## **IGS** in the Americas



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The Americas have played an important role in the history of geosynthetics and of the IGS. A significant portion of the materials, testing methods and design approaches we currently use in geosynthetics engineering have their origins in the New World. Yet, it is only very recently that "The Americas" became a region in the eyes of the IGS. It is true that for years the US and Canada have been organizing excellent and very well attended technical conferences, and that Brazil has been leading the Latin American geosynthetics market through innovation and well organized events, and that Peru has been coordinating highly unique educational geosynthetic initiatives. Yet, we did not work with each other that much. True synergy developed with the planning and execution of GeoAmericas 2008. That collaboration has triggered a series of initiatives that are now leading to a better understanding of the benefits of geosynthetics in many countries of this region. To begin with, three new IGS Chapters have been recently created (Mexico, Chile, Argentina). Also, new communications channels have been established among new and existing chapters. Finally, a country in the region has taken on the challenge of organizing the very first International Geosynthetics Conference in the southern Hemisphere (please continue reading, this event is covered towards the end of this article). This is good for the Americas, promising for geosynthetics, and extremely rewarding for the IGS.

The IGS Chapters in the Americas have grown into a premier outlet, and in many cases they have been indeed the catalyst, of many of the advances in geosynthetics which have originated in the Americas. In addition, our chapters have taken on the important IGS mission of com-

municating geosynthetics knowledge to those that are not familiar with our discipline. There are currently six IGS chapters in the Americas, with 3 of them (half!) having being founded within the last three years. When evaluating the accomplishments of these chapters a striking consistency is their ability to organize high-quality technical events that convey the message of the IGS in multiple ways. Each chapter is successfully fulfilling the IGS mission in ways that are tailored to resonate with the local engineering practitioners. The number of high-quality events is simply impressive. A sample of the proceedings of the national conferences (and of the one regional conference) held in the Americas is shown in Figure 1. This collage includes the proceedings of only some of the conferences. However, it provides good indication of the breath of technical contributions and geosynthetic educational efforts in the Ameri-

was the very first IGS Chapter in the Americas and the second Chapter in the history of the IGS (the first IGS Chapter, founded in 1985, was our Japanese Chapter). As indicated by Bob Holtz and Bob Koerner (1993), the chapter started after an informal ASTM meeting held in Florida in January 1986. The chapter was indeed born as AGS (the American Geosynthetics Society). However, during the Geosynthetics '87 Conference in New Orleans, AGS was approached by a group of enthusiastic Canadians who wished to not only join AGS but to also to hold a seat in the chapter's board and to change the chapter's name to the "North" American Geosynthetics Society. The proposal was enthusiastically accepted at the 1987 General Assembly. Since then, "NAGS" has led numerous successful initiatives that have contributed significantly to the growth of the geosynthetics industry. A highlight of NAGS efforts has been its series of highly successful conferences, including those in New Orleans (1987), San Diego (1989),

Atlanta (1991), Vancouver (1993), Nashville (1995), Long Beach (1997), Boston (1999), Portland (2001), Winnipeg (2003), Austin (2005), Las Vegas (2005), Washington DC (2007), and Salt Lake City (2009). The Proceedings of some of these conferences are shown in the lower and central-left portions of Figure 1. These conferences have been and continue to be a vibrant forum to discuss the most relevant breakthroughs in geosynthetics engineering, with an impressive number of attending practitioners, manufacturers and researchers. For example, and as noted by Richard (1993),NAGS-Bathurst the organized Geosynthetics '93 Conference in Vancouver attracted 1418 registrants and 99 exhibiting companies, becoming the largest Geosynthetics conference by that time (the largest conference was probably the 1998 International Conference in Atlanta, also organized by NAGS, see next). The geosynthetics industry is fortunate to have had NAGS officers with unmatched credentials, as this has provided the credibility needed to convey the merits and validity of new technologies (i.e. geosynthetics) to the average (skeptical) engineer. The list of NAGS presidents can be referred to as nothing less than impressive! Starting with Joe Fluet, then Bob Koerner, Bob Holtz, Jay Beech, Barry Christopher, Richard Bathurst, John Paulson, Karen Henry, David Suits, Grace Hsuan, and currently Dave Elton. We are pleased to announce the next NAGS event, GeoFrontiers 2011, which will take place in Dallas, Texas (13-16 March 2011) and promises to be one of those geosynthetics events that you simply cannot miss.

