

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

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2008 – A very busy year for IGS

eight years of service as Editor of IGS News.

Yes, 2008 is a very busy year for IGS, not only for the election of eight available IGS Council members positions, that will take place from April 1 till May 31 (see biographies of the 11 candidates on page 4 of this issue), but also for the highly visible activities at both the professional, cultural and promotional levels, in particular with the organisation of the IGS Regional Conferences and Exhibitions in the Americas, in Asia, in Europe and in Africa.

GeoAmericas 2008 already took place in Cancun, Mexico from 2 to 5 March (see article on page 11 of this issue). As generator of the concept of a Pan-American conference on geosynthetics during my four years of IGS presidency, I'm deeply proud of the resounding success of the event and I wish to express my sincere thanks to the Organising Committee, chaired by IGS Vice President Jorge Zornberg, to IFAI (Industrial Fabrics Association International) and to the IGS chapters actively involved, NAGS, IGS Brasil, IGS Perù, IGS Chile and IGS Mexico. The next IGS Pan-American

First of all, as chair of the IGS

Communication Committee, I'd like

to give a warm welcome to Gerhard

Bräu, in occasion of his first issue as

Editor of IGS News. Thanks again to

Karina McInnis for her outstanding

Geosynthetics Conference and Exhibition (GeoAmericas 2012) will take place in Lima, Perù in 2012.

Geosynthetics Asia 2008 The 4th Asian Regional Conference and Exhibition on Geosynthetics will take place from 17 to 20 June 2008 in Shanghai, China (see article on page 14 of this issue). The conference theme is Geosynthetics in Civil and Environmental Engineering. The location of Geosynthetics Asia 2012, the 5th Asian Regional Conference to be held in 2012 will be announced in Shanghai.

EuroGeo 4 the 4th *European Geosynthetics Conference and Exhibition* will be from 7 to 10 September 2008 in Edinburgh, Scotland, United Kingdom (see article at page 15 of this issue). The conference will debate the subject of *Geosynthetics in Civil Engineering Applications*. The location of EuroGeo 5, the 5th European Regional Conference to be held in 2012 will be announced in Edinburgh.

Finally, the new entry in the regional conferences is represented by *GeoAfrica 2009* the *First African Regional Conference on Geosynthetics* that will take place from 2 to 4 September 2009 in Cape Town, South Africa (see article on page 16 of this issue).

I'm particularly proud of this new event in the African continent, as generator of this idea during my first visit to South Africa in October 2004: I'm really confident that the friends of GIGSA, the IGS Chapter in South Africa, will be able to attract a lot of interest towards the new opportunities given by geosynthetics technologies from the entire African region.

This means that in 18 months (March 2008 – September 2009) we are having our four Regional Conferences at a world-wide level: I think that this time interval will be perfectly adequate also for the organisation of the four regional conferences that will take place around 2012.

Besides the regional conferences already mentioned, in 2008 we will have two specific conferences with the IGS auspices.

The first one, will be *Geo-Environmental Engineering 2008 (GEE 2008)* that will take from 12 to 14 June 2008 in Kyoto, Japan, and will be mainly devoted to environmental items (see article on page 14 of this issue).

The second one will be the *International Conference commemorating the 1908 Messina and Reggio Calabria earthquake (MERCEA'08)* that will take place from 8 to 11 July 2008 in Reggio Calabria, Italy and will be devoted to seismic issues (see article on page 15 of this issue).

Both conferences typically represent a good example of interdisciplinary events, in which geosynthetics en-

President's Corner

Conferences attended as representative of IGS

- Fukuoka, Japan, 14 16 November 2007 | participated in the 5th Int. Sym. on Earth Reinforcement, IS Kyushu, held under the auspices of the IGS and other organizations where I met a number of IGS colleagues. Interesting and stimulating discussions were made on bridge abutments with reinforced backfill between two groups working on geosythetic reinforced soil (GRS), retaining walls and steel-reinforced soil retaining walls.
- Bangkok, Thailand, 6 & 7 December 2007 | attended the Int. Sym. on Geotechnical Engi-

gineering will play an important role, thus giving a clear evidence of the vitality of our sector.

In conclusion for the conference related aspects, I have the pleasure to announce that the organisation of the 9th International Conference on Geosynthetics (Guarujà, Brazil, 23 – 27 May 2010) has already successfully started (see article on page 16 of this issue). In fact, in Cancun the first meetings of the International Advisory and Scientific Committees and of the International Promotion Committee took place, the 9th ICG logo was presented and the first bulletin was circulated.

Finally, on behalf of the IGS Officers and Council, I like to express a warm welcome to two new chapters (29th and 30th in chronological order) officially approved in Cancun: the new IGS Chapter in Russia and the new IGS Chapter in Norway (see report on the IGS Council at page 7 of this issue). Thank you very much for joining the geosynthetics community!

Reported by Daniele Cazzuffi, IGS Immediate Past President

neering Ground Improvement and Geosynthetics for Human Security and Environmental preservation, organised by Prof. Dennes Bergado where I delivered a keynote lecture on "Integral Bridge System with Geosynthetic-Reinforced Backfill".

• Kolkata, India, 9 - 14 December 2007 I also participated in the 13th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering. A number of interesting papers of Geosynthetics Engineering were presented. One of the highlights to me was the keynote lecture by Prof. Junichi Koseki of the University of Tokyo, on "Stability of earth structures against seismic loads." He reported a number of case



Fumio Tatsuoka

In the following article I have listed several events that happened between the end of October 2007 and April 1st 2008. Despite not all being IGS official activities I think they may be of interest for IGS members as the events are related to *Geosynthetics Engineering*.

histories showing geosynthetic-reinforced soil structures (i.e. embankments having steep slopes and retaining walls) that were constructed replacing conventional type soil structures which totally failed during a couple of recent major earthquakes in Japan. He clearly showed that this technology is now accepted by many civil engineers in Japan to construct highly cost-effective soil structures which can survive very high seismic loads.

Articles to promote IGS

 Together with Dr B. Simpson, UK, I wrote an article titled by "Geotechnics - The next 60 years" to be published in the Geotechnique 60th Birthday Issue, June 2008. In this articleamong other geotechnical issues that will become important in the upcoming years, it is emphasized that "more resourceful use of fill materials is envisaged, with ground improvement and geosynthetics plaving important roles in coming years." It is also stated that "Ground improvement will be critically important in future geotechnical practice" for, among others, "cost-effective solutions of environmental issues, including treatment and recycling of industrial and urban wastes, waste disposal in landfill, and prevention of ground water pollution and continued research and development of geosynthetics is anticipated." My co-author agreed with my view which is included in this article for a journal that is the internationally leading geotechnical journal.

Upcoming IGS events

• In the 4th Asian Regional Conference on Geosynthetics (Geosynthetics Asia 2008, 16 - 20 June 2008, in Shanghai, China), I will deliver a special lecture on the topic of geosynthetic reinforced soil structures emphasizing that this technology is a cost-effective solution based on a strong standing that two engineering disciplines, Material Engineering, specific to polymer materials, and Geotechnical Engineering are combined. I discussed this issue in Editorial of the IGS News, Vol. 23, No. 3, November 2007.

Invitations to other events

- I received a letter from one of our IGS colleagues, Prof. Georg Heerten, inviting me on the behalf of German Geotechnical Society to present a keynote lecture at the next German Geotechnical Conference as a jubilee event (30th Baugrundtagung, 24 - 27 September 2008, Dortmund). I will talk on "the Japanese state-ofthe-art on geosynthetic reinforced earth structures" in the morning of 26th September 2008. This is a great honor to me and I will do my best to report my experiences with the development and practice of geosynthetic reinforced soil structures and its perspective in Japan.
- I received an invitation letter from the Mexican Society for Soil Mechanics to deliver the 19th Carrillo Lecture on 29nd November 2008 on the occasion of the 24th National Meeting of Soil Mechanics to be held in the city of Aguascalientes 27 - 29 November 2008. This is a very prestigious honor for me, taking into account that the past lectures were presentedby Casagrande, Peck, Kézdi. Lowe, Marsal, Hendron, Zeevaert- Wiechers, Seed and recently Mitchell, who are all great names. I chose the topic: "Geosynthetic reinforced soil structures: a cost- effective solution combining two engineering disciplines". Despite the topic being the same as the one of my special lecture at the 4th Geosynthetics Asia, Shanghai, June, 2008, I will re-organize the content of the lecture so that civil engineers working outside the Geosynthetics Engineering community can easily understand. I sincerely hope that this lecture can be a good opportunity to disseminate Geosynthetics Engineering and the IGS in Mexico.

So, 2008 will become a busy year for me and IGS which is celebrating its 25th anniversary.

Fumio Tatsuoka IGS President

Announcing the Candidates for the IGS Council Term 2008 to 2012

A total of 11 candidates have declared their intention to run for one of the eight available IGS Council positions. Three of these candidates are standing for re-election:

- A. Bouazza (Australia),
- P. Fantini (Italy) and
- M. Sadlier (Australia).

