

IGS NEWS



NEWSLETTER OF THE INTERNATIONAL GEOSYNTHETICS SOCIETY

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

VOLUME 22, NO. 2

JULY 2006

From Nice to Yokohama: A review of four stimulating years for the IGS

by Daniele Cazzuffi, IGS President

It is almost four years since I was elected President of the IGS, in Nice, in September 2002. Therefore, it is time to review the several goals I wanted to achieve for maintaining and enhancing the overall excellence of the IGS. As outlined in the November 2002 issue of *IGS News*, the five main goals of my program were the following: **communication**, **expansion** (chapters and structure), **education**, **science vs. business** and, finally, **links with other international associations**.

In this Editorial, I will review the IGS activities of the past four years, with particular reference to the five main goals of my original program.

Communication

The **IGS website** has been tremendously improved and continuously updated: a new “only members” section will be opened in the near future.

IGS News became electronic in

November 2005 (i.e., not distributed in hard copy). Every IGS Member receives e-mail notification of each new issue and a listing of the main articles. The content of the Newsletter is recognized as a reference, in terms of both its quality and quantity of information enclosed, amongst similar newsletters of other learned societies in the world.

Yearly circulation of the **IGS Directory CD Rom** became an opportunity to send all IGS Members most of the relevant recent documents of our Society, including videos, educational leaflets, and all Newsletter issues of the year.

Also, the recent **electronic ballot** for the election of President, Vice President, and Council Members resulted in better communication with our membership, with at least double the number of votes cast when compared to the average number of votes cast in previous postal ballots.

With regard to scientific commu-

nication, excellent results were obtained due to the special agreements signed with Thomas Telford and Elsevier, allowing **free electronic access** to both official IGS journals, namely *Geosynthetics International* and *Geotextiles and Geomembranes*, respectively.

Expansion (Chapters and Structure)

New national IGS Chapters were founded (namely, in Portugal, Czech Republic, Greece, Chile, and Mexico), and the Indonesian Chapter was resurrected, resulting in 27 chapters around the world!

The **IGS Achievement Award** was recently created to provide a vehicle for the chapters to identify and nominate a special member who has contributed to the chapter and to the IGS in a significant way, but who may not be identified to the IGS using any other regular mechanism. The first IGS Achievement Awards will be presented during the

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Visit the IGS WWW site: www.geosyntheticssociety.org

next General Assembly in Yokohama at the 8th International Conference on Geosynthetics (8/CG) in September 2006.

The overall connection between the single chapters and the IGS Council has been improved with the creation of three balanced **Regional Activities Committees**, namely, the European, the Asian, and the joint North-South American, each of them chaired by an IGS Council Member coming from the relevant continent. More specifically, the membership of each regional activities committee includes at least one delegate from every chapter in the region, thus, a **direct link between chapters and the IGS** has been established.

This new modified structure of the overall connection between chapters and the IGS was also made possible by the activities and fruitful discussions amongst members of the newly created **IGS Strategy Committee**, the so-called “brain-storming” committee.

Due to the enhancement of balanced activities among the different regions, I am very proud to announce that, in 2008, for the first time, three regional conferences will take place (instead of two), namely

GeoAmericas 2008 (the *First Pan-American Geosynthetics Conference and Exhibition*, in Cancun, Mexico, 2-5 March), **Geosynthetics Asia 2008** (the *4th Asian Regional Conference on Geosynthetics*, in Shanghai, China, 17-19 June) and **EuroGeo 4** (the *Fourth European Geosynthetics Conference*, in Edinburgh, UK, 7-10 September).

It is my hope that, to truly provide world-wide coverage, the First Regional Conference in Africa will be organised in the coming years.

Education

Several **training courses** were, for the first time, directly organised by the IGS Education Committee in conjunction with various international events, e.g. the *GeoAsia 2004* conference (Seoul, June 2004) and the *Tsunami Symposium* (Bangkok, December 2005). Similarly, a one-day training course will be organised in conjunction with the 8/CG on Monday, 18 September 2006.

In fact, the **IGS Education Committee** has become the “focal point” of all educational activities of the IGS, including the twelve leaflets already prepared and circulated and the eight leaflets currently under preparation, dedicated to the

different geosynthetics applications.

The **IGS Student Award** program was reviewed and will be launched every four years, with particular focus on the regional conferences. Therefore, in 2008, students from American chapters will be recognised at *GeoAmericas 2008*, from Asian chapters at *Geosynthetics Asia 2008*, and from European chapters (plus South Africa) at *EuroGeo 4*.

I am particularly pleased that the first **Professor's Training Course** organised by IGS was held in December 2005; in the upcoming years, the IGS may consider developing such a program on a world-wide scale, with the fundamental support of the local chapters.

Science versus Business

On Thursday, 21 September, at the 8/CG, there will be, for the first time in our history, a special event called the “Practitioners and Academics Forum” to help facilitate **dialogue between the geosynthetics industry and scientists**. I cordially invite everyone to attend what will be a very provocative and, I hope, very productive plenary session.

In the meantime, the **IGS Corporate membership** is at the *highest level ever* of 112 companies. Concurrently, we also continually strive to increase the Society's individual membership, particularly university professors and researchers, which has recently been facilitated by free electronic access to both geosynthetics scientific journals.

Links with other International Associations

In the past four years, the relationships with other learned societies, and particularly with the **ISSMGE** (*International Society for Soil Mechanics and Geotechnical Engineering*), greatly improved. To demonstrate this fact, it is enough to mention that, for the first time, the ISSMGE gave its support to an International Conference on Geosynthetics (8/CG) and its auspices to the two regional geosynthetics



IGS Council Members (back, left to right): Malek Bouazza, Hiroshi Miki, Mike Sadlier, Ennio Palmeira, Masashi Kamon, Pierpaolo Fantini, John Cowland, Eun Chul Shin, Gerhard Bräu, Michele Maugeri, Elizabeth Peggs, Jorge Zornberg, Bernard Myles. Missing are Barry Christopher, Ernesto Alio, G. Venkatappa Rao, Cheng Gang Bao, Philippe Delmas, Steve Corbet.

IGS Officers (front, left to right): Pete Stevenson, Fumio Tatsuoka, Daniele Cazzuffi, Wim Voskamp, Richard Bathurst.

conferences held in 2004 (*EuroGeo 3* in Munich, and *GeoAsia 2004* in Seoul), while, for the first time, the IGS gave its auspices to two very traditional geotechnical events held in 2006, namely the *XIII Danube-European Conference* in Ljubljana and the *5th International Congress on Environmental Geotechnics* in Cardiff. This reinforced link was also very positive for our corporate members, who, as exhibitors in the geotechnical events, were able to meet a broader audience of clients, if compared to the usual attendance of specific shows devoted only to geosynthetics. This was also the case for the very successful *Geo-Frontiers 2005* conference held in January 2005 (Austin, Texas) with

the auspices of both the IGS and ISSMGE.

I am sure this **collaboration between the IGS and the ISSMGE** is planned to continue in the future, with mutual benefits to both learned societies.

In Conclusion

As stated in my first message as IGS President, "all of the Society's activities will be focused on promoting the correct and most efficient use of geosynthetics worldwide. This will contribute to sustainable development for us, our children, and future generations."

