



International Association of Hydrogeologists U.S. National Chapter Newsletter

Vol. 35, no. 2: October, 2006

Editors: Colin J. Booth, Northern Illinois University
And Todd Halihan, Oklahoma State University.



CONTENTS

EDITORS' NOTE: - *Colin Booth and Todd Halihan*
CHAIRMAN'S REPORT – *Jack Sharp*
SECRETARY-TREASURER'S NOTE – *Todd Halihan*

ARTICLES AND REPORTS

INTEGRATED WATER RESOURCES MANAGEMENT AND CHALLENGES OF THE SUSTAINABLE DEVELOPMENT:
Report of IAH Meeting in Marrakech, Morocco, May 2006 -- *Alan Fryar*

DRILLING "BOOT CAMP" FOR DEVELOPING COUNTRIES – *based on material from Todd Jarvis*

ANNOUNCEMENTS

ASSISTANTSHIPS AT COLORADO SCHOOL OF MINES

CONFERENCE NOTICES

AQUIFER STORAGE RECOVERY. (American Ground Water Trust) Oct. 16-17, 2006
Orlando, Florida

GSA ANNUAL MEETING, October 22-26, 2006: Philadelphia, PA
See: www.geosociety.org; and IAH/USNC Chairman's Report below; and NGWA/AGWSE section

2006 INTERNATIONAL CONFERENCE - WATER IN ARID AND SEMI ARID LANDS: INNOVATIVE APPROACHES AND
INFORMED DECISION-MAKING. Texas Tech Univ., Lubbock, Texas. November 15-17, 2006

INTERNATIONAL CONFERENCE ON WATER POLLUTION IN NATURAL POROUS MEDIA AT DIFFERENT SCALES:
Assessment of fate, impact and indicators (WAPO²) Barcelona, Spain, April 11-13, 2007.

NGWA/AGWSE 2007 GROUND WATER SUMMIT - Albuquerque, NM: April 29 - May 3, 2007
See NGWA/AGWSE Section



IAH ALLIED ACTIVITIES WITH GROUNDWATER RESOURCES ASSOCIATION OF CALIFORNIA

By Vicki Kretsinger

HIGH RESOLUTION SITE CHARACTERIZATION AND MONITORING, Westin Hotel, Long Beach, California
November 14-16, 2006

26TH BIENNIAL GROUNDWATER CONFERENCE & 16TH ANNUAL GRA MEETING, September 18-19, 2007;
Sacramento, California

PREVIEW OF 2007 SYMPOSIA AND WORKSHOPS

NGWA-AGWSE INFORMATION

AGWSE 2007 GROUND WATER SUMMIT, *April 29-May 3, 2007; Albuquerque, New Mexico*

GROUNDWATER SESSIONS AT GSA ANNUAL MEETING CO-SPONSORED BY NGWA/AGWSE
by Vicki Kretsinger, Past Chair of AGWSE

NGWA MAKING PUSH TO PROMOTE GROUNDWATER IN EARTH SCIENCE EDUCATION

NOTES FROM NGWA PRESS RELEASES:

--21st Century Ground Water Systems Conference, October 12-13, 2006, Costa Mesa, California-

--2006 NGWA Ground Water Expo: December 5-8, 2006, Las Vegas

--2007 Darcy Distinguished Lecturer to offer talks on ground water modeling and ground water-dependent plants.

MEMBER NOTES

JOHN HAWLEY – UIUC 2006 ALUMNI ACHIEVEMENT AWARD

P. E. LAMOREAUX & ASSOCIATES, INC - Recipient of Alabama Governor's International Trade Excellence Award

CAPE TOWN 2000 CONT' – Reinhard Meyer visits the U.S.

IAH/US NATIONAL CHAPTER: EXECUTIVE COMMITTEE 2005-2008

Chairman:	John M. (Jack) Sharp jmsharp@mail.utexas.edu	University of Texas at Austin 512-471-3317
Secretary-Treasurer:	Todd Halihan todd.halihan@okstate.edu	Oklahoma State University 405-744-6358
Past-Chair:	Leonard F. Konikow	(USGS) lkonikow@usgs.gov
Director:	Colin J. Booth	(Northern Illinois Univ.) colin@geol.niu.edu
Director:	Victor Heilweil	(USGS) heilweil@usgs.gov
Director:	Noel Krothe	(Indiana University) krothen@indiana.edu
Director:	Michael Wireman	(US EPA) Wireman.Mike@epamail.epa.gov



EDITORS' NOTE

Hello and welcome.. To get well ahead of the GSA Annual Meeting (October 22- 25), at which we also have our open IAH/USNC executive committee meeting, we tried to get this newsletter out by the end of September. Well, we didn't quite manage, but we should be close. Thanks to all of you who have provided material for this issue; and Happy Autumn to all our members.....