The remaining eight candidates standing for election are as follows:

- D. T. Bergado (Thailand),
- S. Biswas (India),
- H.-Y. Jeon (Korea),
- R. Jones (UK),
- J. Kuwano (Japan),

- V. Pimentel (Brasil),
- M. de la Torre (Peru) and
- M. Ziegler (Germany).

The IGS bylaws stipulate that a Council Member may only serve two consecutive four-year terms thus the following individuals were not eligible to run as candidates in this Council election: B. Myles (UK) and M. Kamon (Japan).

Biographies of the candidates follow. IGS Members are asked to carefully read the biographical information and consider the merits of the individual candidates with respect to geographical location and background. It is important that the IGS Council be comprised of motivated individuals who reflect the geographical breadth of the Society and the wide range of disciplines and experience associated with the Society.

Note:

Eligible members will receive an email from the IGS Secretary directing them to the electronic ballot.

Candidates for IGS Council Membership

Dennes T. Bergado (Thailand)



Prof. Bergado joined the faculty of the Asian Institute of Technology in 1982 and picked up the subject of ground improvement and geosynthetic as a new field of research. He had realized correctly that there was a gap in the capabilities of the local construction industry and consulting firms as far as ground improvement and geosynthetics were concerned. At the same time large infrastructure projects were about to start and for many of these, alternative construction techniques could turn out to be economically attractive. Prof. Bergado developed research programs on Prefabricated Vertical Drains (PVDs). Geotextiles. Geogrids. Geomembranes, etc. and was successful in attracting interested sponsors, many of them manufacturers, suppliers and users of geosynthetic products. In 1998, he set up the Asian Center for Soil Improvement and Geosynthetics (AC-SIG), a research laboratory for geosynthetic testing and slowly these products found their way into actual construction projects. There are now more than 10 manufacturers of geosynthetic products in Thailand. Many AIT graduate students have contributed to the research and applications of geosynthetics and ground improvement methods. In 2001, Prof. Bergado was largely instrumental in the founding of IGS-Thailand Chapter and is currently serving the second term as its President for the year 2006 to 2008. The Secretariat of IGS-Thailand is hosted by ACSIG. IGS-Thailand also publishes its own Newsletter serving its own members.

Somnath Biswas (India)



Mr. Somnath Biswas is a graduate in Civil Engineering, a Chartered Engineer and a Post Graduate in Management Studies. He has over 15 years of experience in Construction Products, particularly Geosynthetics and allied projects in design, construction. instrumentation studies and failure remediation for MSE Walls and Reinforced Slope Applications. He is currently the Managing Director of Reinforced Earth India Pvt. Limited, a subsidiary company of the Freyssinet Group, France. Mr. Somnath Biswas represented the IGS - Indian Chapter as the Member - Executive Board in two terms from 2001 to 2006, with involvement in policy matters of the IGS India Chapter. He also served the Bureau of Indian Standards, as company representative member (AIMIL) for Geosynthetics sectional committee WRD 25, devoted to the constitution of BIS code of practice for Geosynthetics in laboratory and testing. natural geotextile field specifications and applications, and MSEW and slopes from 2002 to 2006. He has several publications at various national and international conferences and seminars on case histories of MSEW and Reinforced Slopes.

Abdelmalek Bouazza (Australia)



Dr. Abdelmalek Bouazza is an Associate Professor in Geotechnical Engineering and Head of the Ge-

omechanics Group at Monash University, Melbourne, Australia. He received his Diploma in Civil Engineering in 1984 from the Ecole Nationale Polytechnique d'Alger (Algeria) and his Ph.D. in 1990 from the University of Glasgow (U.K). Dr. Bouazza has been conducting research on geosynthetics for the past 20 years, with particular emphasis on environmental applications. He has authored/ co-authored more than 180 papers and serves on a number of national and international technical committees. Currently, he is the Vice-President of the Australasian Chapter of IGS and co-chair of the IGS Education Committee and the Asian Activities committee, respectively. He is a core-member of ISSMGE TC5 (Environmental Geotechnics), a member of Standard Australia Committee on Geosynthetics, and Editorial Board Member of Geotextiles & Geomembranes and Geosynthetics International. If re-elected to the Council, he would like to continue to take an active role in the IGS and to promote the use of geosynthetics in various part of the world.

Pierpaolo Fantini (Italy)



Pierpaolo Fantini obtained in 1982 the Engineering Degree at the University of Trieste, Italy. He has been involved in developing design and construction technique with geosynthetics for civil and geotechnical projects in Italy, Slovenia and Croatia, particularly in soil reinforcement with geosynthetics, drainage systems and erosion control works. He is author of numerous papers presented at national and international conferences. Currently he is managing director of Huesker Italy. Since 1995 he has been an active member of CEN TC 189 (Geosynthetics) and ISO TC 221 (Geosynthetics). Mr. Fantini was a Board Member of the Organizing Committee for EuroGeo2 held in Bologna, Italy in October 2000. Since 1989 he has been Treasurer of the Italian Society for Bioengineering (AIPIN) and he has been reconfirmed in 2007 as Vice-President of AGI-IGS, the Italian Chapter of IGS. If re-elected to the Council, he would like to continue to have an active role inside IGS to improve integration of the Society with Corporate Members and geosynthetics end users.

Han-Yong Jeon (Korea)



Dr. Han- Yong Jeon is a Professor in the Division of Nano- Systems Engineering at INHA University, Incheon, Korea (South). He received his Ph.D. in polymer physics in 1989 from the Hanyang University (Korea (South)). Dr. Jeon conducts research in the area of geosynthetic related materials for the past 15 years. His main interests are focused on manufacturing of advanced geosynthetic materials and evaluation, standardization and regulation of geosynthetics in civil and environmental fields. Especially, he is continuously trying to connect nano-systems and polymeric materials with geosynthetics application areas, He is a leading researcher of geosynthetic materials in Korea (South) and published 325 papers as author or co-author and 12 books (in Korean) over 15 years. He strongly would like to contribute the development of IGS and IGS-KC as IGS Council Member. He was a Publication Committee Chair of 2004. Seoul. Korea GeoAsia (South). He serves on a number of national and international technical committees. Currently, he is the Vice President of the Korean Geosynthetics Society and advisor to the Korean Government Committees of civil engineering related. He is the director of GSI-Korea as a member of Geosynthetic Institute

(USA). He is an International Technical Advisory Committee Member of Geosynthetics : (formerly GFR) and member of ISO TC221 and ASTM D35. Also, he is the editor of Korean Fiber Society Journal from 2008.

Russell Jones (UK)



Dr Russell Jones is a Principal with international ground engineering consultants Golder Associates, based in Nottingham in the UK. He is a chartered civil engineer and has 20 years experience in research, design, specification and assessment of geosynthetics. Russell has been a member of the UK Chapter Committee since 1997, having served in many roles, organised evening technical meetings and three national geosynthetic symposia, and is currently Chairman. He currently sits on the organising committee and technical committee for EuroGeo4 in Edinburgh in September 2008. Dr Jones has contributed to many IGS conferences and to both official IGS journals by authoring and reviewing technical papers, and regularly lectures to masters students on various courses at three UK universities on the environmental applications of geosynthetics. He has authored over 50 technical publications on geosynthetics and served on BSI Technical Committee B/553 on Geosynthetics for over 10 years. His nomination is supported by the IGS UK Chapter Committee.

Jiro Kuwano (Japan)



Prof. Jiro Kuwano is a Professor of Geosphere Research Institute of

Saitama University, Japan. He obtained his Doctor Degree in Civil Engineering from University of Tokyo in 1986. Before joining Saitama University, he worked for University of Tokyo, Asian Institute of Technology (Thailand), Tokyo University of Science and Tokyo Institute of Technology. His research interests geosynthetic-reinforced include structures, especially their seismic stability and restoration from damage, and mechanical properties of geomaterials. He was a core member of the ISSMGE Technical Committee No. 9 on Geosynthetics and Earth Reinforcement. He has attended many geosynthetics conferences as a session chair and as a member of the scientific committee (e.g. IS-Kyushu). He was the Chairman of the Scientific Committee of the 8th International Conference on Geosynthetics in 2006 in Yokohama, Japan. He is a co-author of a keynote lecture presented at the 8ICG (Yokohama 2006). He has been serving as a member and a chairman for examination committees on geosynthetics of Public Works Research Center, Japan. He is currently Vice-President and Secretary for the Japanese Chapter (JC-IGS).

Victor Pimentel (Brasil)



Victor Pimentel is currently the Technical Manager of OBER Geosynthetics (IGS Brasil corporate member). He holds B.S. and M.S. degrees in civil engineering from the University of São Paulo. He is an active member of the Brazilian Chapter of IGS and the current coordinator of the Technical Committee from the Brazilian Geosynthetics Manufacturers Association (ABINT). For the past years, Mr. Pimentel, has contributed significantly for the geosynthetics dissemination of knowledge in Brasil. He has been involved in many technical seminars and assisted the creation of the CBG, a Basic Geosynthetics Course

coorganized by IGS Brasil, ABINT and the Brazilian Soil Mechanics Association (ABMS). He also takes part in the Brazilian Geosynthetic Technical Standards Committee which has produced the national standards on geosynthetics. Victor Pimentel is vice-chair of the upcoming international IGS Conference, the 9th ICG, to be held in Brazil in 2010. As a potential council member, he is committed to work hard to facilitate a definitive presence of geosynthetics in developing countries.