Having this in mind, to create a bright future for the IGS, it is mandatory to plan for the future and mentor the new generation, such

that they are eager to pursue, develop, and expand the present achievements and reputation of the IGS as a respected professional international society. Therefore, we need to involve more and more young and motivated professionals in the IGS worldwide.

Finally, I take this opportunity to thank all of the IGS Officers and Council Members, the IGS Secretariat, all of the IGS Chapter representatives, the IGS Past Presidents, the *IGS News* Editor, the IGS website staff and, of course, the IGS Corporate, Individual and Student members for the very fruitful collaboration in the past four years.

See you in Yokohama!

Be Sure Not to Miss the 8th International Conference on Geosynthetics (8ICG)

18 to 22 September 2006, Yokohama, Japan

The *8th International Conference on Geosynthetics, 8ICG*, will be held on 18 to 22 September 2006 in Yokohama, Japan. The *8ICG* follows the latest successful international geosynthetics conference, *7ICG*, which was held in Nice, France in 2002.

Over **350** paper abstracts have been accepted for the *8ICG*, which is the greatest number of accepted abstracts in the history of the International Conferences on Geosynthetics.

The final papers have been peer-reviewed by the International Paper Selection Committee (IPSC) and international reviewers appointed by the IPSC. The IPSC Members are Jiro Kuwano – Chair (Japan), Richard Bathurst (Canada), Heinz Brandl (Austria), Daniele Cazzuffi (Italy), Jean-Pierre Gourc (France), Robert Holtz (United States), Chris Lawson (Malaysia), Masashi Kamon, Junichi Koseki, and Fumio Tatsuoka

(all of Japan).

Conference Objectives

The objectives of the Conference are to offer:

- an exceptional opportunity for exchanges between specialists and non-specialists, as well as between experts and in the various disciplines related

present practical information to match the expectations of all participants. As a result, the *8ICG* will appeal to all participants in the field of Geosynthetics Engineering.



to geosynthetics

- perspectives and an overview of technical innovations by providing the widest possible forum to engineers and researchers, and by welcoming papers devoted to new techniques and applications.

The Conference will be conducted at a high scientific and technical level and, at the same time, will

Conference Topics

- Transport
- Hydraulic structures
- Erosion control and coastal works
- Soil improvement and reinforcement
- Mining
- Waste landfills
- Remediation of contaminated sites
- Landscaping and environmental mitigation
- Prevention of natural and technological risks
- Agriculture and forests

- Innovative geo-materials and construction methods
 - Education and technology transfer
 - Others
- All aspects of the use of geosynthetics will be dealt with, drawing on the experience gained from case histories as well as research and

development into new products and uses, i.e., design concepts, dimensional design, specifications, construction provisions and construction of structures, inspection, long-term behaviour, assessment of product impact(s) on the environment, standardization, certification, and others.

New Conference Features

Practitioners and Academics Forum

A Special Plenary Session will be held during the 8/CG to help facilitate a dialogue between geosynthetics researchers and practitioners, which will be moderated by Richard J. Bathurst, IGS Past-President. The

8/CG Conference Schedule

	18 Sept. (Mon.)	19 Sept. (Tue.)	20 Sept. (Wed.)	21 Sept. (Thu.)	22 Sept. (Fri.)	23 Sept. (Sat.)
800						
900		Registration	Registration	Registration	Registration	
930		Opening Session IGS History by J.P.Giroud IGS Pioneers (9:30-10:30)	Keynote Lecture 1 by J. Koseki et al. (9:00-10:00)	Keynote Lecture 2 by M. Heibaum et al. (9:00-10:00)	Keynote Lecture 3 by E. Kavazanjian et al. (9:00-10:00)	
1000			IGS Student Awards			
1030			Coffee (10:00-10:30)	Coffee (10:00-10:30)	Coffee (10:00-10:30)	
1100		Giroud lecture by C. Lawson (10:30-11:30)	4 parallel sessions (S3 A-D) (10:30-12:00)		4 parallel sessions (S6 A-D) (10:30-12:00)	
1130					IGS General Assembly including "IGS Awards" (10:30-12:00)	
1200		Exhibition opening (11:45-12:00)	W-3 R-3 H-3 R-11	R-6 T-3 H-6 R-12		
1300		Lunch (12:00-13:30)	Lunch (12:00-13:30)	Lunch (12:00-13:30)	Lunch (12:00-13:30)	
1330						
1400		4 parallel sessions (S1 A-D) (13:30-15:00)	4 parallel sessions (S4 A-D) (13:30-15:00)	4 parallel sessions (S7 A-D) (13:30-15:00)	4 parallel sessions (S8 A-D) (13:30-15:00)	
1430		W-1 R-1 H-1 R-9	W-4 R-4 H-4 R-15	R-7 T-2 E-1 R-13	R-8 T-1 E-2 R-14	
1500						
1530		Coffee (15:00-15:30)	Coffee (15:00-15:30)	Coffee (15:00-15:30)	Coffee (15:00-15:30)	
1600		4 parallel sessions (S2 A-D) (15:30-17:00)	4 parallel sessions (S5 A-D) (15:30-17:00)	Special session PA Forum (15:30-17:00)	Closing session (15:30-17:00)	
1630		W-2 R-2 H-2 R-10	W-5 T-4 H-5 R-5			
1700						
1730		Ice break & Poster session	Drink & Poster session	Football	Banquet	
1800						
1830	Rankine Lecture Terzaghi Lecture (17:30-19:30)		ISO TC221 Meeting (17:00-20:00)			
1900						
1930						
2000						
2100						

goal is to have areas of research identified by academics that have potential applications to practitioners and have potential geosynthetic research opportunities identified by practitioners.

Case Histories

A new and unique feature of the 8/CG will be presentation sessions organized for more than 80 papers on geosynthetics engineering case histories submitted from IGS chapters and individual authors from all over the world.

Special and Keynote Lectures

Giroud Lecture by Lawson, C.R. (Malaysia) on "Geotextile Containment for Hydraulic and Environmental Engineering"

Keynote Lectures

- Heibaum, M. (Germany), Fourie, A. (Australia), Girard, H. (France), Karunaratne, G.P. (Singapore), Lafleur, J. (Canada), Palmeira, E.M. (Brazil) on "Hydraulic Applications of Geosynthetics"
- Koseki, J. (Japan), Bathurst, R.J.

Visit the Conference website at www.8icg-yokohama.org for more information or contact:
Mr. Noboru Kiyokawa
Conference Secretary
Tel: 81/3 3837 2503
Fax: 81/3 3837 5818
info@8icg-yokohama.org

- (Canada), Guler, E. (Turkey), Kuwano, J. (Japan), Maugeri, M. (Italy) on "Seismic Stability of Reinforced Soil Walls"
- Kavazanjian, E. (USA), Dixon, N. (UK), Katsumi, T. (Japan), Kortegast, A. (New Zealand), Legg, P. (South Africa), Zanzinger, H. (Germany) on "Landfill and Environmental Issues"

"IGS History" by Giroud, J.P.