--- Colin Booth & Todd Halihan

CHAIRMAN'S REPORT – BY JACK SHARP

Greetings colleagues,

The IAH Conference met 29 May through 3 June in Dijon, celebrating the 50th anniversary of the founding of the IAH and the 150th anniversary of the publication of Darcy's book, *The Public Fountains of Dijon*. Yanks in attendance included Patricia Bobeck (the translator of Darcy), John and Dickie Moore, Jack and Carol Sharp, Leo and Michele Leonhart, Lorraine O'Connor, David Hargis, Cliff Voss, and Bridget Scanlon. IAH also had a strong presence at the 2006 NGWA Water Summit in San Antonio, where we cosponsored several sessions/symposia. The next Water Summit, in April-May 2007, will be held in Albuquerque.

The XXXIV IAH Congress, "Groundwater- Present Status and Future Tasks," meets in Beijing this 9-13 October (2006). The XXXV and XXXVI Congresses are being organized for Portugal, 17-21 September 2007 (Groundwater and Ecosystems) and Japan, 26 October - 1 November 2008, respectively. If you haven't yet attended an IAH Conference or Congress yet, try to - they are generally a real treat!

We will be having a meeting of the executive committee (i.e., our officers) at the GSA Annual Meeting in Philadelphia. Of course, any IAH member or prospective member is invited to attend. The meeting is arranged for 5:00-6:00 PM Sunday 22 October, in Room 309 of the Convention Center, after the session on *Pharmaceuticals and Other Emerging Contaminants in the Environment*.

The agenda items are as follows:

1. Incorporation: The vote was unanimous to incorporate. By the time of the meeting, I hope that the incorporation is a fact. The "easy," on-line filing procedure turns out not to be so simple, but the wheels are in motion, and our accounts should soon start to bear interest and we will be open to accepting tax-deductible donations. I think that hydrogeologists interested on an international scale may find this a worthy cause. See also below, the item on corporate sponsors. There is a little more paperwork for the Treasurer and Chair, but this should not be a major problem. The Canadian Chapter of IAH is following the same path as us, with some of the same frustrations.

2. Meetings: Our chapter, unlike the Canadian, does not hold separate annual meetings or, in fact, annual general meetings at all. The officers have generally meets at the annual (fall) GSA meeting, rather informally. The feeling has been that there are already many more interesting conferences and symposia in the US than we can attend - to which I concur. However, we are a GSA Associated Society and we can hold a meeting in conjunction with the GSA, as do other societies such as the Society of Economic Geologists. This is something we should consider and may make a formal part of the program.



3. Programs: We also do not hold regular symposia, but rather, we have commonly sponsored or co-sponsored symposia and theme sessions at the GSA and, recently, at the spring Groundwater Summit of the NGWA. This has been an ad hoc initiative, sponsored by one of our members. This year, for the first time in several years, we are sponsoring no such sessions at the GSA.

I propose that we establish a program committee to insure that every year we sponsor scientific sessions at these two meetings. This will insure that we get recognition but do not need to impose the burden of separate regular meetings. IAH has much to offer members of GSA and NGWA who are interested in hydrogeology beyond our borders. The program committee would be our first standing committee. Any volunteers?

4. A future IAH conference in the US: There has been no IAH congress or conference in the US since 1998. One proposal has been a conference on tracers, but we haven't yet made any formal proposals to IAH. Perhaps a joint US-Canadian Conference on a special topic would be a good idea. I think it is easier for foreign nationals to get visas to Canada. Congresses are generally larger and more general in topics than the more focused conferences. The 2003 IAH Conference on Groundwater in Fractured Rocks in Prague is an example of the latter. I took one of my Ph.D. students there and he says it was the most productive meeting that he has ever attended. Suggestions, ideas, and volunteers to organize such a meeting are welcome.

5. Corporate sponsors: The IAH has approved corporate sponsorships. Compared with sister societies, IAH has been notable in relying almost entirely on individual member subscriptions for its income. IAH has corporate members but this is primarily a category for bulk individual membership. We have identified an interest in companies going beyond being corporate members and being prepared to pay a larger sum so as to identify their company with the aims of IAH in return for exposure of their company to the IAH membership and the wider, international groundwater community which IAH serves.

The fee rate proposed for Corporate Sponsorship is €2000 inclusive of Corporate Membership at the basic level. A brochure promoting this scheme has been produced for initial distribution at the Beijing congress. I hope to have some available at GSA. The corporate logos will be prominently displayed in Hydrogeology Journal and the IAH sponsored congresses and conferences. Should your company be interested please contact me. Remember that the US Chapter gets 10% of all dues to run our organization.