Mike Sadlier (Australia)



Mike Sadlier is an Australian Civil Engineer who has been involved with geotechnical, geosynthetic and other construction as a contractor, consultant or material supplier for over 30 years with experience across Australia, the Asia-Pacific and other regions. He first worked with geosynthetics in 1972 and since 1992 he has operated a geosynthetic specialist consultancy. He has actively participated in many geosynthetic events across the world. He believes that the IGS holds a unique position in that it provides a very broad forum for academics, manufacturers, practitioners and others to interact and move the geosynthetic discipline forward for the benefit of all. He wants to see the IGS mature and continue to foster growth in the geosynthetic discipline by working with and providing benefits for all of its membership and providing outreach to other related disciplines. With the forthcoming changes in leadership of the IGS he especially wants to provide some continuity such that our accumulated years of experience of operations of the IGS do not go to waste.

Miguel de la Torre (Peru)



Miguel de la Torre is graduate in Civil Engineering at the National University of Engineering of Lima Perú, and specialized in Geotechnical Engineering and Dams Engineering in Peru. Mr. De la Torre has participated in projects of dams; tunnels; foundations; soil improvement; and stability of slopes; for the sectors of mining, energy, transport and agriculture; having developed designs for more than 60 dams and tunnel projects. He has been professor of the Universities Ricardo Pontificia Universidad Palma Católica in Lima, and at the moment he teaches the course of tailings dams design at the National University of Engineering of Lima. He has been President of the Peruvian Chapter of International Geotechnical Society during the period 1990 - 1993, and at this moment, he is President of the IGS - Peru in period 2007 - 2008. Miguel De la Torre

holds the position of General Manager of the consulting company Geoservice Engineering SAC from 1996 to the present date.

Martin Ziegler (Germany)



Prof. 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 the Chair of Geotechnical Engineering at RWTH Aachen University in April 2000. Apart from tunneling, the application of geosynthetic reinforcement is one of his main research topics. He tries to explain the interaction between soil and geosynthetic reinforcement with adequate models. Since 2006 Prof. Ziegler is president of the section "Geosynthetics in Geotechnique (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 the IGS



Gerhard Bräu

For a long period Karina McInnes was the well known IGS News editor.

Change in IGS News Editorship

We all have to thank her for her great effort, her patience and her persistence that led to an informative newsletter for the IGS membership and was an advertisement to create new members. It is a honour for me to be appointed by the IGS council as her successor in this function. I know very well what the work associated with this job is and I will depend on assistance from you – the readers of this newsletter. The newsletter is for you and will only work if you deliver information on what's going on in your chapter, your area, your university, your office or your company. Please feel free to approach me, if you have any ideas for publication in IGS News.

Actually we decided to continue the format of IGS News in the traditional way. But new technologies need smooth changes that will be offered in the following issues. The main goal will be to increase the benefit for the readers, especially to bring most of the actual information to your finger tip. The newsletter is published as PDF-file and this offers the possibility of linking directly to further and more detailed information.

This idea was already used and is extended in this issue to the IGS Corporate Members list. Those links lead to the corresponding entry on the IGS webpage, from where you will be led to the home page of the company itself. To get most benefit for the corporate member and the reader, the corporate pages on the IGS webpage should be carefully checked by the corporate members. The same linkable info will be realized with the official IGS journals. In the past only the info about the journal itself was published. We will provide the content of the actual issues with the link to the abstract. Please remember: the access to these journals is free for members. If the link does not work smoothly, please check with IGS secretariat or become a member of IGS!

In the past some persons were appointed as correspondents for IGS News. With the increase of chapters that cover most of the areas worldwide, it seems reasonable to change the system and ask each chapter to nominate a member for this task. We hope to insure by this a more effective and direct communication. A special letter to the chapters will be sent soon by the IGS secretariat.

I know it is a great challenge for me to keep the IGS News alive and of benefit for you as well as Karina did for such a long period. I am looking forward to your cooperation, support and criticism – then we (myself, you and first of all IGS) will have success.

Gerhard Bräu, IGS News Editor (contact address see page 25)

ICG - International Conference on Geosynthetics IGS Chapters Sought as Conference Organizers

The IGS invites Chapters and interested organizations to express their interest in organizing and hosting the 10^{h} International Conference on Geosynthetics (10 ICG), which will be held in 2014. The following is the history of the International Conferences on Geosynthetics (ICGs):

- First ICG, Paris, France, 1977
- Second ICG, Las Vegas, USA, 1982
- Third ICG, Vienna, Austria, 1986

- Fourth ICG, The Hague, The Netherlands, 1990
- Fifth ICG, Singapore, 1994
- Sixth ICG, Atlanta, USA, 1998
- Seventh ICG, Nice, France, 2002
- Eighth ICG, Yokohama, Japan,
- 2006
- Ninth ICG, Brazil, 2010

The IGS Secretary will provide prospective hosts with a detailed information package that informs and instructs interested parties on the proper procedure to prepare a bid to host the Conference. Interested Chapters should contact the IGS Secretary.

Time Schedule

- Deadline for application: July 2008
- Council review: 2009
- Announcement of successful candidate at 9th ICG: 2010

Report of the

IGS Officer and Council Meetings 29 February – 02 March 2008, Cancun, Mexico



Peter E. Stevenson

The IGS Officers, Committees and the Council met on February 29, through March 2, 2008 at GeoAmericas 08 in Cancun, Mexico.

2008 is an extraordinary year for the IGS, it is a year in which the Society celebrates its 25th Anniversary, participates in three regional confer-

ences on three continents (a fourth regional conference in Africa is discussed elsewhere), holds an election, conducts the 2008 edition of the IGS Awards program including IGS Awards, IGS Young Member Awards, IGS Student Awards, IGS Achievement Awards and recognizes the contribution of past council members. In addition, the IGS has initiated a program to recognize and honor those companies that have a 20 or more year record of continuous membership in and support of the Society.

The Student Awards, Achievement Awards, Council Service recognition and Corporate Member recognition are to be conducted at each of the regional conferences; Cancun, Shanghai and Edinburgh, and indeed these ceremonies were conducted in Cancun. The ceremonies will be repeated at GeoSynthetics Asia 2008 in June and then again at EuroGeo4 in September and EuroGeo4 will also feature the presentation of the IGS Awards and Young Member Awards.

The organization and conduct of these activities comprised a major portion of the meetings of the IGS Council in Cancun and will continue to demand attention at the officers meeting in Shanghai and the new Council meeting in Edinburgh. The term of the current council will conclude immediately preceding the Edinburgh meeting; hence the Council gathering in Scotland will be a "New" council with the introduction and seating of the members elected in June.

The IGS Council and its committees and officers also addressed a number of less visible issues and items during the three day meeting. One of the main subjects was that of the growth of the Society. The majority of the individual membership belongs to the Society through the chapters and two new chapters, Norway and Russia, were approved by the council. Several other groups are actively working to organize chapters and it is hoped the council will have two or three additional chapters to welcome at Shanghai or Edinburgh. The corporate membership is also growing with seven corporate members joining thus far in 2008.

The Society will seek a formal liaison relationship with ISO. ASTM. CEN and other bodies. The liaisons are expected to facilitate the hosting of various committees and meetings at IGS events around the world. The council membership was urged to communicate and coordinate with the chapters to make sure the chapters were aware of and took advantage of the IGS Website, the IGS FTP site and the IGS News and the ability of these tools to disseminate information and publish reports from the chapter to their membership and to the IGS in general. A key area of focus for the council was the coordination with chapters on the organization of proposals for future IGS regional and international events. 2008 is the year for the announcement of the venues for EuroGeo 5, GeoSyn-



Council Members in Cancun, Mexico

thetics Asia 2012, and GeoAmericas 2012 (GeoAmericas will be held in Peru). The Awards committee, which will meet in Shanghai, was charged with the additional duty to recommend changes or improvements to the existing programs in order to make the programs more meaningful and insure the programs are current. The Communication committee was tasked with developing information flyers on membership and various members benefits (the application leaflets) and the issues of cost of printing and transportation of these materials to various venues such as IGS events and other exhibitions. The officers are charged with establishing communication with ISSMGE to accomplish mutual support and dissemination of information for conferences and events of both organizations. The Education committee was encouraged to continue and expand the

IGS Application leaflets program and to encourage their translation to a number of languages (English, Portuguese and Spanish are available now, Chinese, Japanese, Korean and French are underway). Interested persons among the membership who wish to contribute their time to add additional languages are encouraged to contact the Secretariat or the Education Committee chair. The Technical committee is nearing the completion of the update of the IGS Symbols and Terminology document and the Society website will add links to organizations that maintain current inventories (lists) of standards. All in all 2008 is already a very busy year for the Council with more, much more, to come.

reported by Pete Stevenson IGS Secretary

Synopsis of the Workshop

Applications of Geosynthetics – Present and Future 20-21 September 2007, Gandhinagar (Gujarat), India

The Indian Chapter of IGS is promoting the applications of geosynthetics as important and relevant to India's need for infrastructure development, for more than two decades. Beginning with the first workshop in the year 1985, numerous activities to disseminate the information regarding use of geosynthetics in civil engineering, are being organised by the Indian Chapter in various parts of India.