Pre-Conference Special Lectures

"The Vienna Terzaghi Lecture" by J.P. Giroud and the "2005 Rankine

Lecture" by R. Kerry Rowe will be presented on 18 September 2006 and is being hosted by the Japan IGS Chapter and the Japanese Geotechnical Society. The Lectures are open to and free for all Conference participants and members of the Japan IGS Chapter and the JGS. Reservations are required due to the limited number of available seats; contact Ms. C. Nohara for more information:

nohara@rs.noda.tus.ac.jp

Geosynthetics Training Course

An introductory training course on geosynthetics organized by the IGS Education Committee will be offered all day on 18 September 2006, with an introduction by Dr. Cazzuffi, IGS President.

- Geosynthetics Types and Functions (E. Palmeira)
- Geosynthetics in Drainage and Filtration (J.P. Gourc)
- Geosynthetics in Hydraulic Applications (J. Zornberg)
- Geosynthetics in Reinforced Walls and Steep Slopes (R. Bathurst)
- Geosynthetics in Unpaved Roads (E.C. Shin)
- Geosynthetics in Embankments on Soft Soils (J. Otani)
- Geosynthetics in Waste Disposal (M. Bouazza)

The training course fee is JPY3,000. There is a limited number of seats and those interested should register as soon as possible.

IGS Meetings

Pre-Conference Council Meeting (outgoing Council): Monday, 18 September, 8:00 to 17:00

General Assembly: Thursday, 21 September, 10:30 to 12:00

Post-Conference Council Meeting (new Council): Saturday, 23 September, 10:00 to 17:00

Technical Tours

There will be pre-, during, and post-Conference technical tours to sites such as the Daini Tomei Express-

way, the Port and Airport Research Institute, and the world's longest suspension bridge, the Akashi Straits Bridge. For more information, visit the Conference web site.

Accompanying Persons Program

Several programs and tours will be held for accompanying individuals including a tea ceremony and flower arrangement program, tours to temples, shrines and museums, and boat tours. Again, for more information, visit the Conference web site.

Conference Registration Fees

Registration fees include technical sessions, coffee/refreshment breaks, lunches, CD-ROM proceedings, football match, entrance to the exhibition.

For IGS and ISSMGE members:

- before the end of June 2006 -- JPY70,000 for full participation (JPY30,000 for one day);
- after 1 July 2006, JPY80,000 for full participation (JPY36,000 for one day).

For students members:

- before the end of June 2006 -- JPY36,000 for full participation (JPY30,000 for one day);
- after 1 July 2006 -- JPY90,000 for full participation (JPY36,000 for one day).

For others:

- before the end of June 2006 -- JPY80,000 for full participation (JPY36,000 for one day);
- after 1 July 2006 -- JPY90,000 for full participation (JPY42,000 for one day).

Organized by the Japan Chapter of the IGS

Under the auspices of the IGS

With the support of the International Society for Soil Mechanics and Geotechnical Engineering, & the Japanese Geotechnical Society

reported by Fumio Tatsuoka, IGS Vice President and Chair of the 8/CG Organizing Committee

IGS Officer and Council Meeting Minutes

Cardiff, Wales, UK, 23 to 25 June 2006

The following is a synopsis of three days of meetings involving the IGS Officers Daniele Cazzuffi, Fumio Tatsuoka, Pete Stevenson, Wim Voskamp and Richard Bathurst.

These meetings were assisted by Rosemary Stevenson, Manager of the IGS Secretariat, and Council Members Ennio Palmeira, Elizabeth Peggs, Steve Corbet, Bernard Myles, John Cowland, Eun Chul Shin, Jorge Zornberg, Pierpaolo Fantini, Michele Maugeri, Malek Bouazza, Barry Christopher, Gerhard Braeu, and guests Yun min Chen, Xiao-wu Tang, Liang-Tong Shan, Anastassios Kollios, Derek Smith, and Hugues Girard.

IGS Journals

One of the premier membership benefits is electronic access to the IGS Journals. T. Telford presented a report to the Communications Committee concerning the activity of *Geosynthetics International*. Representatives from both *Geotextiles & Geomembranes* and *Geosynthetics International* will present activity reports at the next IGS meetings, to be held in conjunction with the 8/ICG in September, in Yokohama, Japan.

IGS Handbook

The IGS Handbook will be revised by the Secretary and the revisions will be reviewed by the Officers. The Handbook contains the IGS bylaws, the IGS Code of Ethics, and several guidance documents concerning chapter formation, chapter bylaws, organizing conferences and other activities that can be helpful to IGS Members. The revised document, 2006 Edition, is expected to be available at the 8/ICG and will be distributed to Council Members. In the near future, the revised Handbook will be available electronically to IGS Members from the IGS web site.

IGS Corporate Members

Corporate membership in the IGS continues to grow with 112 members on board as of 25 June 2006. The IGS will strive to expand the individual membership category through a campaign to insure that members of the industry are fully aware of the benefit package provided by the IGS.

The IGS will host a reception for the corporate membership on the evening of Monday, 18 September at the 8/ICG immediately following the Terzaghi and Rankine Lectures by J.P. Giroud and Kerry Rowe, respectively.

IGS Awards

There are two categories of IGS Awards: the competition for the IGS Awards which are granted for excellence in achievement every two years by a special awards committee; and awards of recognition, granted periodically by the Council in recognition of significant contribution to the IGS and the industry.

IGS Recognition Awards

- *IGS Honorary Membership* for extraordinary service to the IGS and to the industry
- *IGS Plaque* for extraordinary contribution to the industry
- *IGS Service* for service to the IGS, usually at the council level

The Officers recommended, and the Council approved, the addition of a *new IGS Award for Achievement*. The proposal was to establish the IGS Achievement Award for service to the IGS and the industry, usually given for contribution at the chapter or national level and usually nominated at the chapter level. This award will be included in the normal two-year cycle as for all other IGS awards.

Accordingly, the IGS recognition awards category now reads: IGS Honorary Membership, IGS Plaque,

IGS Service, and IGS Achievement.

Award Nominations

There were several nominations for recognition awards, which will be presented at the 8/ICG. *Robert Koerner* and *Kerry Rowe* were awarded *IGS Honorary Membership* in the Society. *Richard Bathurst* and *Wim Voskamp* were awarded the *IGS Plaque*, and *Rudolph Floss* was awarded the *IGS Service Award*.

Student Awards

At the 8/ICG, the student award program will recognize contributions made by candidates selected by the different IGS Chapters in the world by the end of July 2006.

9th International Conference on Geosynthetics (9/ICG)

The IGS Chapter from Brasil was unanimously selected to host the 9/ICG in 2010. The exact location in Brasil will be decided at the next IGS meetings in Yokohama in September 2006.

Electronic Election Underway

The electronic election for officers and council is currently underway and appears to be successful in creating a voting opportunity for a larger portion of the membership than previously enjoyed by postal ballot or General Assembly elections. With 20 days remaining to cast a vote at the time of writing, the votes cast were already twice the number cast in the previous postal ballot in 2004.

New IGS Chapters

Two new chapters were approved by Council. Congratulations are due to the organizers and members of the Chilean and Mexican Chapters of the IGS. Special recognition is due to Jorge Zornberg who was tireless in assisting the organizers in both countries.