6. Representatives to other scientific societies: It has been suggested that we have representatives to other scientific societies, including NGWA (best for a hydrogeologist active in both IAH and NGWA and who should probably be on the program committee – see item 3 above), AGI (typically meets in DC or in conjunction with the spring AAPG meeting), and the Allied and Associated Society Committee of the GSA (meets in Boulder). This might entail a meeting per year. Volunteers are welcome as are suggestions of members to ask.

7. New business.

8. Adjourn in time to attend the Welcoming Party

- Jack Sharp

SECRETARY-TREASURER'S NOTE – BY TODD HALIHAN

There have been many changes to the mechanics behind the scenes at IAH USNC this year. We have tried to convert most of the dues payments to electronic payments, and have changed staff in Britain. We have had some issues with making sure dues are paid and accounted for as well as the usual euro/dollar conversion issues. I thank those of you that have been affected for your patience and I am hoping for some smoother times in '07.

-Todd Halihan



ARTICLES AND REPORTS

Integrated Water Resources Management and Challenges of the Sustainable Development: Report of IAH Meeting in Marrakech, Morocco, May 2006 By Alan Fryar

The Moroccan chapter of IAH organized an international congress on “Integrated Water Resources Management and Challenges of the Sustainable Development” (GIRE3D). This took place May 23–25 at the Faculté des Sciences Semlalia, Université Cadi Ayyad, in Marrakech. Presentations were divided among three broad themes: tools and techniques applied to the integrated management of water resources; the impact of climatic changes, new hydraulic structures and socioeconomic development on water resources; and quantitative and qualitative aspects of integrated and sustainable water resources management. There were more than 200 attendees, mainly from north Africa, western Europe, and the Middle East. Keynote speakers included Moroccan government officials, researchers from Morocco and Belgium, and IAH President Stephen Foster, who spoke on “Integrated Approaches to Groundwater Resource Management”. More information about the congress is available at www.ucam.ac.ma/gire3d.

As the only presenter from the USA, I was impressed by the diversity and, in many cases, the sophistication of the research presented. Presentations were in English, French, and sometimes both languages (e.g., English slides with French narration). Despite my own very limited French (which was painfully evident when I moderated one of the sessions), I found the presentations generally understandable and particularly worthwhile: I had not encountered many of the specific topics at meetings in the USA. Moreover, at a time of geopolitical turmoil, the conviviality among the participants was heartening. I forewent the post-meeting field trips (one to the desert of southeastern Morocco, another to the High Atlas east of Marrakech) in order to travel with my host and colleague Prof. Lahcen Benaabidate (Faculté des Sciences et Techniques Saïss, Université Mohamed Ben Abdellah, Fez), a member of the GIRE3D scientific committee. Prof. Benaabidate and I visited the Atlantic coast, the Ourika valley of the High Atlas, the Middle Atlas plateau, and the Sebou basin of north-central Morocco (notable for its thermal springs). I am indebted to him and the other congress organizers for their hospitality.



Prof. Lahcen Benaabidate outside the congress amphitheatre.



Sidi Harazem, a thermal spring in the Sebou basin east of Fez.

Drilling “Boot Camp” for Developing Countries



This item is based on material sent to us by member Todd Jarvis, now Senior Researcher in Water Resources at the Institute for Water and Watersheds, Oregon State University, Corvallis, who will be writing a fuller article on this elsewhere. Todd worked as a consulting hydrogeologist for over 20 years then finished his Ph.D at Oregon State in August 2006. As part of the Williamson Water Prize, recently attended the **Applications of Drilling Technology for Developing Communities** Course offered through NWP Drilling & Consulting, LLC, Colorado. In Todd's case, the camp gave him a chance to develop his interests in differences in how groundwater is managed in developed versus developing countries.

NWP is run by Ray and Daniel Newmyer, well drillers based in Mosca, near Alamosa, Colorado. Ray has a degrees in engineering physics, education, and psychology and has both worked as a hydrogeologist and has taught in local high schools and college, while Daniel has a business degree with a minor in engineering geology and an associate degree in well technology. NWP offers both rotary and cable-tool drilling services, with an emphasis in the latter. The five-day intensive course focuses on the application of various drilling technologies to developing countries. As Ray explained to Todd, the sophisticated deep drilling technologies available in the United States are poorly suited to developing country settings, in which it is difficult to get replacement parts to location or sometimes even out of customs. The key to working in developing countries is "keep it simple". Even cable tool drilling is high technology in developing countries.

The course is offered several times during the summer and attracts a typical enrollment of five people comprising scientists, engineers, and "entrepreneurs" from many walks of life and countries. Accommodations are in developing country style - camping or bunkhouse, with all meals provided. Each evening, the Newmyers gave presentations about their volunteer work in developing countries. Ray has made several trips to work in the karst of Haiti, while Daniel and his wife Kate have trained drillers in Mozambique. Daniel has helped to train drilling crews in Uzbekistan and focuses much of his training on developing business plans to secure loans from banks and government agencies. Todd learned that, even with all the relief work underway, a great amount of work is still needed just to provide the basic water needs of developing countries. Part of the challenge is also to educate the local populations so that they can maintain what infrastructure they have.