As part of its activities, the Indian Chapter in association with the Central Board of Irrigation & Power (CBIP), organised a Workshop on "Applications of Geosynthetics – Present and Future" during 20-21 September 2007 at Ahmedabad (Gujarat). 85 participants from all over India, and Malaysia participated in the workshop. The workshop was supported by Garware-Wall Ropes Limited, Sardar Sarovar Narmada Nigam Ltd., Skaps Industries India Pvt. Ltd., TenCate Geosynthetics Asia Sdn Bhd, Charankattu Coir Mfg. Co. (P) Ltd., Coir Board, Maccaferri Environmental Solutions Pvt. Ltd. and Techfab India. 20 papers were presented and discussed during the workshop on the following topics:

- Applications of Geosynthetics in Water Resources Projects
- Testing of Geosynthetics
- Applications of Geosynthetics in **Pavements**
- Applications of Natural Fibres (Jute, Coir and allied Fibres)
- Applications of Geosynthetics in Landfills

The proceedings of the workshop containing 15 invited lectures/case studies are available on sale from the Secretariat of the Indian Chapter. 10% discount is being offered to the members of the IGS.

For any other information, please contact: uday@cbip.org

Reported by Uday Chander, Indian Chapter of IGS



View of dignitaries on the podium during Inaugural Session (from left): Mr. G.N. Mathur; Member Secretary; Indian Chapter of IGS, Mr. A.B. Mandavia; Director (Civil); Sardar Sarovar Narmada Nigam Ltd. and Chief Guest of

the Inaugural Session,

Dr. G.V. Rao; President, Indian Chapter of IGS and

Mr. A.C. Gupta; Treasurer; Indian Chapter of IGS

Short report on

2nd International GSI-Taiwan Geosynthetics Conference 14 December 2007 **Pingtung**, Taiwan

The second GSI-Taiwan conference was held on the campus of National Pinatung University of Science and Technology on December 14, 2007. The conference theme was the application of geosynthetics in Civil and Hydraulic Engineering. Dr. Liao, vice director, Water Resource Agency, Taiwan, Dr. Y. Grace Hsuan, Chairwoman, NAGS, Mr. John W. Cowland, delegate of IGS, and Mr. Mike Sadlier, representative of Asian Activities Committee of IGS, and several local researchers and experts were invited to give technical presentations. Totally, 10 technical papers were presented. 15 exhibitors demonstrated their products and over 200 engineers, government officers and technicians attended the conference.

GSI-Taiwan is an affiliated organization with the Geosynthetic Institute (GSI) and organizes annual conferences near the end of each year since 2006. International and



Participants at the 2nd International GSI-Taiwan Geosynthetics Conference, Pingtung, Taiwan

local researchers and experts will be invited to provide current geosynthetic information, technology and new findings to the attendants.

Reported by Chiwan Hsieh, IGS member

Short report on

Mercer Lecture at the 13th ARC, 10 December 2007 Kolkata, India



Ennio M. Palmeira

The second presentation of the Mercer Lecture for 2007-2008 by Prof. Ennio M. Palmeira, the University of Brasilia, Brazil, was made during the 13th Asian Regional Conference of Soil Mechanics and Geotechnical Engineering (13th)

ARC), held in Kolkata, India, on December 10th 2007. The previous presentation of the lecture was made during the 13th PanAmerican Conference of Soil Mechanics and Geotechnical Engineering, in Isla de Margarita, Venezuela, July of 2007. The lecture is entitled "Soil - Geosynthetic Interaction: Modelling and Analysis". Over 300 people attended the lecture, which was delivered in the morning of the first day of the conference. The lecture covered the State-of- the-Art of the issue providing an overview and perspective. The next official presentation of the Mercer Lecture will be made during EuroGeo4 the Fourth European Conference on Geosynthetics –, held in Edinburgh September 8th 2008. However, in the meantime Prof. Palmeira will also deliver the lecture at Geosynthetics Asia 2008 the Fourth Asian Regional Conference on Geosynthetics in Shanghai, China, on June 17th, by invitation from the organising committee of that conference.

Synopsis of the Conference on

Geosynthetics for Soil Reinforcement, 12 February 2008 Perugia, Italy

The Conference on Geosynthetics for soil reinforcement was held on 12th February 2008 in Perugia, Italy. The conference was jointly organized by the Alta Scuola of Perugia and the Italian Chapter of the IGS (AGI-IGS), under the auspices of the Italian Environmental Ministry, of the Italian Infrastructures Ministry and of the Umbria Region.

More than 140 participants attended the Conference, which was opened by Lucio Ubertini and Claudio Soccodato (respectively, President and Secretary of the Alta Scuola) and by Daniele Cazzuffi (AGI-IGS President and IGS Immediate Past President).

After an introduction on the conference theme by Vincenzo Pane (University of Perugia), one keynote lecture and five invited lectures were presented. The keynote lecture on *Seismic behaviour of Earth Reinforced Structures* was presented by Junichi Koseki (University of Tokio) and obtained a noticeable interest among all participants.

The five invited lectures were divided in two sessions. In the first session, chaired by Michele Maugeri, two lectures were presented.



Board members of AGI-IGS with Junichi Koseki enjoying the Italian cuisine and wine in Perugia

The first lecture presented by Daniele Cazzuffi (CESI Milano) was focused on *Types and applications of geosynthetics*, with particular reference to reinforcement. The second lecture, presented by Nicola Moraci (University of Reggio Calabria), addressed *Design of geosynthetics reinforcing walls and embankments.* In the second session, chaired by Nicola Moraci, three lectures were presented.

The first lecture presented by Michele Maugeri (University of Catania) was focused on *Design of earth reinforced structures in seismic conditions*. The second lecture presented by Claudio di Prisco (Polytechnic of Milano) addressed *Nu*- merical modelling of earth reinforced structures. The last lecture delivered by Paolo Carrubba (University of Padova) was related to Monitoring of earth reinforced structures. At the end of each session, a fruitful and interesting discussion on the different topics took place.

It is important to underline the participation of administrators and politicians of the Umbria Region, one of the regions in Italy more affected by seismic events, in which an increasing number of geosynthetics reinforced structures were built in the last ten years.

Reported by Nicola Moraci, AGI-IGS Secretary

Report on

GeoAmericas 2008, 02 - 05 March 2008 Cancun, Mexico



GeoAmericas 2008, the First Pan American Geosynthetics Conference and Exhibition, took place at the Hilton Golf and Spa Resort in Cancún, México, from March 2 to 5, 2008. With this conference, the International Geosynthetics Society (IGS) adds the important Pan American component to its suite of regional conferences. GeoAmericas 2008 was organized under the auspices of the IGS, sponsored and managed by Industrial Fabrics Association International (IFAI), and held in cooperation with the North American Geosynthetics Society (NAGS), IGS Perú, IGS Brasil, IGS Chile and IGS Mexico.

The overall objective of GeoAmericas' technical, education, and exhibit programs was to bring together geotechnical consultants and owners, geosynthetic manufacturers and academics. project regulators and contractors from across the Americas. Yet, this conference was unique not only for integrating the multiple constituents of the geosynthetics community but also for a number of pioneering initiatives.

Important innovations in Geo-Americas' organization included:

• Multinational participation that went beyond successfully attracting geographically diverse technical contributions. It should be noted that there was no single host for the conference; instead, all IGS chapters in the Americas hosted and shared technical and financial duties in the conference organization.

- Organization of the technical program through a comprehensive call for proposals. This approach for structuring the technical program led to a rich portfolio as well as to an early, strong commitment of those who eventually became the organizers of the technical activities, including the 44 Technical Sessions.
- Emphasis on educational programs, which included a total of 8 Short Courses with multi-lingual offerings. A program of discount incentives was implemented, which included significant short course registration discounts to full conference attendees.
- Implementation of Training Lectures, a new modality of technical activities. Training Lectures are stand-alone, 1.5 hourlong lectures that took place in parallel with the technical sessions and allowed attendees to upgrade their knowledge on a specific topic. A total of 24 Training Lectures, 12 in English and 12 in Spanish, took place at GeoAmericas.
- Strong collaboration with sister organizations. This included coordination with the Geosynthetics Institute for development of its annual conference, the GRI-21, under the umbrella of GeoAmericas as well as participation of numerous strategic partners.

