

International Association of Hydrogeologists
US National Chapter
Newsletter

Vol. 31, No. 2: October 2002

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EDITOR 'S NOTE

Welcome to the Fall 2002 electronic newsletter of the US National Chapter of the International Association of Hydrogeologists. For those of you who were impressed with the Adobe PDF version that Lenny did in Spring, I'm sorry if we don't manage it this time - we are back to the bare-bones MS-Word format for the moment.

I am very pleased to report that our membership has grown to a current total of more than 400 - what a fabulous jump in one year! Thanks are especially due to two people: Vicki Kretsinger for the alliance with the California GRA, and Lenny Konikow for his energetic recruitment activities. Of course, even with this jump in membership we would like to bring in more people - so please, encourage others to join, show them Hydrogeology Journal, give them my name or the address of the web page (www.iah.org/member.htm) where they can join directly.

Unfortunately I won't be at GSA this year, but there will be many great hydrogeology sessions, including the sessions sponsored by IAH, which Lenny discusses below. And please stop by the IAH poster display.

Finally, as always: let me know if you change your e-mail or mailing address, otherwise IAH will lose you.

- Colin Booth

MESSAGE FROM THE CHAIRMAN

BY LENNY KONIKOW

Since the May Newsletter, we have continued our efforts to increase the visibility of IAH and to attract new members. I was very pleased when Colin recently told me that membership in the U.S. National Chapter had increased to 400. Please continue to encourage your colleagues to consider joining IAH and getting *Hydrogeology Journal*.

As I mentioned in the last Newsletter, the Geological Society of America has accepted the IAH/US National Chapter as an Associated Society. This should lead to closer cooperation between IAH and GSA, especially with the Hydrogeology Division of GSA as the two groups have many interests (and members) in common. IAH/USNC will have a poster display in the Exhibit Hall at the Denver meeting: please stop by if you are there. We would like to have one or two IAH-sponsored special sessions on a regular basis at future GSA Annual Meetings, and invite you to submit proposals or suggestions for sessions to Colin or me. Our two special sessions at the 2002 Denver meeting are "Groundwater Depletion and Overexploitation: A Global Problem" and "Groundwater and Hard-rock Mining." We also have an opportunity to hold an IAH/USNC business or membership meeting at future GSA Annual Meetings; please let us know whether you think that this would be a good idea.

The IAH/USNC alliance program with the Groundwater Resources Association of California continues. This has generated interest and new membership for IAH, and IAH/USNC has co-sponsored several symposia and short courses with GRA during 2002, including a short course on "Principles of Groundwater Flow and Transport Modeling,"

Symposia on “Perchlorate and NDMA in Groundwater: Occurrence, Analysis and Treatment” (April 17, 2002), “Nitrate in Groundwater: Sources, Impacts, and Solutions,” and “Environmental Forensic Geochemistry” (Nov. 14, 2002), and the GRA Annual Conference (“Sustaining Groundwater Resources: The Critical Vision,” Oct. 30-31). We look forward to continuing this alliance in 2003.

IAH/USNC is also co-sponsoring two upcoming NGWA events: the Annual AGWSE Technical Session on “Linking Surface and Subsurface Hydrology—From Science to Technology,” in Las Vegas, December 9-11, 2002, and the NGWA Southwest FOCUS Conference on “Water Supply and Emerging Contaminants”, in Phoenix , February 20-21, 2003 (see more detailed information in “MEETINGS” section).

The IAH will hold its 32nd International Congress in Mar del Plata, Argentina, in October 2002. The overall theme is “Groundwater and Human Development,” but the technical sessions will focus on a variety of technical and managerial groundwater issues. I am looking forward to attending the Congress and the IAH Council Meeting and will report back to you on the highlights. I hope to see some of you there. There will not be a Congress during 2003; instead there will be two sequential IAH-sponsored Regional Conferences: “Groundwater in Fractured Rocks” in Prague (Sept. 15-19) and “Groundwater in Geological Engineering” in Bled, Slovenia (Sept. 22-26). There is still time to submit abstracts to both of these meetings. The 33rd International Congress of IAH is planned for Mexico City in Fall 2004; the USNC will co-sponsor and help organize a symposium on trans-boundary aquifer issues. Please let us know if you’d be interested in presenting a talk during this symposium.