In the course, Todd also learned a lot about the basics of drilling – including how to burn a welding rod, use a cutting torch, and operate a backhoe – and says that has a much greater appreciation not only for the versatility of cable tool drilling, but also of the many skills mastered by the well driller, as well as the hard work that a well drilling contractor endures on a daily basis.

Our thanks to Todd for this story of his experiences. For further information about the camp, please see: <http://www.nwpdrilling.com/course.html>.

Todd Jarvis with tools and lots of pipe dope.



ANNOUNCEMENTS



Assistantships at Colorado School of Mines

The Hydrologic Science and Engineering Program at the Colorado School of Mines is seeking applications for several teaching and research assistantships (TA/RAs) and one Graduate Fellowship. TAs may be appointed to teach Geology, Geophysics, or Environmental Engineering classes. RAs are needed in several areas, including hydrologic modeling, contaminant transport and remediation, and surface-ground water interaction. The Graduate Dean's Fellowship in Hydrology is awarded to the top applicant and funds discretionary research aligned with the recipient's interests. A list of participating faculty advisors, along with general application procedures, is listed at www.mines.edu/hydro. In addition to the standard application, applicants for these positions should draft a short letter explaining their research interests, potential advisors, and/or teaching interest and experience. Send the additional letter to:

John McCray, Director,
Hydrologic Science and Engineering, Colorado School of Mines, Golden, CO 80401
jmmcray@mines.edu



CONFERENCE AND MEETING NOTICES

For announcements by IAH, please go to the IAH website, www.iah.org

For announcements of conferences and meetings being presented by California GRA
See the GRA section below.

AQUIFER STORAGE RECOVERY

Application of science and technology to ground water management
American Ground Water Trust: ASR 6 Conference, October 16 & 17, 2006
Holiday Inn Orlando Airport, Orlando, Florida

Updates and insights from top experts concerning an aquifer management strategy that is growing in importance throughout the world: this two-day program will bring together engineers, scientists, planners, water-resource managers, attorneys, concerned citizens, etc. to share up-to-date information regarding the challenges, feasibility, potential, regulatory concerns and the economic & environmental benefits of aquifer management, strategies involving artificial recharge, aquifer storage and ground water management. (Field Trip Sunday October 15, to ASR facilities at City of Cocoa)
Cosponsored by IAH.

<http://www.agwt.org/workshops.htm> (Details & registration)

GEOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING

October 22-26, 2006: Philadelphia, Pennsylvania

See: www.geosociety.org



See Chairman's Report above for information on IAH Meeting, October 22, at GSA.
See also GSA Sessions co-sponsored by NGWA/AGWSE, by Vicki Kretsinger, below, for a more detailed description of some of the groundwater-related sessions at GSA

2006 International Conference - Water in Arid and Semi Arid Lands: Innovative Approaches and Informed Decision-Making
The International Center for Arid & Semi-Arid Land Studies, Texas Tech University,
Lubbock, Texas, USA: November 15-17, 2006

Pre-conference workshops and activities on November 13 & 14. Conference themes include crop management, cultivation practices, climate and weather, remote sensing and GIS applications, water rights, sustainable growth, water and energy, water quality, and many others. Detailed conference information can be found at: <http://www.iaff.ttu.edu/home/icasals/conference/>.

The conference will include a **Workshop: Negotiating a transboundary waters agreement: November 13-14, 2006** that will focus on the issues relevant to avoiding disputes and seeking compromise over transboundary fresh waters (surface and ground water). It will address the various scientific, environmental, political, social, economic and other interests and concerns that riparian states may bring to the negotiating table. It also will introduce participants to the subject of international water law and its application to international rivers, lakes, and aquifers. The workshop will involve lectures and group discussions as well as a practical exercise in which participants will be asked to negotiate a transboundary water agreement based on a hypothetical scenario. The workshop is designed for all water specialists and policymakers involved in the regulation, management, exploitation, allocation, protection, and conservation of transboundary rivers, lakes, and aquifers. More information on the workshop can be found at: <http://www.iaff.ttu.edu/home/icasals/conference/workshops>

---Gabriel Eckstein (gabriel.eckstein@ttu.edu)

4th International Conference on Hydrogeology, Ecology, Monitoring, and Management of Ground Water in Karst Terrains
Safety Harbor, Florida, USA • February 27-28, 2007

This NGWA-organized conference will be an international consortium of engineers, scientists, regulators, researchers, and students gathering to understand the science and management of ground water in karst terrains. The conference will feature an industry display area, platform and poster sessions, workshops, a banquet, and a field trip. About 45 accepted papers and a field trip are planned. Conference topics include: Karst aquifer characterization; Ecology and vulnerability of karst aquifers; Ground water extraction from karst aquifers; Ground water remediation in karst.