Highlights of the technical program included a series of outstanding keynote lectures delivered by geosynthetic experts Dr. J.P. Giroud, Dr. Robert Koerner, Mr. Mark Smith, and Dr. Leandro Costa Filho. The technical program was complemented with a comprehensive exhibition, which included over 85 stands that constituted the most complete marketplace for the promotion of geosynthetic products across the Americas. The program also included presentation of a several IGS awards, including IGS Student Awards. IGS Achievement Awards, IGS Corporate Member Recognitions, IGS Honorary membership, and Best Papers from Geosynthetics International and Geotextiles & Geomembranes.

Two aspects were crucial to the success of GeoAmericas; one of them was certainly hard work. The second and truly unique one was the outstanding group of individuals that constituted our Organizing Committee. Our organization always benefited from the tireless effort of our Technical Committee co-chairs, geosynthetic authorities Richard Bathurst and Ennio Palmeira, as well as from the many creative initiatives of our Communications Committee chair. talented Elizabeth Peggs. Beth Wistrcill, our Secretary General, together with Todd Lindemann, Barbara Connett, and Jill Rutledge from IFAI provided careful support to the countless and always urgent conference management activities. Sam Allen, chair of the Education Committee and Deron Austin, chair of the Exhibits Committee, provided invaluable industry perspective to our course of action. The organization of GeoAmericas also counted with Steve Warner. Daniele Cazzuffi. and Pete Stevenson who helped articulating the early framework for the conference. Finally, the energetic dedication of Dean Sandri, Flavio Montez, German Vivar, Mauricio Ossa, and Rafael Rocha Vargas, in their role of conference

vice-chairs on behalf of the IGS chapters in the Americas, provided the much-needed wisdom and regional perspectives to our program. **With almost 1,000 attendees**, 8 concurrent technical activities throughout the entire conference (see Figure 1), a unique educational program, a well-integrated exhibit hall, and multiple social opportunities in the most beautiful conference venue, GeoAmericas 2008 constitutes an important milestone in the history of successful conferences of the IGS. Reported by Jorge G. Zornberg, Chairman, GeoAmericas 2008, IGS Vice President



Secretariat manager Rosemary Stevenson with new Corporate Member Nicky Araujo from Costa Rica



Official opening of the exhibition



Welcome by Organizing Committee: Technical co-chair Richard Bathurst, Vice-chairs Dean Sandri and Flavio Montez, chairman Jorge Zornberg, and Communications chair Elizabeth Peggs (left to right) (*)



IGS President Fumio Tatsuoka and IGS Secretary Pete Stevenson honouring former IGS Council member Barry Christopher on the occasion of 25^{th} Anniversary of IGS (*)



audience attentive to keynote lecturer (*)



view of Cancun's Riviera during lunchtime (*)



IGS Achievement Award ceremony: Rafael Rocha, IGS Mexico Pete Stevenson, IGS Secretary, Jorge Zornberg (honored by IGS Mexico) Delma de Mattos Vidal, IGS Brasil Fumio Tatsuoka, IGS President (left to right) (*)

(*) Pictures are courtesy of geosynthetica.net



IGS Students Award ceremony: Ennio Palmeira, Chairman IGS Education Committee, Helber N. Lima Viana, IGS Brasil Melissa Chappel, NAGS Carlos Centurion Pata, IGS Peru Alexandra Ossa Lopez, IGS Mexico Fumio Tatsuoka, IGS President (left to right) (*)



Chairman Jorge Zornberg with Secretary General Beth Wistrcill

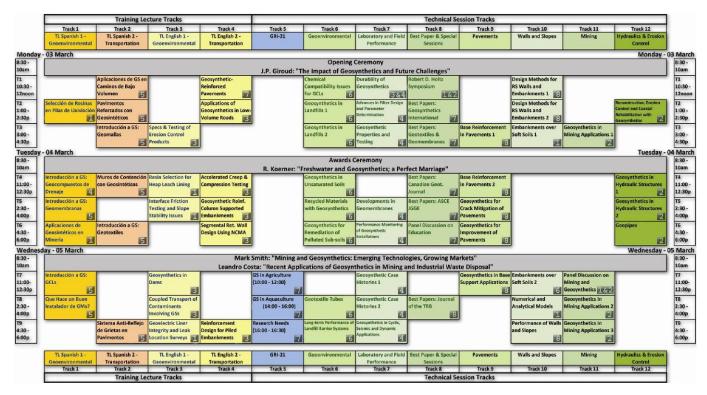


Figure 1. Overview of the Technical Program at GeoAmericas 2008. The program included 8 concurrent technical activities throughout the 3 days of the conference. The technical program included a number of tracks dedicated to Technical Sessions, and a number of tracks dedicated to Training Lectures, a new modality of educational activities

NAGS Co-Sponsors Seminar on

Geosynthetic Advancements in Soil Reinforcement Applications, 25 March 2008 Syracuse, USA

"Geosynthetic Advancements is Soil Reinforcement Applications" was the subject of a seminar co-sponsored by NAGS on March 25, 2008 at Syracuse University. The seminar was co-sponsored by NAGS, the Civil Engineering Department at Syracuse University, and the Syracuse Area Chapter of the ASCE. Dr. Shobha Bhatia, Svracuse University, Matthew President-elect Marko. of the Syracuse Area ASCE, and David Suits, NAGS acted as hosts for the seminar. Dr. Barry Christopher spoke on the following areas of geosynthetics reinforcement: Reinforced Soil Slopes; Reinforced Soil Walls; Reinforced Embankments; and Smart Geosynthetics. During the two hour seminar Dr. Christopher emphasized the advancements and innovations in each of the subject areas. These included the broader acceptance of the technology by bridge and structural engineering units within state and fed-



Matthew Marko, ASCE Syracuse Chapter President-elect, welcoming seminar participants

eral transportation agencies; standard designs and details being available now; the Load Resistance Factor Design (LRFD) approach; use of light weight fills; and, reliability-based design approaches for steepened slopes. The HITECH Evaluation Program and stress relief retaining structures were added innovations in addition to those



Barry Christopher introducing his lecture

mentioned for steepened slopes. For embankments the innovations included the combining of technologies and materials such as lightweight fills, vertical drains; the use of hydraulic fills and refined analysis methods. In the area of smart geosynthetics, the inclusion of fiber optics and other sensing methods were described along with the advantages of using geosynthetics as an instrumentation delivery system (e.g., minimal disruption of construction). Dr. Christopher described some of the "smart sensing" techniques used in the construction of the Woodrow Wilson Bridge replacement in Washington, DC. This and other such seminars are available for presentation through NAGS to your organization or group. If interested contact David Suits, Executive Director for further information (<u>nagsdirector@aol.com</u>).

Geo-Environmental Engineering 2008, 12-14 June 2008 Kyoto, Japan

The conference provides an international forum to discuss the problems facing the public and private sectors, the engineering and scientific communities, in terms of the waste management and remediation of contaminated lands, and related topics.

The conference venue is the Clock Tower Centennial Hall, which has come to symbolize Kyoto University. The main goal of Geo-Environmental Engineering 2008 is to bring together international information, experience and research in order to give the conference participants a greater knowledge and ability to help revitalize their communities.

Conference Topics

- Waste / landfill management
- Landfill liner and coverGeosynthetics in
- geo-environmental engineeringGeotechnical reuse of solid waste
- Contribution to global environmental problems
- Remediation of contaminated sites
- Environmental assessment
- Risk management

- Ground improvement technologies
- Lessons from the field and case studies

Important Dates

Full paper submission: April 15, 2008

For more Information

Email: inui@mbox.kudpc.kyoto-u.ac.jp

Geosynthetics Asia 2008, 17 - 20 June 2008 Shanghai, China



Geosynthetics Asia 2008, the 4th Asian Regional Conference on Geosynthetics will be held from 17 to 20 June 2008 at the Shanghai Exhibition Center, Shanghai, China. The Conference theme is Geosynthetics in Civil and Environmental Engineering.

The Conference is being organized under the auspices of the IGS by the Chinese IGS Chapter, the Chinese Technical Association on Geosynthetics, the Chinese Hydraulic Engineering Society, and is supported by the Shanghai Investigation Design & Research Institute and Zhejiang University.

Conference Subjects

Geosynthetics have been broadly used in civil and environmental en-

gineering for decades. *Geosynthetics Asia 2008* will appeal to all participants and will cover the following topics:

- Fundamental Principles and Properties of Geosynthetics
- Testing and Standards
- Reinforcement and Soil Improvement
- Filtration, Drainage and Erosion Control
- Landfill and other Environmental Engineering applications
- Engineering Measures for Natural Disasters
- Geosystems (Geotubes, Geocontainers, etc.)
- Transport (highways, railways, tunnels, harbours, airports, etc.)
- Hydraulic structures (dams, canals, reservoirs, etc.)
- Special Case Histories and others (including unsuccessful applications)

Technical Events

- Special lectures Prof. F. Tatsuoka (IGS President)
 Mercer Lecture
 - Prof. E.M. Palmeira (Brazil)

- Keynote lectures About Reinforcement, Prof. H. Ochiai (Japan) About Landfills, Prof. J.P. Gourc
- (France) About Filtration, Dr. Cazzuffi (Italy)
- Invited reports on important projects
- Forum: Geosynthetics in Environmental Engineering
- Paper Presentations
- Exhibition
- Technical visits
- Three different technical visits on June 20, 2008
- Training Course organized by the IGS, free of charge

Conference Language

The conference language is English. There will be simultaneous translation of special and keynote lectures into Chinese.