Other Updates

IGS web site: The web site continues to be a successful communication device with high traffic from all corners of the globe and utilization of many pages.

Regional Conference Update: Planning is well advanced for the several regional conferences that will take place, in 2008, in Cancun, Mexico (*GeoAmericas 2008*), Shanghai, China (*Geosynthetics Asia 2008*) and Edinburgh, UK (*EuroGeo 4*). Promotion for these events will hit full stride immediately following the conclusion of the *8/CG*.

Education Committee: The Education Committee plans to complete the information leaflet set with additional topics, and a promotional flyer on the leaflets for the *8/CG*. The next task is to prepare a generic training course that can be applied to developing and developed markets alike. A preview will be employed for the *8/CG* training course.

Technical Committee: The Technical Committee is nearing completion on a generic specification guide. The Committee Chair, Steve Corbet, intends to have a final draft ready for review and adoption at the *8/CG*.

Next Officers and Council Meetings

The next meetings of the IGS Officers and Council will take place at the *8/CG* in Yokohama, Japan, at the following times:

- **Officers**, 9:00 AM
17 September 2006
- **Outgoing Council**, 8:00 AM
18 September 2006
- **New Council**, 10:00 AM
23 September 2006

reported by Peter Stevenson
IGS Secretary

IGS Pioneers

Recognition Event at the *8/CG* in September 2006

The IGS will recognize Pioneers of the IGS at the Opening Session of the *8/CG* on Tuesday, 19 September 2006, in Yokohama, Japan.

An IGS pioneer is defined as an IGS Member who fulfills the following criteria:

- Attendance at the Paris Conference (1977) and all subsequent ICG conferences including Yokohama and/or
- Attendance at the Las Vegas Conference (1982), including the ad hoc meeting that initiated the plan-

ning and subsequent formation of the IGS and attendance at the next six conferences and planning to be in Yokohama and/or

- Recognized activity and contribution to the IGS and the industry over the period of 1977 to the present and planning to be in Yokohama.

At present, the IGS Pioneers expected to appear in Yokohama include: J.P. Giroud, J.P. Gourc, D. Fayoux, P. Delmas, B. Myles, P. Rankilor, P. Stevenson, C. Fuller, P. Barker, B. Holtz, B. Christopher, G.

Heerten, C. Finazzi, D. Cazzuffi, M. Fukuoka, T. Yamanouchi, J. Kassner and C. Lawson.

If you are a person, or know of persons, who meet the qualifications and expect to be in Yokohama, please identify yourself or your colleagues to the IGS Secretary immediately by e-mail (IGSsec@aol.com).

reported by Peter Stevenson
IGS Secretary

Seminar on Applications of Geosynthetics in Environmental Engineering: Chinese Chapter Update

Held in Shanghai, China on 12 to 14 April 2006

The Seminar on *Applications of Geosynthetics in Environmental Engineering* was held on 12 to 14 April 2006 in Shanghai, China and was organized by the Chinese Chapter of the International Geosynthetics Society (CCIGS) and the Chinese Technical Association on Geosynthetics (CTAG), with the support of the Shanghai Investigation, Design & Research Institute (SIDRI). Approximately 100 participants from almost every field of geosynthetics investi-

gation and profession attended, i.e., manufacturers, installers, researchers, and designers.

Dr. J.P. Giroud was invited to give the **Mercer Lecture** titled "Contribution of Geosynthetics to the Geotechnical Aspects of Waste Containment". There were two parts in his lecture: the first addressed the contribution of geosynthetics to liquid control, while the second part discussed the contribution of geosynthetics to short- and long-term integrity of landfills. Dr. Giroud thor-

oughly explained the issues using photos of geosynthetics in situ.

The Seminar attendees expressed a greater appreciation and gained a broader view of the updated challenges and solutions to the practical problems faced when using geosynthetics in the field for waste containment. At the end of the Lecture, Dr. Giroud answered questions from Chinese experts in the audience.

The Mercer Lecture is a biennial

lecture sponsored by Tensar International with the endorsement of the IGS. The aim of the lecture is to promote cooperation and information exchange between geotechnical engineering and geosynthetics engineering. The lecture is given once each in Europe, North America, and the Far East with, in each case, the venue and date being agreed by the selection committee comprising representatives of Tensar International, the ISSMGE, and the IGS.

Three other experts from the Chinese Chapter were also invited to present: Professor Chen Yunmin, Architecture Engineering School of Zhejiang University; Chief Engineer Wang Yanming, Shanghai Civil Engineering Design & Research Institute; and Hua Guiliang, the Deputy Director of the Environmen-

tal Protection Division of Shanghai Investigation, Design & Research Institute. Each presented a special report on their research in the application of geosynthetics.

As part of the Seminar, a trip to the Shanghai Laogang Landfill Project was organized for all participants. This landfill project is one of the biggest projects of its kind in China and is aided by loans from the World Bank. The landfill was designed by an international professional institute in cooperation with the Shanghai Civil Engineering Design & Research Institute.



Presentation of gift to Dr. J.P. Giroud from the Chinese Chapter of the IGS.

reported by Xia Qixing and Fenny Huang, IGS Members

Geo-Environmental Engineering 2006

Sixth Japan-Korea-France Joint Seminar on Geoenvironmental Engineering

3 to 4 April 2006, Kyoto, Japan

Geo-Environmental Engineering 2006 (GEE 2006, or Sixth Japan-Korea-France Joint Seminar on Geoenvironmental Engineering) was held on 3 and 4 April 2006 at the Fukui Institute for Fundamental Chemistry, Kyoto University, Kyoto, Japan.

Geo-Environmental Engineering 2006
Sixth Japan-Korea-France Joint Seminar on Geoenvironmental Engineering
April 3-4, 2006, Kyoto University, Japan



The Conference was jointly organized by Kyoto University, Japan, Seoul National University and the Korea Institute of Construction Technology (KICT), Korea, and University Joseph Fourier, France, under the auspices of the IGS and the Japanese Geotechnical Society (JGS), and supported by the Society for Materials Science, Japan (JSMS).

The main goal of the Conference of "... sharing information, experi-

ences, and research to give Conference participants greater knowledge, and the ability to help revitalize their communities." was achieved.

Participants

A total of 89 full registrants from 11 countries including 3 invited persons participated in the Conference. Thirty six people were invited to contribute an oral presentation.

Conference Papers and Proceedings

The 40 accepted papers are included in the Conference proceedings. The PDF files of the papers are available on the IGS web site at www.geosyntheticssociety.org.

Conference Program

The paper presentations and discussions were organized into six **Plenary Sessions:**

1. Landfill Liner, Cover and Barrier (Chaired by Prof. Catharine

Mulligan, Concordia University, Canada)

2. Landfill Liner, Cover and Barrier (Chaired by Prof. Junboun Park, Seoul National University, Korea)
3. Testing of Physical and Chemical Properties (Chaired by Dr. Ha Ik Chung, Korea Institute of Construction and Technology, Korea)
4. Characteristics of Geosynthetics (Chaired by Prof. Jean-Pierre Gourc, University Joseph Fourier, France)
5. Contaminated Soil and Groundwater (Chaired by Prof. Takeshi Katsumi, Kyoto University, Japan)
6. Monitoring and Field Investigation (Chaired by Prof. Yoshihisa Shimizu, Kyoto University, Japan)

The contributions were not only laboratory tests, theoretical modeling, and numerical analyses, but also field monitoring results and

practical applications. All of the contributions were very comprehensive and interesting topics.