The decision to create IGS Brasil (1985) originated in 1995 during a conversation between the future IGS Brasil President, Ennio Palmeira, and the then IGS Vice-President, Richard Bathurst, during the Second Brazilian Conference on Geosynthetics (Geossintéticos '95). As noted by Ennio Palmeira (2004), the possibility of a Latin-American IGS chapter had been considered for some time, and (in retrospect) consideration of this possibility ended

up delaying the development of IGS chapters in Latin America. However, a decision was made to abandon the concept of a potential Latin-American chapter, so IGS Brasil was formed in 1997. This was a fantastic decision, as proven not only by the many achievements of an energetic IGS Brasil chapter, but also by the subsequent proliferation of IGS Chapters in Latin America. And what a contribution has the IGS Brasil made! To begin with, their very successful series of "Geossintéticos" Conferences have attracted well over 300 participants on a regular basis. This series of conferences includes those held in Brasilia (1992), Sao Paulo (1995), Rio de Janeiro (1999), Porto Alegre (2003), and Recife (2007). The Proceedings are shown in the upper-right corner of Figure 1. These successful Brageosynthetic conferences have been organized back-to-back with the Brazilian Geoenviornmental conference, which proved valuable to both conference attendees and geosynthetic manufacturers exhibiting at the conference. In addition to these successful conferences, numerous short courses and workshops are organized on a regular basis by IGS Brasil. For example, itinerary short courses are now being planned for multiple offerings in different corners of the large Brazilian territory. The Boards of IGS Brasil were led by their presidents Ennio Palmeira, Delma Vidal, Benedito Bueno, and currently by Mauricio Ehrlich, all of them world-recognized contributors to the geosynthetics discipline. The next "Geossintéticos" conference is already being planned for 2011 in Belo Horizonte. Yet, before this (certainly successful) next national conference, the IGS Brazil is up to the very important challenge of hosting our very next IGS International Conference (please keep reading).

IGS Perú ( ) was founded next in 2001 and constitutes the first chapter of the IGS in Spanish-speaking Latin America. As indicated by German Vivar (2009), the concept of a Peruvian IGS chapter was triggered in 1998 from discussions held during the 6ICG in Atlanta. German Vivar became the first President of IGS Perú and was followed by Pier Giacchetti and current President Miguel de la Torre, all of

them true leaders of the advance of geosynthetics in Latin America. IGS Perú organized the First Peruvian Conference on Geosynthetics in Lima (2004), which was a major success and attracted over 300 attendees. The Proceedings are shown in the upper-left corner of Figure 1. What is truly impressive about the activities of IGS Perú is their series of impeccably organized (and free) geosynthetic short courses that have been offered to the Peruvian engineering community. To begin with, and in coordination with Dr. Koerner from the Geosynthetics Institute, IGS Perú took on the major task of translating into Spanish the seminal book Geosynthetics. Designing with What is striking in this effort, though, is that IGS Perú scheduled their ongoing translation effort so that, after completing each book chapter, a short course was organized for the release and presentation in Spanish of the newly translated document! Thousands of Peruvian engineers did benefit from these courses, which were offered geosynthetic experts from across the Americas. As a consequence, Perú is now among the Latin American countries with an community engineering versed on the good use of geosynthetics. Please take note of the next Peruvian Geosynthetics Conference, which will be held in Lima on 28-30 October 2010, and includes the participation of IGS Past President J.P. Giroud. In addition to being another landmark national geosynthetics event, this conference will be an important step towards the subsequent challenge of IGS Perú: GeoAmericas 2012 (see below).

( is México) Mexico IGS was founded as part of the recent IGS initiative aimed at broadening the presence of the IGS in the Americas. The enthusiasm for a Mexican Chapter developed after a meeting held during the GeoFrontiers 2005 Conference (co-organized NAGS and held in Austin, Texas). The result of this and subsequent meetings was the formation of IGS Mexico in 2006. Their timing was exciting as it transpired during the heat of the organization of GeoAmericas 2008, which was held in Mexico. After its creation,

IGS Mexico provided key support to ongoing organization GeoAmericas 2008 by working to increase local participation, and by providing much of the local and logistical support. Both the founding President, Marco Sanchez, and the second and current president, Giovanni Bellei, have focused on leading a wide range of initiatives designed to educate the local governments on the long range, economic and environmental benefits of geosynthetics to Mexican government agencies (note that the Mexican government is the main potential user of geosynthetics in this nation). initiatives include organizing the very First Mexican Conference on Geosynthetics, which will take place in Mexico City in March 2010.

IGS Chile ( ) was also founded in 2006 as part of recent effort to enhance the IGS presence in the continent. Mauricio Ossa, the founder and current president of IGS Chile has played a key role in the direction and activities of the Chilean chapter. IGS Chile was also a significant contributor to the organization of GeoAmericas 2008. The technical activities of IGS Chile have focused mainly on the organization of short courses. More specifically, an important emphasis has been on the use of geosynthetics in the mining industry, an area in which Chile has developed significant experience, with impressive mining projects that have incorporated innovative use of geosynthetics.