For more Information

E-mail: ccigs@4acg-2008sh.com Web site: www.4acg-2008sh.com

MERCEA'08, 8-11 July 2008 2008 Seismic Engineering International Conference commemorating the 1908 Messina and Reggio Calabria Earthquake, Italy



The 2008 Seismic Engineering International Conference commemorating the 1908 Messina and Reggio Calabria Earthquake (MERCEA'08) will provide a forum to discuss the state-of-the-art, the best practices and the new research results in the field of earthquake engineering and geotechnics. The Conference is organized by the Universities of Reggio Calabria, Messina, Catania and Palermo, the ENEA (Italian National Agency for New Technologies. Energy and the Environment) as well as the C.I.Di.S (Centro Interuniversitario di Dinamica Strutturale Teorica e Sperimentale) under the auspices of:

- Associazione Geotecnica Italiana
- Anti-Seismic System International Society

- Consiglio Regionale della Calabria
- Assessorato Regionale alla Cultura
- Assessorato Regionale all'Urbanistica e al Governo del Territorio
- International Geosynthetics Society
- Isolation and other antiseismic design strategies
- Rete dei Laboratori Universitari di Ingegneria Sismica

Conference Topics:

- The 1908 Messina and Reggio Calabria earthquake
- Site characterisation, microzonation and site effects
- Soil liquefaction and liquefaction countermeasures
- Slopes, embankments, dams and waste fills
- Foundations, and soil-structure interaction
- Earth retaining structures and geosynthetics
- Codes and guidelines
- Structural engineering
- Emerging technologies
- Numerical methods
- Passive protection devices and seismic isolation
- Advanced technologies in construction and retrofit of structures
- Seismic risk

- Stochastic methods
- Structural safety and reliability
- Structural dynamics
- Urban planning and policies for seismic risk reduction

Conference Format

Technical Sessions: The sessions will be organized in parallel special sessions with each presentation scheduled for 15 minutes including a discussion period

Exhibition: The exhibition will be held during the Conference, with the purpose of offering an opportunity to local and international companies to show their latest products and technologies in the field of seismic protection.

Conference Venue

The Mercea'08 Conference as well as the exhibition will be held in the Altafiumara Resort Conference Centre near Santa Trada di Cannitello only 11 km from Reggio Calabria.

For more Information:

E-mail: <u>mercea08@unirc.it</u> Web site: <u>www.mercea08.org</u>

EuroGeo4, 7 - 10 September 2008 Edinburgh, Scotland, United Kingdom



EuroGeo4, the 4th European Geosynthetics Conference, , will be held at the Edinburgh Conference Centre, Heriot-Watt University, Scotland, UK, from 7 to 10 September 2008. The Conference is being organized by the UK IGS Chapter under the auspices of the IGS and is supported by the British Geotechnical Association, Scottish Geotechnical Group, Ground Forum and the Engineering Group of the Geological Society.

Conference Scope and Theme

The Conference will debate the subject of *Geosynthetics in Civil Engineering Applications* within a three-day event comprising keynote lectures, paper presentations, discussions and poster sessions. The use of geosynthetics in civil engi-

neering applications has long been undertaken and provides cost effective solutions to many very technically challenging problems. The Conference will highlight the hot topics in geosynthetics.

Mercer Lecture

The Mercer lecturer is Ennio Marques Palmeira from the University of Brasilia, Brazil, on the topic of "Soil-geosynthetics interaction: modelling and analysis".

Keynote Lecturers

- Colin JFP Jones (UK) "Electro-kinetic geosynthetics from research to applications"
- Nathalie Touze-Foltz (France)
 "Geoenvironmental applications of
 geosynthetics"
- Grace Hsuan (USA)
 "Long-term performance and lifetime prediction of geosynthetics"

Conference Format

• Technical Sessions: There will be three themed keynote lectures,

with three parallel sessions held over 3 days, together with a prestige lecture on geosynthetics. Poster sessions will be held during the conference where authors will be available to answer questions and discuss particular issues related to their papers.

• *Training Course:* A separate training course will be held in parallel with the conference to provide education on the use of and design with geosynthetics in civil engineering applications.

• Exhibition

For more Information

Web site: www.eurogeo4.org

GeoAfrica 2009, 2-4 September 2009 Cape Town, South Africa



Geoafrica 2009 will present a forum for consulting engineers, manufacturers, installers and academics to exchange information about current and potential applications for geosynthetics in Africa.

This will be the first conference to be held under the auspices of the IGS in the region, and will present an opportunity to meet the top geosynthetics specialists and prospects on the continent. Every visitor to the exhibition floor will be a potential customer, and professionals seeking geosynthetic solutions to their challenges will attend each technical session. This will be the largest gathering of geosynthetics professionals seen in Africa to date.

Exhibition

The conference will include an exhibition for the specification and trade of geosynthetic products and technology to users throughout Africa, as well as those wishing to make an entry into the continent. Details of the conference are currently being finalized. If you would like to participate in this major event and receive an invitation to submit a technical paper, please an e-mail with your contact details to Kim Barnard at <u>geotexgp@iafrica.com</u> and he will put you on the conference mailing list.

For more Information

E-mail: <u>geotexgp@iafrica.com</u> Web site: <u>www.gigsa.org</u>

Reported by GIGSA

9th International Conference on Geosynthetics Guarujá, Brazil, 23 - 27 May 2010



This traditional IGS Conference will take place in May 2010 and will bring together geosynthetic researchers, consultants, owners, geotechnical and environmental engineers, geosynthetic manufacturers and distributors, project regulators, contractors and academics. It will offer an unique opportunity for the exchange of experiences on the main geosynthetic themes through lectures, paper presentations, discussions, courses and exhibition. The conference is jointly organized by IGS Brasil, the Brazilian Chapter of the International Geosynthetics Society, and ABMS, the Brazilian Association for Soil Mechanics and Geotechnical Engineering, under the support of ABINT, the Brazilian Association of Nonwoven and Technical Textiles Industries, and the auspices of IGS, the International Geosynthetics Society.

Conference Venue

The 9th ICG will be held at Sofitel Jequitimar Hotel in Guarujá, Brazil. Guarujá is a beautiful coastal town about 90 km from the city of São Paulo, which is the biggest metropolis in South America and offers a large variety of cultural, touristic and gastronomic attractions.

Conference Topics

The conference will highlight the main topics in the geosynthetics industry and applications. The traditional Giroud Lecture will be delivered in a special session. Keynote lectures and selected papers will be presented on the main themes.

- Case Histories
- Design Approaches and Numerical Solutions
- Drainage and Filtration
- Durability and Long Term Performance
- Geosynthetics in Agriculture and Aquaculture
- Geosynthetics in Environmental Applications
- Geosynthetics in Dynamic Applications

- Geosynthetics in Hydraulic Applications
- Geosynthetics in Mining Applications
- Geosynthetics in Highways and Railways
- Geosynthetics Properties
- Innovative Uses and Solutions
- New Geosynthetic Products
- Reinforced Walls and Slopes
- Reinforcement of Embankments and Unpaved Roads
- Soil-Geosynthetic Interaction
- Sustainability of Earth Works with Geosynthetics

Important Dates

- Abstracts submission: From May 1st 2008 to October 30th 2008
- Acceptance of abstracts: November 30th 2008
- Papers submission: May 31st 2009

For more information:

http://www.9icg-brazil2010.info

Geosynthetics International An Official Journal of the IGS: Electronic Journal Free to IGS Members



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

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

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

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

Papers should be work not published in full elsewhere and should be sent to one of the following individuals:

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Content of Volume: 15, Issue: 1 (2008)

Deterministic and reliability-based design: veneer cover soil stability Authors: A. H. I. Sia and N. Dixon Abstract

Cyclic behaviour of soil-structure interfaces associated with modular-block reinforced soil-retaining walls

Authors: H. I. Ling, J.-P. Wang and D. Leshchinsky

Abstract

The significance of the contact angle in characterising the pore size distribution of geotextiles Authors: D. J. Elton and D. W. Haves

Abstract

Effect of effective overburden pressure on geomembrane/soil interface transmissivity

Authors: J.-C. Chai, S. Hayashi and N. Khalili Abstract A combined DJM-PVD method for soft ground improvement Authors: S. Y. Liu, J. Han, D. W.

Zhang and Z. S. Hong Abstract

Impact on groundwater of concurrent leakage and diffusion of dichloromethane through geomembranes in landfill liners

Authors: A. El-Zein and R. K. Rowe Abstract

Geotextiles & Geomembranes

An Official Journal of the IGS: Electronic Journal Free to IGS Members



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

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

Papers should be submitted electronically as a Microsoft Word or pdf file to: kerry@civil.queensu.ca Please ensure the text is double spaced, there is an abstract with keywords included, and tables and figures are at the end following the text. Please check the Journal's instructions for authors for additional information regarding submissions. The Journal strives to provide the authors with quick, constructive reviews, and we appreciate the author's hard work in addressing these comments and quick return of revised papers.