Mercer Lecture – Conference Highlight

We were pleased that Dr. J.P. Giroud (JP Giroud, Inc., USA) presented the sixth Mercer Lecture at the Conference, which had been originally scheduled for the 16th International Conference on Soil Mechanics and Geotechnical Engineering held in Osaka Japan on 15 September 2005. The title of the lecture was “Contribution of geosynthetics to the geotechnical aspects of waste containment”. The Mercer Lecture was introduced by D. Cazzuffi, IGS President.

Special Events

Session Awards

Each Session Chair selected a “best presenter”, all of whom were given awards at the Closing Session. The list of the recipients is as follows:

- Mr. Crist Martin (Seoul National University): Capture width of permeable reactive wells as function of hydraulic conductivity
- Mr. Yoshikazu Otsuka (Kyoto University): Self-sealing system using pressured colloidal solution (SLC)

- Mr. Jin-Woo Cho (KICT): Strength characteristics of industrial by-products as a ground stabilizer
- Mr. Saravanan Mariappan (Kyoto University): Landfill liners stability assessment using interface parameters
- Mr. Hirotohi Mori (Public Works Research Institute): Treatment system for dioxins contaminated drainage using artificial filter modules for construction sites
- Mr. Hyun Uk Bake (Seoul National University): Evaluation of ion effect by a moisture probe applied in landfill monitoring

Reception and Closing

On the first evening, a reception was held at the Holiday Inn Kyoto Hotel. On the last evening, a farewell Sukiyaki party was held at a Japanese restaurant.

Next Conference

Geo-Environmental Engineering 2007 (GEE 2007, or Seventh Japan-Korea-France Joint Seminar on Geoenvironmental Engineering) will be held on 21 and 22 May 2007 at University Joseph Fourier, Grenoble, France.

*reported by Masashi Kamon
Chair of the GEE2006 Organizing
Committee and IGS
Council Member*



Geo-Environmental Engineering 2006 conference participants.

Synopsis of the XIII Danube-European Geotechnical Engineering Conference

Held on 29 to 31 May 2006, in Ljubljana, Slovenia

The 13th Danube European Conference on Geotechnical Engineering (DECGE) was held on 29 to 31 May 2006 in Ljubljana, Slovenia.

The Conference was jointly organized by the Slovenian Geotechnical Society and the Road and Transportation Research Association of Slovenia under the auspices of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), International Geosynthetics Society (IGS), and

Ministry of Transportation of the Republic of Slovenia. The main theme of the Conference was “Active Geotechnical Design in Infrastructure Development”.

The Conference theme, session topics, and venue attracted over 300 participants from 29 countries, 9 sponsors, and 31 exhibitors. At the Opening Ceremony, Conference participants were greeted by Prof. P. Seco e Pinto (ISSMGE President), Prof. R. Frank (ISSMGE

Europe Vice President), Dr. D. Cazzuffi (IGS President), J. Božič, M.Sc. (Minister of Transport of Republic of Slovenia), and Prof. B. Majes, Organizing Committee President).

Special Lectures

The following invited Special and Keynote lectures attracted much interest.

Heritage Lecture: *Slovenian Geotechnics*, Prof. B. Majes, University of Ljubljana, Slovenia

Šuklje Memorial Lecture - Special

Lecture 1: The Isotache Approach.

Where are we 50 years after its development by Prof. Šuklje? Prof. S. Leroueil, Université Laval, Québec, Canada

Special Lecture 2: Geotechnical problems of reconstruction of historical cities, Prof. V. Ulitsky, Dr. A. Shashkin and Dr. M. Lisyuk, St. Petersburg State Transport University and Georeconstruction, St. Peterburg, Russian Federation

Special Lecture 3: From major to minor – innovation and managing risk on small projects, Dr. A. Powderham, Mott MacDonald, United Kingdom

Keynote Lectures

Site characterization for geotechnical and geoenvironmental purposes, Prof. W. Wolski and Dr. M. Lipinski (Poland)

Soil reinforcement for foundations, Prof. F. Schlosser and Dr. B. Simon (France)

The role of geotechnical engineering in brownfields redevelopment, Prof. I. Vaniček (Czech Republic)

Observations on the observational method, Prof. A. Szavits Nossan (Croatia)

Basic regularities of soil-structure interaction, Dr. C. Shashkin (Russian Federation)

Safety and risk in geotechnics, Prof. M. Ziegler (Germany)

Ground improvement and earthwork innovations for transportation infrastructure, Prof. H. Brandl (Austria)

Practitioner-Academic Forum

The Practitioner-Academic Forum was organized by Prof. Mike Jamiolkowski, Past President of ISSMGE, following the idea of the 16th ICSMGE that was held in 2005, in Osaka, Japan. Prof. S. Springmann (Switzerland) represented academic views, Prof. M. Nussbaumer (Germany) the contractor's views, Dr. J. Kleberger (Austria) designer's views, and L. Prah (Slovenia) the client's views on the main conference theme.

Specific Geosynthetics-Related Activities

The IGS President, Daniele Cazzuffi, addressed the Conference participants during the Opening Ceremony. The geosynthetics industry was strongly represented at the Conference with three out of nine conference sponsors coming from the geosynthetics community.

In addition, the following are examples of panel presentations that covered topics related to geosynthetics:

- *Long term performance of reinforced soil structures,* Dr. V. Herle (Czech Republic)
 - *Interactive geotechnical design with geosynthetics for covering of sludge lagoons or tailing ponds,* Prof. G. Heerten (Germany)
 - *Emergency stabilizing measures for river dykes using membranes,* Dr. J. Brauns (Germany)
- Additional



The conference hall during the lecture on long-term performance of reinforced soil structures by V. Herle from the Czech Republic.

papers on the subject of geosynthetics can be found in the Conference proceedings.

Conference Papers and Proceedings

187 papers from 34 countries were accepted for publication in the Conference proceedings, representing 390 authors. The proceedings were published in two volumes containing 1,330 pages and on CD ROM. The first volume includes Invited Special and Keynote Lectures and the second volume all other papers. Copies of the proceedings can be obtained from the Slovenian Geotechnical Society (danube.2006@fgg.uni-lj.si).

Post-Conference Activities

The technical visit to the Karst region included a visit to the world-famous Postojna cave and the construction site of the motorway section from Razdrto to Vipava.

The course on Computational Geotechnics, organized by Plaxis and Graz Technical University, was held after the Conference at the



Technical visit to the motorway construction site near Postojna.

Civil Engineering Department of the University of Ljubljana.