The IAH Council had a meeting in Romania in May 2002. Among their recommendations was one to impose a small increase in membership dues for 2003 (from 60 Euros to 62 Euros), necessary to enable IAH to maintain a balanced budget for 2003. We trust that this \$2.00 increase will not cause any U.S. members to drop out of IAH! Student membership will remain at 30 Euros. It is also planned to discontinue printing paper copies of the IAH membership directory and replace it with an on-line directory available to members only. The Council is also considering venues for possible regional meetings during 2005 in Spain, China, and Japan, and for 2006 the 34th IAH Congress in France on the occasion of the 50th Anniversary of the founding of IAH.

We welcome comments and suggestions from members, and hope that you’ll contact Colin or me if you want to give us any feedback.

Lenny Konikow

SECRETARY-TREASURER'S REPORT

Statement of Financial Activities for the Year 2001-2002:

Statement made October 2001:

Account balance as of 9/30/01:	\$37, 446.08
Outstanding Credits:	\$ 360.00
Outstanding Debits: Membership Dues sent to IAH:	\$ 9,595.50
Sponsorships sent to IAH:	\$ 305.00
Effective Balance 10/31/01	\$ 27,905.58

Year 2001-2002

Expenditures:

AIH, shared cost of operating booth at 2001 GSA:	\$ 628.19
Returned mistaken overpayments of dues	\$ 68.00
AGI annual association membership dues	\$ 514.00

Income:

Membership dues received	\$ 10,896.00
Account balance as of 9/30/02	\$ 37,591.39
Outstanding debits	
Membership dues sent to IAH*	\$ 8,224.90
Donations from members sent to IAH	\$ 366.00
Effective account balance as of 10/11/02	\$ 29,000.49

*Note: equals total membership payments made by check to IAH/USNC, minus 10% of total dues of US members (including those made directly to IAH in the UK).

The International Association of Hydrogeologists is a charitable company registered in the United Kingdom: Company Registration No. 39562333, Charity Registration No. 1083019. The US National Committee of IAH forwards all membership dues to IAH, less 10% for operating expenses per IAH procedures of operation. Officers of the IAH/USNC receive no payment for services provided to the Association.

Membership Status

Membership as of 10/23/01: Honorary 4; Full Members 257; Student 15; Corporate 1
 Membership as of 10/11/02: Honorary 3; Full Members 377; Student 27; Corporate 3

IAH: US NATIONAL COMMITTEE

Chairman:	Leonard F. Konikow: lkonikow@usgs.gov	703-648-5878
Secretary-Treasurer:	Colin J. Booth: colin@geol.niu.edu	815-753-7933
Vice-Chair:	John F. Harsh: abbiekh@aol.com	813-884-9336
Vice-Chair:	Yoram Eckstein: yeckstei@geology.kent.edu	330-672-2364

Hydrogeology Journal Manuscript Processing Goes Online¹

Clifford I. Voss, Executive Editor of *Hydrogeology Journal*

Beginning mid-August 2002, all processing of *Hydrogeology Journal* (HJ) manuscripts, from submittal to publication, will be exclusively electronic. The author's initial submittal of a manuscript is online (rather than via mailed paper copy). Similarly, the Editors, Associate Editor, and reviewers will all retrieve the manuscript, the author will receive the publication, review comments, and submit the revised manuscript, and the final accepted manuscript will be forwarded to the publisher – all online. Additionally, all manuscript tracking is now centralized through the newly established HJ Editorial Office located near the International Association of Hydrogeologists (IAH) office in the UK (rather than through the Executive Editor's office in the USA). The HJ Editorial Office will be operated by Mrs. Christine Watson, who has already provided support to IAH in the IAH Executive Secretary's office.