More details on the conference and registration forms can be found at the following web site:

<http://www.ngwa.org/e/conf/0702275018.cfm>



**International Conference on Water POLLution in natural Porous media at different scales:
Assessment of fate, impact and indicators (WAPO²)
BARCELONA, Spain, April 11-13, 2007.**

The conference is aimed at scientists, students, policy makers and managers concerned with problems of groundwater contamination in porous media. It will provide a forum for the exchange of new findings and ideas in this field and for the discussion of better ways of managing our groundwater resources. The conference also provides a contribution to the implementation of the Groundwater Component of the IHP VI 2002-2007 Programme on Water Interaction Systems at Risks and Social Challenges. Topics include:

- Alternative methods and indicators of water quality in natural porous media
- Biogeochemical processes from soil to groundwater.
- Numerical simulation of pollutant transport and interactions in the soil and subsoil environments: techniques, problems and case studies.

Abstract submission deadline is Oct. 31, 2006. More information is available on the conference web site at: www.proyectosH2O.upc.es/WAPO

**NGWA/AGWSE 2007 Ground Water Summit
Albuquerque, NM: April 29 - May 3, 2007
See NGWA/AGWSE items below**

**IAH ALLIED ACTIVITIES WITH THE GROUNDWATER RESOURCES
ASSOCIATION OF CALIFORNIA**

By Vicki Kretsinger

The Groundwater Resources Association of California (GRA) and IAH developed an allied partnership in 2001 and this alliance has included IAH's participation as a cooperating organization for many of GRA's educational events and training workshops. Upcoming GRA events for which the USNC/IAH is a cooperating organization are described below. As members of a cooperating organization, IAH members enjoy GRA member rates to attend these events.

**High Resolution Site Characterization and Monitoring
Westin Hotel, Long Beach, California November 14-16, 2006**

Cooperating Organizations include: University of Waterloo, USGS, USEPA, California Department of Toxic Substances Control, IAH/USNC, and NGWA. --*Murray Einarson, Geomatrix*

Despite many recent advances in understanding contaminant behavior, site assessments performed at commercial sites in North America often still follow traditional practices established in the early 1980s. However, new technologies allow rapid, high-resolution site assessments that provide unprecedented clarity regarding the nature, extent, and migration of contaminants in the subsurface, and the effectiveness of in situ remediation. This symposium brings together an invited group of top researchers, practitioners, and regulatory experts from around the globe to describe the "state of the science" regarding efficient, high-resolution subsurface site assessments and remediation monitoring. The complete listing of speakers, participants and presentations, field trip information and other symposium details are on the GRA website at <http://www.grac.org/hires.asp>.



Presentations will be made in six consecutive technical sessions during the first two days of the event. Moderated 15-minute summary and discussion periods will end each session. The third day will consist of a hands-on, outdoor field demonstration of state-of-the-art high resolution technologies. The final session of the symposium consists of six short presentations, by invited panelists from industry, academia, and the regulatory community, on the efforts needed to achieve wider use of these technologies. There will be exhibits of innovative site characterization and monitoring technologies and software developers by more than 30 invited manufacturers. Technical poster presentations will follow the platform presentations on each day of the symposium. This symposium of world-class invited speakers and technology developers promises to be one of GRA's most popular events ever. For more information and to register, visit the GRA website at www.grac.org. Please feel free to contact Murray Einarson (meinaron@geomatrix.com ; 650-400-0248) or Tim Parker (tparker2@slb.com; 916-329-9199) if you have any questions about this upcoming event.

26th BIENNIAL GROUNDWATER CONFERENCE AND 16th ANNUAL GRA MEETING
September 18-19, 2007; Sacramento, California

For more than 50 years, the Biennial Groundwater Conference has provided policy-makers, practitioners, researchers, and educators the opportunity to learn about the current policies, regulations, and technical challenges affecting the use and management of groundwater in California. Sponsors of next year's conference include the University of California Center for Water Resources, California Department of Water Resources (DWR), California State Water Resources Control Board (SWRCB), Groundwater Resources Association of California (GRA), Water Education Foundation (WEF), and U.S. Geological Survey (USGS). Policy and technical sessions will address groundwater resources management and water quality issues at basin-wide, regional, and national scales.

Conference Program Information: Visit the University of California Center for Water Resources Center web site, <http://www.waterresources.ucr.edu>, for upcoming conference details and registration information. For more information, contact Julie Drouyor at the UC Center for Water Resources, (951) 827-4327. Information will also be posted at <http://www.grac.org> .