The Next DECGE

Bratislava, Slovakia was chosen as the venue of the 14th Danube European Conference on Geotechnical Engineering in 2010. The invitation

was extended by Prof. Turček. During the meeting of Danube countries, Prof. Brandl (Austria), who has followed the series of Danube geotechnical conferences from their beginning in Vienna, in 1964, informed us that in 2014, 50 years after the first conference, Vienna

will be happy to host the 15th Danube conference. A vote on this attractive invitation will be taken in Bratislava in 2010.

reported by Janko Logar, President of the Slovenian Geotechnical Society

Synopsis of *Rencontres Géosynthétiques 06*

Held on 12 to 14 June 2006, Montpellier, France

The 6th francophone conference of the French Chapter of the IGS, *Rencontres Géosynthétiques 06*, was held on 13 and 14 June 2006 under the auspices of the IGS in Montpellier, a quickly developing city south of France.

The Conference was very successful with approximately 300 participants, including 30 foreign (French-speaking) individuals from four continents. Many of the authors were young and new to the geosynthetics field, which bodes well for the future of the IGS.

The Conference was opened by Daniele Cazzuffi, IGS President, Jean-Pierre Magnan, President of the French Chapter CFG, and by Hugues Girard and Jean-Pierre Gourc, Co-chairs of the Conference Scientific Committee.

This Conference, which is held every two years, provides the opportunity to disseminate information to the French-speaking public on the state-of-the-art geosynthetics practice particularly for individuals not familiar with the use of geosynthetics, with a focus on:

- more updated applications of geosynthetics (e.g., at this Conference the reinforcement of weak soil or areas susceptible to local subsidence was discussed),
- the long-term behaviour of earthworks including geosynthetics, and
- standardization and quality control policy.

The participation of practitioners was encouraged, thus, the presen-

tation of case histories was a substantial part of the program. Specific sessions were dedicated to:

- Landfills and geosynthetic lining systems
- Roads and railways
- Reinforcement structures
- Hydraulic works

Training Course and Exhibition

On 12 June, the day before the Conference, a training course was held with an audience of 50 people. The course provided essential background information on geosynthetics and their use in civil engineering works. In addition, a successful technical exhibition was held during the Conference with 30 different companies presenting the latest geosynthetic products and

technologies, which enabled the exchange of information between individuals in the private sector and academia.

Proceedings

The proceedings comprise 68 papers that were reviewed by two members of the Scientific Committee; 50 of these papers were orally presented at the Conference. The proceedings will soon be available on the French IGS Chapter web site (www.cfg.asso.fr). To obtain a hard copy, contact the Secretary of French Chapter, Francois Caquel at Francois.caquel@equipe-ment.gouv.fr.

Closing Banquet

The *Rencontres Géosynthétiques* conferences have a great reputa-



From left to right: Jean-Pierre Magnan, President of the French Chapter, Hugues Girard, Jean-Pierre Gourc and Daniele Cazzuffi during the Conference opening.

tion for their traditional banquet at a wine-producing property. This time around the "Chateau du Pouget" provided the opportunity to gather

all participants and their companions in a friendly atmosphere to enjoy dinner and a glass of local wine.

reported by Jean-Pierre Gourc
Co-chair of the Conference
Scientific Committee and IGS
Member

5th International Congress on Environmental Geotechnics Held in Cardiff, Wales, UK, 26 to 30 June 2006

The 5th International Congress on Environmental Geotechnics (5ICEG) was held in Cardiff, Wales, UK, on 26-30 June 2006 and was sponsored by the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE). The Congress was held under the auspices of ISSMGE Technical Committee on Environmental Geotechnics TC5, the British Geotechnical Association, and the IGS.

The Congress theme was "Opportunities, Challenges and Responsibilities for Environmental Geotechnics" and addressed issues that continue to be a major preoccupation for governments, public and private organisations, and the general community around the world. More than 300 delegates from 40 countries attended the congress reflecting its truly international flavour.

The Congress program featured one Keynote Lecture, three Feature Lectures, and nine Workshop sessions. The Keynote Lecture was given by Dr. M. Eisa, Programme Manager, United Nations Industrial Development Organization, Vienna, Austria, on

the theme of "Persistent Organic Pollution: Sustainable Solutions".

The three feature lectures were: "A Survey of Lethal Failures in Municipal Solid Waste Dumps and Landfills," by Prof. G. Blight, Professor Emeritus, University of the Witwatersrand, South Africa "Some Factors affecting Geosynthetics used for Geoenvironmental Applications," by Prof. R Kerry Rowe, Vice-Principal (Research) and Professor of Civil Engineering, Queen's University, Kingston, Canada

"The Use of Waste Materials in Construction — Progress Made and Challenges for the Future," by Dr. M. Head, Director of Infrastructure, TRL Ltd, UK

The nine workshop sessions included an introductory lecture presenting an independent state of the art on the session theme and discussed and validated by prominent panellists. Delegates were also invited to discuss the issues raised by the submitted papers and session panellists within each workshop sessions. The workshop sessions were organised under a number of key themes including Remediation, Fate and Transport of

Pollutants, Testing and Monitoring, Sustainability, Regulation and Risk Management, Barrier Design, including Nuclear Waste Disposal, Waste Reuse and Waste Management, Mine Sites, Tailing Dams, Dredging and Lagoons, Tailings, Sludge Ponds, Underwater Geoenvironmental Issues.



Parallel to the different technical sessions, a number of geosynthetic papers were presented, and the technical exhibition featured the strong presence of geosynthetics manufacturers.

The Congress successfully brought together people working in industry, academia and the public sector to discuss the latest ideas and developments in Environmental Geotechnics and related fields. Congress proceedings (2 volumes) are available from Thomas Telford, UK, in electronic and paper formats (www.thomastelford.com).

reported by Abdelmalek Bouazza
IGS Council Member

Seminar on Lifetime of Geosynthetics (Lebensdauer von Geokunststoffen) Held on 4 to 5 April 2006, Würzburg, Germany

Following their successful one-day seminars on life prediction of geosynthetics, ERA of Leatherhead, England, worked together with the Süddeutsches Kunststoff-Zentrum (SKZ), Würzburg, Bavaria, Germany to

organise a German language version.

Under the leadership of Helmut Zanzinger, SKZ expanded this to a two-day event, which was held at Würzburg on 4 and 5 April 2006 and attended by 41 delegates from four

different countries. Helmut Zanzinger presented the introduction to geosynthetics and described geosynthetic clay liners and drainage materials; John Greenwood (ERA) presented the basics of life prediction, creep and the derivation of



Lifetime of Geosynthetics seminar attendees.

reduction factors; Hartmut Schröder (BAM, Berlin, Germany), covered the chemistry of degradation, additives and Arrhenius testing; Peter Trubiroha (BAM, now retired)

explained weathering; while Bob Koerner (GSI, Philadelphia, USA), with Bavarian roots, brushed up his “native” tongue to describe life prediction and his observations on

exposed geosynthetics on site.

The seminar included a tour of SKZs’ impressive new facilities.

