cobramseg2016.com.br</a>

Event	Location	Date	E-Mail, Website
<b>6<sup>th</sup> Asian Regional Conference on Geosynthetics</b>	<b>New Delhi, India</b>	<b>08 - 11 Nov 2016</b>	<a href="mailto:uday@cbip.org">uday@cbip.org</a> <a href="http://www.geosyntheticsasia.in">www.geosyntheticsasia.in</a>
5 <sup>th</sup> International Conference on Geotechnical Engineering and Soil Mechanics	Tehran, Iran	14 - 16 Nov 2016	<a href="mailto:info@igs.ir">info@igs.ir</a> <a href="http://www.igs.ir">www.igs.ir</a>
<b>Geotechnical Frontiers</b>	<b>Orlando, Florida, USA</b>	<b>12 – 15 Mar 2017</b>	<a href="mailto:bjconnett@ifai.com">bjconnett@ifai.com</a>
GEOS PERÚ 2017 - IV National Conference on Geosynthetics	Lima, Peru	March 2017 (data not yet fixed)	<a href="mailto:presidencia@igsperu.org">presidencia@igsperu.org</a> ; <a href="mailto:asistentedpresidencia@igsperu.org">asistentedpresidencia@igsperu.org</a>
BCRRA 2017 - Tenth International Conference on the Bearing Capacity of Roads, Railways and Airfields.	Athens, Greece	28 - 30 Jun 2017	<a href="mailto:aloizos@central.ntua.gr">aloizos@central.ntua.gr</a> <a href="http://www.bcrra2017.com/">http://www.bcrra2017.com/</a>
GeoMEast 2017	Sharm El-Sheikh, Egypt	15 - 19 Jul 2017	<a href="mailto:hanyfarouk808@gmail.com">hanyfarouk808@gmail.com</a> <a href="http://www.geomeast2017.org/">http://www.geomeast2017.org/</a>
PBD-III Vancouver 2017 - The 3rd International Conference on Performance Based Design in Earthquake Geotechnical Engineering	Vancouver, British Columbia, Canada	16 - 19 Jul 2017	<a href="http://pbdiivancouver.com/">http://pbdiivancouver.com/</a>
ICSMGE 2017 - 19 <sup>th</sup> International Conference on Soil Mechanics and Geotechnical Engineering	Seoul, Korea	17 - 21 Sep 2017	<a href="mailto:secretariat@icsmge2017.org">secretariat@icsmge2017.org</a> <a href="http://www.icsmge2017.org">http://www.icsmge2017.org</a>
The 7 <sup>th</sup> International Conference on Unsaturated Soils (UNSAT2018)	Hong Kong, China	03 - 05 Aug 2018	<a href="mailto:unsat2018@ust.hk">unsat2018@ust.hk</a> <a href="http://www.unsat2018.org">http://www.unsat2018.org</a>
<b>11th International Conference on Geosynthetics (11ICG)</b>	<b>Seoul South Korea</b>	<b>16 - 20 Sep 2018</b>	<a href="mailto:csyoo@skku.edu">csyoo@skku.edu</a>
ECSMGE 2019 – XVII European Conference on Soil Mechanics and Geotechnical Engineering	Reykjavik, Iceland	01 - 06 Sep 2019	<a href="mailto:has@road.is">has@road.is</a> <a href="http://www.ecsmge-2019.com">http://www.ecsmge-2019.com</a>

Note:

The conference announcements are shown with different graphics due to their priority for IGS:

**IGS Conference**

**Conference organized under the auspices of the IGS**

**Conference under the auspices or with the support of an IGS Chapter**