PREVIEW OF 2007 SYMPOSIA AND WORKSHOPS
Watch for details at GRA's web site

- Groundwater Rights and Policy, March 2, 2007, San Francisco, CA
- Legislative Symposium and Lobby Day, Spring 2007, Sacramento, CA
- Artificial Recharge II, Spring 2007
- Environmental Information Management Systems II
- Introduction to Groundwater Modeling
- DNAPL II, Summer 2007
- 26th Biennial Groundwater Conference and 16th Annual GRA Meeting, September 18-19, Sacramento, CA
- Exit Strategies for Contaminated Sites, Fall 2007
- Using Stable Isotope Methods in Groundwater Resource Studies
- Introduction to Groundwater Hydrology and Watersheds

IAH members are welcome to express their interest in assisting with the planning of these events or participating as a session organizer or presenter by contacting GRA. Learn more about GRA, or the programs in which IAH is participating with GRA as a cooperator, on the GRA web site at <http://www.grac.org> , or by telephone, 916-446-3626.



NGWA-AGWSE INFORMATION
Association of Ground Water Scientists and Engineers
division of the National Ground Water Association
- by Vicki Kretsinger, Past Chair

AGWSE 2007 GROUND WATER SUMMIT
Co-sponsored by USNC/IAH
April 29-May 3, 2007; Albuquerque, New Mexico

Many thanks to GSA's Hydrogeology Division as a continuing co-sponsor of the new AGWSE annual technical conference, the "Ground Water Summit", launched in 2005. Summit co-chairs Bill Alley and Erik Block, AGWSE Board members, are leading the planning activities for the 2007 AGWSE Ground Water Summit that will take place April 29-May 3, 2007 at the Convention Center in Albuquerque, New Mexico. The Summit engages local, national, and international science partners to facilitate the exchange and dissemination of technical information and new science developments, allow a means for discussing policy and regulatory issues pertaining to groundwater, and promote goodwill among groundwater professionals worldwide. Highlights of the 2007 Summit include: keynote speaker John Wilson of New Mexico Tech, workshops, Darcy Forum, platform and poster presentations, distinguished lecturers (including 2007 NGWA Darcy Lecturer, James Butler, and the 2007 GSA Birdsall-Dreiss Lecturer, Bridget Scanlon), field trips, student mentoring program, student project presentations, and student awards for platform and poster presentations.

The Summit includes 39 sessions with subject matter that ranges from more environmentally and emerging contaminant-focused topics to water resources systems analysis, management, and policy issues. Co-sponsors include the U.S. Geological Survey, the Geological Society of America's (GSA) Hydrogeology Division, U.S. National Chapter/International Association of Hydrogeologists, the Groundwater Resources Association of California (GRA), National Onsite Wastewater Recycling Association, and the Illinois State Geological Survey.

Call for Abstracts: Abstract instructions are posted on the NGWA web site on the Ground Water Summit Page at <http://www.ngwa.org/e/conf/0704295095.cfm#submissions>. Abstracts for both oral and poster sessions must be submitted online and will be received until midnight (EDT) **November 10, 2006**.

For direct access to the Summit submission page, please follow this link:

<http://ngwa.confex.com/ngwa/2007gws/cfp.cgi>

Summit session details and other Summit information: <http://www.ngwa.org/e/conf/0704295095.cfm>

Some highlights of the conference:

Darcy Forum

The Darcy Forum launched in 2005 at the first Summit was created to provide perspectives and insights by renowned panelists and prompt an exciting exchange among the panelists and Summit attendees. This year's forum will be moderated by Bill Woessner, Professor at the University of Montana, and the topic is: ***"Surface and groundwater interactions – where science and policy meet."***



Summit Workshops and Courses

Springs Ecosystems Inventory, Classification, and Monitoring

Abe Springer, Northern Arizona University, and Larry Stevens, Environcon Systems

Environmental Aqueous Geochemistry Short Course

Patrick Longmire, Los Alamos National Laboratory

Ground Water Management in New Mexico

Tim Parker, Schlumberger Water Services

Student Presentations and Awards

Students are especially welcome to submit abstracts for oral and poster presentations. There will be up to four best paper/poster awards of \$250 each given to those students presenting. A panel of judges will be evaluating each paper and poster on the merit of quality, scientific content, and responses to questions. These awards, which are made available through the Robert Farvolden scholarship fund of the National Ground Water Research and Educational Foundation, will be distributed after the completion of the Conference.