*reported by John Greenwood
IGS Member*

Canadian Society for Civil Engineering Casmir Gzowski Medal goes to Richard Bathurst and Kianoosh Hatami

Richard Bathurst (IGS Past President, Royal Military College of Canada) and Kianoosh Hatami (IGS Member, University of Oklahoma) received the Casmir Gzowski Medal of the Canadian Society for Civil Engineering (CSCE) for their paper "Development and verification of a numerical model for the analysis of geosynthetic-reinforced soil segmental walls under working stress conditions," published in the *Canadian Geotechnical Journal* (Volume 42, No. 4, pp. 1066-1085).

Colonel Sir Casimir Stanislaus Gzowski (1813-1898) was founder

of the CSCE in 1887 and served as president from 1889 to 1891. Established by Sir Casimir in 1890, the Casmir Gzowski Medal is awarded annually for the best paper on a civil engineering subject in the area of surveying, structural engineering and heavy construction.

The paper describes a numerical model that was developed to simulate the response of three instrumented, full-scale, geosynthetic-reinforced soil walls under working stress conditions. The walls were constructed with a fascia column of solid modular concrete units and clean, uniform sand backfill on a rigid foundation. The soil reinforcement comprised different arrangements of a weak biaxial polypropylene geogrid reinforcement material.

The properties of backfill material, the method of construction, the wall geometry, and the boundary con-

ditions were otherwise nominally the same for each structure. The performance of the test walls up to the end of construction was simulated with the finite-difference-based Fast Lagrangian Analysis of Continua (FLAC) program. The paper describes FLAC program implementation, material properties, constitutive models for component materials, and predicted results for the model walls. The results predicted with the use of nonlinear elastic-plastic models for the backfill soil and reinforcement layers are shown to be in good agreement with measured toe boundary forces, vertical foundation pressures, facing displacements, connection

loads, and reinforcement strains. Numerical results using a linear elastic-plastic model for the soil also gave good agreement with measured wall displacements and boundary toe forces but gave a poorer prediction of the distribution of strain in the reinforcement layers.

Congratulations to Richard and Kianoosh!



*Dr. Richard Bathurst, IGS
Past President.*



*Dr. Kianoosh Hatami,
IGS Member.*

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 £325/US\$585. An individual rate for those non-members whose organization subscribes, but would like an additional personal subscription (including the update CD) will be available for £60/US\$108.

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

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Geotextiles & Geomembranes

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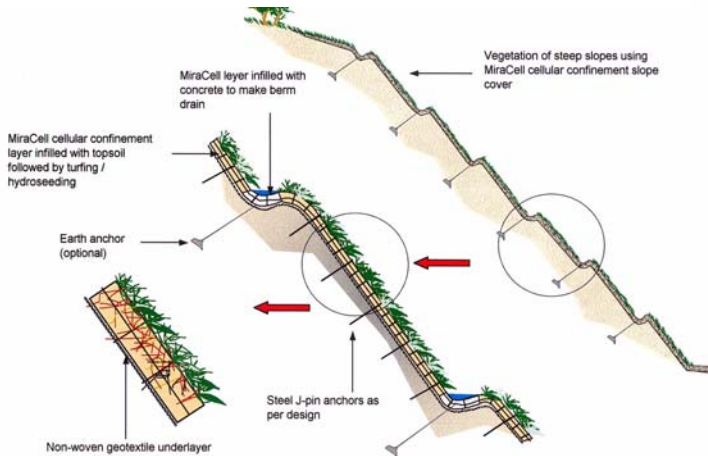
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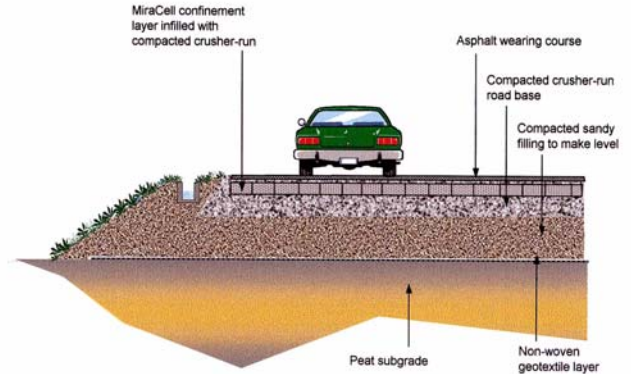


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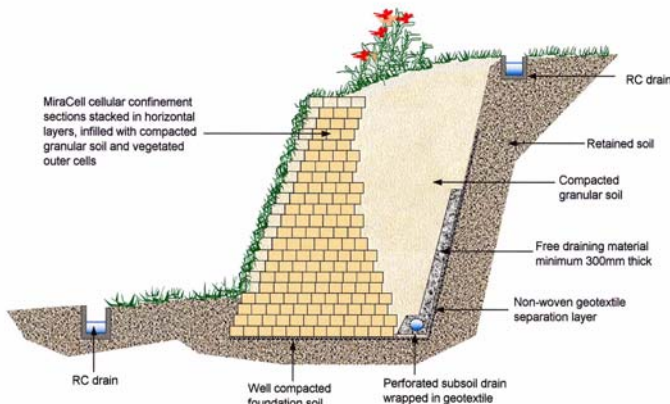
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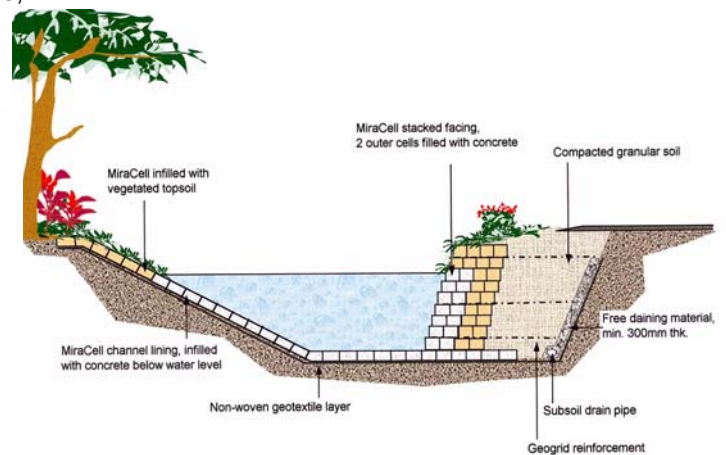
Slope Protection: MiraCell™ provides excellent protection for slopes against erosion through its engineered, expandable, strong, high density polyethylene, honeycomb structure. It confines infill and resists downward migration of material due to hydraulic flows.



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MiraCell has been a Corporate Member of the IGS since 2006.

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OJSC 494 UNR Russia

OJSC 494 UNR is a general contractor organization, which has been building a market in Russia for 38 years.

For the last 12 years, OJSC 494 UNR has manufactured and sold plastic geocells, PRUDON-494, which are applied to volumetric reinforcement of soils in road building.

OJSC 494 UNR manufactures PRUDON-494 geocells with the following dimensions to satisfy the requirements of different geocell applications:

- Type OP-1: height = 50 mm, cell = 200 mm x 200 mm
- Type OP-3: height = 100 mm, cell = 400 mm x 400 mm
- Type AP-1: height = 100 mm, cell = 200 mm x 200 mm
- Type AP-2: height = 150 mm, cell = 200 mm x 200 mm
- Type AP-3: height = 200 mm, cell = 200 x 200 mm

The best economic effect is achieved while applying PRUDON-494 geocells in difficult hydrogeological conditions. The following are examples of the potential applications of geocells in construction projects:

- reinforcement of pavement installed on a weak soil (e.g., marsh, permafrost, sand);
- reinforcement of slopes;
- reinforcement of bridge and viaduct tapers;
- construction of retaining walls from reinforced soils;

OJSC 494 UNR Russia has been a Corporate Member of the IGS since 2003.