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For editorial enquiries contact: Dr. R. Kerry Rowe, Editor Geotextiles and Geomembranes Dept. of Civil Engineering Ellis Hall, Queens University Kingston, Ontario K7L 3N6 CANADA Fax: 1/613 533 6934 E-mail: kerry@civil.gueensu.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/

Content of Volume 26, Issue 1 (February 2008)

Experimental and theoretical investigation of strength of soil reinforced with multi-layer horizontal-vertical orthogonal elements

M.X. Zhang, H. Zhou, A.A. Javadi and Z.W. Wang

Abstract

Long-term barrier performance of modified bentonite materials against sodium and calcium permeant solutions

Takeshi Katsumi, Hiroyuki Ishimori, Masanobu Onikata and Ryoichi Fukagawa

Abstract

A tilt table device for testing geosynthetic interfaces in centrifuge W. Wu, H. Wick, F. Ferstl and F. Aschauer

Abstract

2D and 3D numerical simulations of reinforced embankments on soft ground

Dennes T. Bergado and Chairat Teerawattanasuk

Abstract

Model tests of geocell retaining structures

R.H. Chen and Y.M. Chiu Abstract

Accelerated ageing of polypropylene geotextiles, the effect of temperature, oxygen pressure and aqueous media on fibers - Methodological aspects

Emmanuel Richaud, Fabienne Farcas, Loïc Divet and Jean Paul Benneton Abstract The influence of bentonite extrusion on shear strength of GCL/geomembrane interface

Ana Vukelić, Antun Szavits-Nossan and Predrag Kvasnička

Abstract

Finite element analysis of geotextile-reinforced sand-bed subjected to strip loading

P.K. Basudhar, P.M. Dixit, Ashish Gharpure and Kousik Deb

Abstract

Geotechnical performance of waste tires for soil reinforcement from chamber tests

Yeo Won Yoon, Seung Beom Heo and Keun Soo Kim

Abstract

Content of Volume 26, Issue 2 (April 2008)

Validation of a numerical modelling technique for multilayered geosynthetic landfill lining systems

G.J. Fowmes, N. Dixon and D.R.V. Jones

Abstract

Analytical modelling of gas leakage rate through a geosynthetic clay

liner–geomembrane composite liner due to a circular defect in the geomembrane Abdelmalek Bouazza, Thaveesak Vangpaisal, Hossam Abuel-Naga and Jayantha Kodikara <u>Abstract</u> Long-term shear strength of geosynthetic clay liners Werner Müller, Ines Jakob, Stefan Seeger and Renate Tatzky-Gerth <u>Abstract</u> Laboratory tests of small-diameter

Laboratory tests of small-diameter HDPE pipes buried in reinforced sand under repeated-load S.N. Moghaddas Tafreshi and O. Khalaj

Abstract

An experimental investigation of soil arching within basal reinforced and unreinforced piled embankments Chen Yun-min, Cao Wei-ping and Chen Ren-peng

Abstract

Behavior of EPS geofoam in true triaxial compression tests

The IGS leaflets are brief descriptions of applications and characteristics of geosynthetics and their several applications.

<u>Geosynthetics in Agricultural Applications</u>

There is a wide variety of applications ranging from covered and uncovered ditch linings and ponds to protection of the groundwater and surface waters that are being polluted by animal waste.

- <u>Geosynthetics Functions</u> Geosynthetics include a variety of synthetic polymer materials that are specially fabricated to be used in geotechnical, geoenvironmental, hydraulic and transportation engineering applications. It is convenient to identify the primary function of a geosynthetic as being one of: separation, filtration, drainage, reinforcement, fluid/gas containment, or erosion control.
- <u>Geosynthetics Classification</u> Geosynthetics can be broadly classified into categories based on method of manufacture.
- <u>Geosynthetics in Drainage and</u> <u>Filtration</u>

Geosynthetics can be effectively used as drains and filters in civil and environmental works in addition to or in substitution to traditional granular materials. Geosynthetics are easier to install in the field and often cost-effective.

 <u>Geosynthetics in Embankments</u> on Soft Soils

Construction of embankments on soft soils can be a challenging task. The use of geosynthetics to improve embankment stability is one of the most effectives and well-tried forms of the soil reinforcement technique. Chin Jian Leo, M Kumruzzaman, Henry Wong and Jin H Yin <u>Abstract</u>

Numerical simulation of fiber - reinforced sand behavior

G.L. Sivakumar Babu, A.K. Vasudevan and Sumanta Haldar

Abstract

Laboratory study of expanded polystyrene (EPS) geofoam used with expansive soils S. Banu Ikizler, Mustafa Aytekin and Evin Nas <u>Abstract</u> |

Numerical modelling of advective flow through composite liners in case of two interacting adjacent square defects in the geomembrane Fethi Saidi, Nathalie Touze-Foltz and Patrick Goblet Abstract

IGS Educational Leaflets in English, Portuguese and Spanish

- Geosynthetics in Erosion Control Erosion is a natural process caused by the forces of water and wind. It is influenced by a number of factors, such as soil type, vegetation and landscape, and it can be accelerated by various activities that occur on a specific field installation. Uncontrolled erosion processes can cause major damages to existing structures and to the environment. Geosynthetics can be properly specified to minimize or avoid such damages.
- <u>Geosynthetics in Hydraulics Pro-jects</u>

Hydraulic structures comprise the geosynthetics market segment with arguably the largest growth opportunities. The term "hydraulic structures" includes dams and canals.

- <u>Geosynthetics in Landfills</u> Geosynthetics are extensively used in the design of both base and cover liner systems of landfill facilities.
- <u>Geosynthetics in Railroads</u> Geosynthetics may perform the following functions in new track construction or rehabilitation: separation of materials with different particle size distributions, filtration, drainage and soil reinforcement.
- <u>Geosynthetics in Road Engineer-</u> ing

Roads and highway are of utmost importance to the development of any country. Due to systematic traffic of heavy vehicles, climate conditions and mechanical properties of the materials used in their constructions, highway pavements may last considerably less than expected. Geosynthetics can significantly increase the performance and durability of roads.Geosynthetics in Slopes over

- Stable Foundations Layers of geosynthetic reinforcement are used to stabilize slopes against potential deep-seated failure using horizontal layers of primary reinforcement. The reinforced slope may be part of slope reinstatement and (or) to strengthen the sides of earth fill embankments
- <u>Geosynthetics in Unpaved Roads</u> Geosynthetics can be effectively used to reinforce unpaved roads and working platforms on soft soils.
- Geosynthetics in Walls Horizontal layers of geosynthetic reinforcement can be included with retaining wall backfills to provide a reinforced soil mass that acts as a gravity structure to resist the earth forces developed behind the reinforced zone.
- <u>Geosynthetics in Waste Water</u> <u>Treatment</u>

Geosynthetics are used in various applications in waste water facilities. The most common use is in lagoons operating with anaerobic and aerobic processes. Other applications include enhanced evaporation of wastewater and sludge dewatering by permeable geotextile geotubes.

You can find all leaflets at: <u>http://www.geosyntheticssociety.org</u> /proceedings.htm#edu.

Conferences

Symposia

Workshops

23rd International Conference on Solid Waste Technology and Management Philadelphia, USA 30 March - 2 April 2008 E-mail: <u>solid.waste@widener.edu</u> <u>www.widener.edu</u>

3rd International Conference on Site Characterization Taipei, Taiwan 1-4 April 2008 E-mail: <u>abhuang@mail.nctu.edu.tw</u> www.elitepco.com.tw/ISC3

Lifetime of Geosynthetics Würzburg, Germany 9-10 April 2008 E-Mail: <u>anmeldung@skz.de</u> www.skz.de

VI International Symposium Geotechnical Aspects of Underground Construction in Soft Ground - IS- Shanghai 2008 Shanghai, China 10 - 12 April 2008 E-mail: <u>secretary@tc28-shanghai.org</u> www.tc28-shanghai.org

2nd International Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation Nanjing, China 30 May-2 June 2008 E-mail: gedmar08@hhu.edu.cn www.GeoHohai.com/GEDMAR08

1st International Conference on Education and Training in Geo-Engineering Sciences Constantza, Romania 2-4 June 2008 E-mail: <u>nicoleta@utcb.ro</u> <u>www.ppm.ro/srgf/</u>

Geo-Environmental Engineering 2008 Kyoto, Japan 12-14 June 2008 E-mail: inui@mbox.kudpc.kyoto-u.ac.jp

6th RILEM International Conference on Cracking in Pavements Chicago, USA 16-18 June 2008 E-mail: <u>RILEMcracking@gmail.com</u> www.ict.uiuc.edu/rilem/default.asp

Development of Urban Areas and Geotechnical Engineering Saint Petersburg, Russia 16-19 June 2008 E-mail: <u>mbl@georec.spb.ru</u>