Groundwater Sessions at GSA Annual Meeting

Co-Sponsored by NGWA/AGWSE

by Vicki Kretsinger, Past Chair of AGWSE, Division of NGWA

NGWA/AGWSE, an Associated Society of the Geological Society of America (GSA), is pleased to co-sponsor two sessions at the 2006 GSA Annual Meeting and Exhibition in Philadelphia, Pennsylvania. Kudos to Rob Young, of Western Carolina University, 2006 Technical Program Chair, along with Laura Toran of Temple University and Mark Person of Indiana University, Hydrogeology Program Co-chairs, for assembling a great technical conference on behalf of GSA's Hydrogeology Division! All the Hydrogeology Division sessions are described on GSA's web site at <http://www.geosociety.org/meetings/2006/sessions/topical.asp>. A few additional details on the sessions co-sponsored by NGWA/AGWSE, and also a groundwater sustainability-related one, are provided below.

Now is an especially important time for science collaborations because of the opportunities that bring the science community together to discuss the science and data needs relating to developing a better understanding of future groundwater availability. In a recent member survey conducted by NGWA, it was learned that among AGWSE members, 70 percent reported being "somewhat to very challenged" in their professional work by the issue of the sustainability of ground water. Through NGWA's Government Affairs Committee and its annual Fly-In, NGWA has been trying to increase groundwater awareness and the need for good groundwater data on Capitol Hill. Bev Herzog, Chair of the AGWSE Division and Assistant to the Chief for Environmental Initiatives of the Illinois State Geological Survey, recently learned that groundwater sustainability is important to Speaker of the House Dennis Hastert. The Speaker called a press conference in Kane County, just west of Chicago and part of Hastert's district, to announce \$1.4 million in grants to the county for water resources planning. Bev reports that most of these funds are going for an ongoing study by the Illinois State Geological Survey and the Illinois State Water Survey to map the aquifers, monitor ground water levels and quality, and model the groundwater system beneath the county as a basis for water resources planning. The remainder will go for floodplain mapping. In making the announcement, Hastert stated, "Given its incredible growth, Kane County must provide an additional 60 million to 80 million gallons of water per day to serve 400,000 additional residents by the year 2030. This federal investment will allow the county to examine how to make that happen in a way that is cost-efficient and environmentally responsible."



The two NGWA co-sponsored sessions promote the spirit of GSA's theme, "The Pursuit of Science", and also, promote the effective collection, analysis, and application of good data, including formulation of conceptual models and development and calibration of numerical models, to address current and future groundwater quantity and quality issues. A related session, "Groundwater Availability and Its Sustainability" (Topical Session 69), convened by Bill Alley and Kevin Dennehy of the U.S. Geological Survey, also speaks to these objectives, including groundwater monitoring and assessment to address issues of the long-term sustainability of aquifer systems at the regional scale, including storage depletion, water-quality impacts, land subsidence, and streamflow depletion.

One of the NGWA co-sponsored sessions at the 2006 GSA annual meeting is "**Water-Quality Issues in Sole-Source and Principal Aquifers in the U.S.**" (Topical Session T25) which is being co-sponsored by GSA's Hydrogeology Division and NGWA/AGWSE and organized by Brian Katz and Mike Focazio of the U.S. Geological Survey (USGS) in Florida and Virginia, respectively. In recent years, concerns have emerged about water quality in many of the 62 principal aquifers in the U.S. In some of these systems, sole-source aquifer designations have been used to protect drinking water supplies especially where few or alternative sources of water exist. This session highlights research on anthropogenic and natural factors that control water quality in sole-source and principal aquifers in the U.S.

A second session co-sponsored by GSA's Hydrogeology Division and NGWA/AGWSE is "**Emerging and Innovative Approaches to Groundwater Modeling**" (Topical Session T66). This session, convened by Abe Springer of Northern Arizona University and Linda Zhang of the University of Michigan, focuses on the evolution and widespread application of groundwater models and innovative approaches in modeling. Session presentations will highlight innovative approaches in development, application, effective parameter determination, uncertainty of models, and other topics. NGWA's 2006 Darcy Lecturer Eileen Poeter, currently a Professor of Geological Engineering at the Colorado School of Mines and Director of the International Ground Water Modeling Center, will provide her Darcy Lecture "All Models Are Wrong: How Do We Know Which Are Useful?" in coordination with this session. Eileen's lecture will be presented on Monday October 23 at 5:00 pm and details how the groundwater profession today is searching for appropriate approaches to developing conceptual models, evaluating which are useful, and describing the uncertainty associated with their predictions.

OTHER INFORMATION FROM NGWA

NGWA Making Push to Promote Groundwater in Earth Science Education

In the **Spring 2006 IAH/USNC newsletter**, efforts by the National Ground Water Association (NGWA) to join other federal and state groups and geoscience organizations in calling for strengthened Earth systems science education were described. As a follow-on action to the adoption of the position statement, "The Importance of Earth Systems Science Education," NGWA will meet with the Environmental Education Council of Ohio and key earth science education advocates in that state. The purpose of this meeting is to assist NGWA in developing an effective approach to promoting groundwater science education—not only in Ohio but nationally. This is a follow-up to a meeting held in July with officials in the Ohio Department of Education.