- construction of aerodromes and helicopter pads; and
- reinforcement of river-beds and banks.

OJSC 494 UNR is the first company in Russia that produces volumetric plastic geocells at the amount of approximately two million square meters a year. The quality of product is confirmed by the State Certificate, and the origin of technology is protected by national patents.

Example Project 1



To provide instantaneous protection of slopes from water and wind erosion at a skiing complex (Sorochany in the Dmitrovsk District Moscow Region), PRUDON-494 geocells were used by OJSC 494 UNR to construct steep retaining walls (up to vertical), which were filled with soil and crushed stone materials. The slope was first erected on an existing hill in 2001. The walls were pliable and not susceptible to base settlement due to the strain capability of the soil.

The slope reconstruction project was a joint effort between OJSC 494 UNR and the Institute of FGUP SoyusdorNII.

The project and reconstruction activities included:

- Engineering surveys to provide engineering and geodesic information
- Grading to prepare the construction surface
- Subgrade and pavement drainage design
- Organizational and technological solutions
- Laboratory survey of the soil

Example Project 2

To enable the construction of steep slopes, the application of reinforced soil has been widely practiced worldwide. For example, PRUDON 924 geocells were used to reinforce the soil slope for widening the viaduct subgrade on the Moscow-Nizhniy Novgorod Highway. Geotextiles were used in combination with the geocells to strengthen and stabilize the soil and to reduce the unevenness of slope settlement and foundation stress.



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www.494unr.ru/en/index.html

CONFERENCES
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CALENDAR OF EVENTS



SHORT COURSES
EXPOSITIONS
TRADE SHOWS

International Conference on Physical Modelling in Geotechnics
Hong Kong, China
4-6 August 2006
Contact: Ms. Shirley Tse
E-mail: gcf@ust.hk
[ihome.ust.hk/~gcf/ICPMG2006/index.htm](http://home.ust.hk/~gcf/ICPMG2006/index.htm)

COBRAMSEG 2006
Parana, Brazil
27-31 August 2006
Contact: Prof. Alessandro Kormann
E-mail: alessander@ufpr.br
www.cobramseg2006.com.br

WASTECON 2006
Cape Town, South Africa
5-8 September 2005
E-mail: wastecon06@netactive.co.za
www.wastecon.co.za/

Vth European Conference on Numerical Methods in Geotechnical Engineering
Graz, Austria
6-8 September 2006
E-mail: florian.scharinger@tugraz.at
www.numge06.tugraz.at

8th International Conference on Geosynthetics (8ICG)
Yokohama, Japan
18-22 September 2006
Contact: **8ICG Conference Secretary**
E-mail: info@8icg-yokohama.org
www.8icg-yokohama.org

59th Canadian/7th CGS_IAH Conference
Vancouver, British Columbia, Canada
1-4 October 2006
Contact: Peter Lighthall
E-mail: peter.lighthall@amec.com
www.seatoskygeo.ca

International Solid Waste Association 2006 World Congress
Copenhagen, Denmark
1-5 October 2006
www.iswa2006.dk

IV International Conference on Soft Soil Engineering
Vancouver, British Columbia, Canada
4-6 October 2006
Contact: Dr. Dave Chan
E-mail: dave.chan@ualberta.ca
ravenweb.civil.ualberta.ca/icsse

XI Congreso Colombiano de Geotecnia/ VI Congreso Suramericano de Mecanica de Rocas
Cartagena, Colombia
8-13 October 2006
E-mail: scg1@colomsat.net.co
www.scg.org.co

III International Conference on Scour and Erosion
Amsterdam, The Netherlands
1-3 November 2006

Contact: Cora Hoogeveen
E-mail: mail@icse2006.org

Two Decades of Geosynthetics in India Applications of Geosynthetics New Delhi, India
8-10 November 2006
Contact: **Mr. G.N. Mathur, Secretary**
E-mail: uday@cbip.org; cbip@cbip.org
www.cbip.org

International Conference on New Developments in Geoenvironmental and Geotechnical Engineering Incheon, Republic of Korea
9-11 November 2006
Contact: Eun Chul Shin
E-mail: ecshin@incheon.ac.kr

Second National Geosynthetics Conference
Bebek, Istanbul
16-17 November 2006
Contact: Prof. Erol Guler
E-mail: erolguler@geosentetiklerdernegi.org
www.geosentetiklerdernegi.org

Geosynthetics 2007 Washington, DC, USA
16-18 January 2007
Contact: Jill Rutledge, IFAI
E-mail: jmrutledge@ifai.com
www.geoshow.info/

EC07
Reno, Nevada, USA
12-16 February 2007
Contact: Kate Nowak
E-mail: kate@ieca.org
www.ieca.org/

Young Geotechnical African Conference (YGAC)
Tunisia
16-18 March 2007
E-mail: samia.bousetta@enit.rnu.tn

3rd Asian Conference on Unsaturated Soils
Nanjing, China
21-23 April 2007
Contact: Dr Abraham C.F. Chiu
E-mail: geotech2@hhu.edu.cn
www.geohohai.com/english/unsat.htm

16th Southeast Asian Geotechnical Conference
Subang Jaya, Selangor Darul Ehsan
8-11 May 2007
Contact: Conference Secretariat
E-mail: 16seagc@iem.org.my
www.16seagc.com

IV International Conference on Earthquake Geotechnical Engineering
Thessaloniki, Greece
25-28 June 2007
Contact: Prof. Kyriazis Pitilakis
E-mail: kpitilaki@civil.auth.gr

www.4icege.org

13th Panamerican Conference on Soil Mechanics and Geotechnical Engineering
Porlamar, Nueva Esparta, Venezuela
16-20 July 2007
E-mail: svdg@telcel.net.ve
svdg.org.ve

14th European Conference on Soil Mechanics and Geotechnical Engineering
Madrid, Spain
24-27 September 2007
Contact: secretary@ecsmge2007.org
www.ecsmge2007.org

Sardinia 2007 11th International Waste Management & Landfill Symposium S. Margherita di Pula, Cagliari, Italy
1-5 October 2007
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60th Canadian/8th CGS_IAH Conference
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IS Kyushu '07 : 5th International Symposium on Earth Reinforcement Fukuoka, Japan
14-17 November 2007
Contact: Jun Otani
E-mail: junotani@gpo.kumamoto-u.ac.jp

14th African Regional Conference on Soil Mechanics and Geotechnical Engineering
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26-30 November 2007
www.issmge.org/addon/view.asp?EventID=329&Lang=

13th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering
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IGS News is published three times per year. Material for publication should be submitted to the Editor by 31 January, 31 May, and 30 September, for possible publication in the March, July, and November issues, respectively.

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.

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First, to contribute to the development of our profession.

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- 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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