Calendar of Events



Geosynthetics Asia 2008 4th Asian Regional Conference on Geosynthetics Shanghai, China 17-20 June 2008 E-mail: <u>ccigs@4acg-2008sh.com</u> www.4acg-2008sh.com

Debris Flow 2008 The New Forest, UK 18-20 June 2008 E-mail: <u>swinburn@wessex.ac.uk</u> www.wessex.ac.uk

10th International Symposium on Landslides and Engineered Slopes Xi'an, China 30 June-4 July 2008 E-mail: <u>wangyj@iwhr.com</u> www.landslide.iwhr.com

E-UNSAT 2008: First European Conference on Unsatuated Soils Durham University, Durham, UK 2 - 4 July 2008 E-mail: <u>e-unsat@durham.ac.uk</u> <u>www.e-unsat.dur.ac.uk/</u>

MERCEA'08 2008 Seismic Engineering International Conference commemorating the "1908 Messina and Reggio Calabria Earthquake" Reggio Calabria and Messina, Italy

8 – 11 July 2008 E-mail: <u>mercea08@unirc.it</u> <u>www.mercea08.org</u>

6th International Conference on Case Histories in Geotechnical Engineering Washington, D.C., USA 11-16 August 2008 E-mail: <u>prakash@umr.edu</u> www.6icchge2008.org

1st International Conference on Transportation Geotechnics Nottingham, United Kingdom 25-27 August 2008 E-mail: geomechanics@nottingham.ac.uk www.nottingham.ac.uk/ncg

Global Waste Management Symposium Copper, Colorado, USA 7-10 September 2008 E-mail: <u>rita.ugianskis@penton.com</u> <u>www.wastesymposium.com</u>

Short Courses

Expositions

Trade Shows

5th Bored and Auger Piles Conference 8 - 10 September 2008 Ghent, Belgium E-mail: <u>william.vanimpe@ugent.be</u>

Stress Wave 2008 - 8th International Conference on the Application of Stress Wave Theory to Piles Lisbon, Portugal 8 - 10 September 2008 E-mail: <u>sw2008@civil.ist.utl.pt</u> www.civil.ist.utl.pt/sw2008

EuroGeo4 The Fourth European Geosynthetics Conference Edinburgh, Scotland, UK 7-10 September 2008 E-mail: <u>eurogeo4@eurogeo4.org</u> www.eurogeo4.org

11th Baltic Sea Geotechnical Conference - Geotechnics in Maritime Engineering, Gdansk, Poland 15-18 September 2008 E-mail: <u>BC11@pg.gda.pl</u> www.pg.gda.pl/~BC11

Waste 2008 Stratford-upon-Avon, Warwickshire, England 16-17 September 2008 Email: <u>info@waste2008.com</u> <u>www.waste2008.com</u>

4th International Symposium on Deformation Characteristics of Geomaterials Atlanta, Georgia 22-24 September 2008 E-mail: <u>webmaster@isatlanta2008.org</u> www.isatlanta2008.org

2nd Remediation Technologies Expo RemTech 2008 Ferrara, Italy 24-26 September 2008 Email: <u>info@ferrarafiere.it</u> <u>www.remtechexpo.com</u>

First International Conference on Hazardous Waste Management Chania-Crete, Greece 1-3 October 2008 E-mail: <u>hwm1.conference@ enveng.tuc.gr</u> www.hwm1.tuc.gr

12th International Conference of the IACMAG Goa, India 1-6 October 2008 E-mail: <u>dns@civil.iitb.ac.in</u> www.civil.iitb.ac.in/~dns

NUCGE'08 Skikda, Algeria 27-29 October 2008 E-mail: <u>larmacs@univ-skikda.dz</u> www.univ-skikda.dz

IV International Conference on Scour and Erosion 2008, ICSE-4 Tokyo, Japan 5-7 November 2008 E-mail: <u>sekiguch@ujigawa.mbox</u>, <u>media@kyoto-u.ac.jp</u> http://icse-4.kz.tsukuba.ac.jp

FS-KGEO 2009 Kunststoffe in der Geotechnik Munich, Germany 12 Februar 2009 E-mail: <u>fskgeo@bv.tum.de</u> <u>http://www.gb.bv.tum.de/fachsektion/a</u> <u>veranstaltungen.htm</u>

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IS-Tokyo 2009 - International Conference on Performance-Based Design in Earthquake Geotechnical Engineering Tsukuba, Japan 15-17 June 2009 E-mail: <u>ytsoil@rs.noda.tus.ac.jp</u> www.rs.noda.tus.ac.jp/ytsoil/IS2009.htm

GeoAfrica 2009 The First African Regional Conference on Geosynthetics Cape Town, South Africa 2-4 September, 2009 www.gigsa.org

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XVII Int. Conference for Soil Mechanics and Geotechnical Eng. Alexandria, Egypt 5-9 October 2009 www.2009icsmge-egypt.org/

9th International Conference on Geosynthetics Guarujá, Brazil May 2010 http://www.9icg-brazil2010.info

Note:

• Items in bold blue print are organized under the auspices of the IGS or with the support of the IGS.

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Note:

 In case of not updated information, the IGS chapters are invited to notify to both IGS Secretary and IGS News Editor

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



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- A click to the name of the corporate member leads to the corresponding entry at the IGS website. The corporate members are encouraged to check their entry there!
- Date is earliest year of continuous membership

Celebrating 20 Years of Corporate Membership



On the occasion of the 25th of the IGS in 2008 the Society has initiated a program to recognize those corporate members that have 20years or more continuous membership. In 2008 there are 18 such companies. In 2010, at the 9th ICG, the program will continue with as many as 6 companies to be recognized.

Recognition ceremonies and the presentation of a "gift" for each company will take place at the three IGS events in 2008, GeoAmericas in Cancun, Geosynthetics Asia in Shanghai and EuroGeo4 in Edinburgh. The companies to be recognized are listed below.

Award Ceremony at GeoAmericas 08:

- Geosynthetic Materials Association (GMA), USA
- NAUE GmbH & Co. KG, Germany

Award Ceremony at GeoSynthetics Asia 2008:

- Asahi Kasei Geotechnologies Co., Ltd., Japan
- Kajima Corporation, Japan
- Award Ceremony at EuroGeo4:
- Bonar Technical Fabrics N.V., Belgium
- · Colbond bv., The Netherlands

- Du Pont de Nemours (Luxembourg) S.A., Luxembourg
- Fibertex A/S, Denmark
- Fritz Landolt AG, Switzerland
- GSE Lining Technology, Inc., USA
 Huesker Synthetic CmbH & Co
- Huesker Synthetic GmbH & Co., Germany
- Okasan Livic Co. Ltd., Japan
- Swiss Association for Geosynthetics SVG, Switzerland
- TenCate Geosynthetics Europe GmbH, Austria
- Terram Ltd., United Kingdom

Award Ceremony to be fixed:

- Japan Spunbond Toray Corp., Japan
- Obayashi Corporation, Japan
- Tokyu Construction Co. Ltd., Japan

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The IGS Clothing was a good selling article at the IGS Booth at GeoAmericas '08.

Please be aware: Summer is coming soon! Buy your IGS shirts now!

IGS Logo Clothing is now available on-line. Hats, visors and various shirts can be viewed and ordered through the Members Only Section (www.geosyntheticssociety.org/me mbersOnly/Login.asp) of the site.

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Visor	840	One size fits all	White, Stone, Aqua, Carrot, Khaki, Dandelion	\$11.00
Сар	810	One size fits all	White, Khaki	\$11.00
T-Shirt	PC61	S, M, L, XL	White, Aqua, Ash, Gold, Daffodil, Light Blue, Lime, Red, Natural,Orange Sherbet, Pink, Sand, Stonewash Green, Stonewash Blue, Spruce, Heather, Colonial Blue,	\$11.00
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Cutter & Buck Golf Shirt	02481	S, M, L, XL	White, Lotus, Putting Green, Red, Black, Sea Blue, Navy Blue	\$35.00
Short Sleeve Button Down 507 S, M, L, XL Light Stone, White, Faded Blue		\$28.00		
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The International Geosynthetics Society OBJECTIVES OF THE IGS



The International Geosynthetics Society was formed with the following objectives:

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

WHY BECOME A MEMBER OF THE IGS?

First, to contribute to the development of our pro- Second, to enjoy the benefits. fession.

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.

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The following benefits are now available to all IGS Members:

- · the IGS Membership Directory, published yearly;
- the newsletter, IGS News, published three times per year;
- · free electronic issues of Geosynthetics International and Geotextiles & Geomembranes;
- a CD containing the 19 IGS Mini Lecture Series;
- a DVD containing the three IGS Videos;
- 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
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Membership of the International Geosynthetics Society (IGS) 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 individuals and US\$1000 for Corporate Members. Individuals of, or not of, corporations who voluntarily contribute a minimum of US\$200 annually to the IGS, in excess of their membership dues, will be mentioned in the IGS Directory in a separate list as benefactors

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