A preliminary concept for active support of groundwater science education is building on the National Science Teachers Association initiative, "Building a Presence for Science." This initiative seeks to "end the isolation of classroom science teachers and to provide them with professional development opportunities and science teaching resources." Its goals are to:

- Identify a point of contact for standards-based science teaching and learning in every school
- Establish an electronic network of science educators



- Create an infrastructure of national and state partners who are advocates for effective science teaching and learning.

On a related note, NGWA is developing a *Community Ground Water Awareness Kit* for use in promoting groundwater protection and/or conservation. This kit will provide some strategies and tools for spreading the word about groundwater and motivating the public to action. The *Community Ground Water Awareness Kit*, when completed, will be downloadable from NGWA's Wellowner.org Web site.

For more information, contact Cliff Treyens, Awareness Director, at 1-800- 551-7379.

No full-length papers are required - abstracts only. Presenters must also register for the conference.

Any questions, contact Dawn Steele (dsteale@ngwa.org).

NOTES FROM NGWA PRESS RELEASES:

21st Century Ground Water Systems Conference, October 12-13, 2006, Costa Mesa, California.

Focuses on planning for future ground-water systems and management.

To learn more about the conference, visit www.ngwa.org

2006 NGWA GROUND WATER EXPO: December 5-8, 2006, Las Vegas.

www.ngwa.org/expo2006/main.cfm.

2007 DARCY DISTINGUISHED LECTURER TO OFFER TALKS ON GROUND WATER MODELING AND GROUND WATER-DEPENDENT PLANTS

Kansas Geological Survey Senior Scientist James J. Butler Jr., Ph.D., has been chosen as the 2007 Henry Darcy Distinguished Lecturer in Ground Water Science by the National Ground Water Research and Educational Foundation (NGWREF). As the Darcy Lecturer, Butler will spend the year lecturing at colleges and universities throughout the world to educate and generate interest in ground water science. He will offer two lectures-one focusing on ground water modeling and the other on phreatophytes (plants that use ground water) in semiarid zones.

Requests for the Darcy Lecturer for the 2007 calendar year will be accepted only by completing the online request form found on the National Ground Water Association Web site at

<http://www.ngwa.org/forms/darcylectureform.html>. The deadline for submissions is October 15, 2006.

NGWREF reserves the right to be the sole entity able to confirm any request made for this lecture series. Direct any questions to Barbette Howell at bhowell@ngwa.org

MEMBER NOTES

John W. Hawley

IAH/USNC member John W. Hawley, is the recipient of the 2006 Alumni Achievement Award from the University of Illinois-Urbana, Department of Geology (Ph.D. 1962). Following the award presentation on November 10, he will review his current research on "Development of digital hydrogeologic models of basin-fill aquifer systems in the bi-national Paso del Norte region of New Mexico, Trans-Pecos Texas, and Chihuahua, Mexico." John is an Emeritus Senior Environmental Geologist with the Bureau of Geology Division of New Mexico Tech, and he is currently an adjunct faculty member contributing to hydrogeology/GIS research programs at NM Tech, the Water Resources Research Institute at New Mexico State University, and the Universidad



Autónoma de Ciudad Juárez, Centro de Información Geográfica. He will also receive the 2006 Distinguished Career Award from the Geological Society of America-Quaternary Geology & Geomorphology Division at the Society's Annual Meeting, and he was the 2005 recipient of the GSA Engineering Geology Division Distinguished Practice Award.

P. E. LaMoreaux & Associates, Inc.

Recipient of Alabama Governor's International Trade
Excellence Award

P.E. LaMoreaux & Associates, Inc. (PELA) was selected as one of the 8 recipients of the 2006 Alabama Governor's Trade Excellence Award. The awards were initiated to demonstrate the exporting excellence of Alabama businesses and to celebrate their export successes.

Criteria for selection include: level of export sales as a proportion of total sales; sustainable growth in export sales; quality of export marketing strategy; senior management commitment to export development; innovations in exporting; and businesses that have benefited from the export assistance from organizations making up the Export Alabama Trade Alliance. PELA was one of three service companies recognized.

According to Governor Bob Riley's office, "the Governor's Trade Excellence Awards represent the commitment and strong cooperation that exists between federal, state, regional and local entities and the business community to support and encourage Alabama companies to grow through exporting."

Headquartered in Tuscaloosa, Alabama, PELA offers a wide variety of environmental services to clients throughout the U. S. and abroad and has successfully completed projects in fourteen countries on six continents.

IAH Cape Town 2000 Cont'

Reinhard Meyer visits U.S.



Reinhard Meyer (CSIR South Africa) and Todd Halihan continue a friendship started at IAH Cape Town at Pavilion Springs at the Chickasaw National Recreation Area, Sulphur, Oklahoma (August 2006).