IGS Argentina ( ) is the latest chapter to join the IGS family. Founded in 2009, IGS Argentina is now in the process of establishing itself as a non-profit organization in Argentina. In addition, they are planning their strategy for continued growth. Argentina is a country with major natural resources and, consequently, has major potential for the use of geosynthetics. IGS Argentina has placed their immediate priority on educating the engineering community regarding the specific benefits and the proper use of geosynthetics. Accordingly, they are currently planning a series of short courses at different levels of proficiency regarding the design and use of geosynthetics.

In spite of the successful national



Figure 1 Proceedings of some of the geosynthetics conferences organized by IGS Chapters in the Americas.

events mentioned above, it is only recently that the Americas have initiated a series of Regional Conferences. This follows on the lead of the IGS European and Asian re-

gions, which had already held highly successful regional conferences in the past. Specifically, **GeoAmericas 2008** (COO), the First Pan-American Geosynthetics

Conference and Exhibition, was held in Cancún, México, 2-5 March 2008 (see Proceedings in the central-right portion of **Figure 1**).

I had the privilege of chairing GeoAmericas 2008 and working with the most outstanding group of individuals who constituted our organizing committee. This included Richard Bathurst and Ennio Palmeira, who led the technical program, Elizabeth Peggs, who led the very effective communication initiatives. and Daniele Cazzuffi who provided continued help and direction. The conference steering committee included a geographically diverse group of members from across the Americas (from cold Argentina to colder Canada, making tropical Cancún a nice choice). This committee was indeed a true think tank, as it came up with numerous pioneering initiatives for the conference organization. These included: (a) Multinational participation, as no single IGS Chapter hosted the conference; instead, all IGS chapters in the Americas hosted and shared technical and financial duties; (b) Issuing a call for proposals to organize the technical program; this led to a strong commitment by those geosynthetic experts who organized the 44 technical sessions of the conference; (c) Emphasis on educational programs, which included 8 short courses with multi-lingual offerings; (d) Implementation of training lectures, a new modality of technical activities that involved stand-alone, multi-lingual lectures offered in parallel with technical sessions; (e) Strong collaboration with sister organizations; and (f) Journal sessions with presentations of papers judged to be the best geosynthetics papers in our two official IGS journals (Geosynthetics International and Geotextiles and Geomembranes) and other highly rated journals. With almost 1,000 attendees, 8 concurrent technical activities throughout the entire conference, a unique educational program, a well-integrated exhibit hall and multiple social opportunities in the most beautiful seaside setting, GeoAmericas 2008 constitutes an important milestone in the history of confersuccessful geosynthetic ences. The next Pan-American destination is Lima, Perú. Indeed, IGS Perú has taken the leadership for the organization of GeoAmericas **2012**, the Second Pan-American Geosynthetics Conference and Exhibition that will take place in Lima, the portal to the admirable relics of the Incan civilization, in May 2012.

The Americas have also invited and hosted the rest of the world in some of the most relevant international geosynthetics venues. This includes two of our IGS International Conferences. Specifically, the Second International Conference on "Geotextiles" (note that the conference was not on "Geosynthetics" at the time) was held in Las Vegas, USA, in 1982. As noted in the article by J.P. Giroud (1993), the organization of this international conference prompted the discussion about the formation of an international society on geosynthetics. The most prominent geosynthetics pioneers gathered in Las Vegas and the IGS was eventually founded in 1983. Following this very good start for IGS international activities in the Americas was the Sixth International Conference on "Geosynthetics" (note the change in the conference name), which took place in Atlanta, USA, in 1998. As reported by Dave Elton (1998), this conference was a major success, as it was attended by over 1900 participants and its exhibit hall gathered 126 exhibitors. This is possibly the largest conference held so far in the history of geosynthetics. It was characterized by a remarkable technical program that included a number of provocative workshops and panel sessions. While the two IGS international conferences held so far in the New World took place in the USA, we are now heading to Brazil for the very First IGS International Conference to be ever held in the southern hemisphere (the southernmost IGS International Conference so far took place in Singapore, one degree north of the equator). The Ninth International Conference on Geosynthetics,

"9ICG" ( ) will be held on 23-27 May 2010 in the beautiful touristic city of Guarujá, which is

located some 90 km from Sao Paulo, the largest city in Brazil (www.9icg-brazil2010.info). Continuing with the excellence in technical contributions that has characterized the previous IGS International Conferences, the 9ICG will provide a unique opportunity to share experiences, knowledge, advances, and opportunities related to geosynthetics and affiliated technologies. The technical program of the 9ICG involves a wide range of technical activities. This includes a series of exceptional keynote lectures such as the "Giroud Lecture" to be delivered by Prof. Brandl on "Geosynthetics for the Mitigation of Natural Disasters," technical sessions such as the "Meeting the Industry" program in which geosynthetic representatives will have the opportunity to present the merits of their new technologies, and training lectures that will provide learning opportunities to both novice and experts on geosynthetics. The Americas look forward to seeing you in Guarujá for the 9ICG!

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