These new arrangements should make the entire publication process more effective, more timely, and less costly. Mailing and courier costs are reduced for authors and HJ staff. Authors need not make and send multiple copies of their manuscripts, but can prepare their initial manuscript in the exact final electronic format required for publication. The length of time between manuscript submittal and publication decision will be shorter not only because manuscript movements will be nearly instantaneous, but also because all transactions will be carefully tracked by the new HJ Editorial Office, which will prompt editors and reviewers to keep to promised completion schedules for each review step on each manuscript.

Paper manuscript submittal will only be accepted by HJ when it is impossible for the author to submit online. Whenever possible, authors are expected to use electronic text files and graphics, and to scan non-electronic documents and images creating electronic files that can be submitted online.

For detailed instructions on how to access the Online System, go to the IAH web site (at: <http://www.iah.org/News/2002/025.html>) or see the August 2002 issue of HJ. User help is also available from Springer-Verlag and from the HJ Editorial Office.

¹ *Excerpted and adapted from Editor's Message, Hydrogeology Journal (2002) 10:441-442.*

IAH ALLIED ACTIVITIES WITH THE GRA OF CALIFORNIA

- by Vicki Kretsinger

GRA and IAH 2002/2003 Joint Programming

The Groundwater Resources Association (GRA) and IAH developed an allied partnership in 2001 and launched a Joint Membership Program beginning in 2002. As in 2001, IAH has been a cooperating organization with GRA for seven events in 2002. Through the balance of 2002, upcoming cooperative events with GRA, and also NGWA where both GRA and IAH are co-sponsors, include:

- Symposium “Biological Treatment of MTBE Contamination in Groundwater: Ex-Situ & In-Situ Challenges” (Oct.17, 2002; San Jose, CA. A short summary of this Symposium was included in the May 2002 IAH USNC newsletter; the complete program is now posted on GRA’s web site);
- Symposium “Nitrate in Groundwater: Sources, Impacts and Solutions” (Nov. 12-13, 2002; Fresno, CA. A short summary of this Symposium was also included in the May 2002 IAH USNC newsletter; a complete program is now posted on GRA’s web site);
- Environmental Forensic Geochemistry Workshop (Nov. 14, 2002; San Francisco East Bay Area, CA; for more details watch the GRA web site, or e-mail Bill Motzer at billm@hydroenvironmental.com); and
- AGWSE 2002 Annual Meeting and Conference: “Linking Surface and Subsurface Hydrology – From Science to Technology” (Dec. 8-11, 2002; Las Vegas, NV; to view the complete program, see NGWA’s web site at <http://www.ngwa.org/pdf/2002techprogram.pdf>

2003 Planned Events (GRA and also NGWA events with IAH as a cooperator) **Include:**

- Groundwater Recharge Workshop (GRA, DWR, and USGS sponsored with IAH and other cooperators);
- Lower American River Basin Science Conference (GRA sponsored with IAH and other cooperators);
- Low Yield Aquifer Testing Short Course (GRA sponsored with IAH and other cooperators);
- GPS and Field Data Collection Using PDAs (GRA sponsored with IAH and other cooperators);
- NGWA Southwest Focus Conference: Water Supply and Emerging Contaminants (NGWA sponsor with GRA, IAH and other co-sponsors; Feb. 24-25, 2003; Scottsdale, AZ);
- NGWA Northwest Focus Conference: Ground Water Issues (NGWA sponsor with GRA and other co-sponsors; June 24-25; Anchorage, AK);

- 24th Biennial Groundwater Conference and 12th Annual GRA Meeting (Sponsors: University of California, DWR, WEF, SWRCB, USGS, and GRA with IAH and other cooperators; Fall 2003; Southern CA);
- DNAPL Physics, Characterization, and Remediation (GRA sponsored with IAH and other cooperators); and
- Many other short courses and Symposia are also planned.

IAH members interested in learning more about GRA, or the programs in which IAH is participating with GRA as a cooperator, please check the GRA web site at <http://www.grac.org> . If interested in participating in the above-listed GRA programs, please e-mail your interest to Tom Mohr, GRA Board Member and Seminar Committee Chair, at tmohr@valleywater.org For those who are interested in the particulars of the GRA/IAH Joint Membership Program (particularly for possible development of similar programs in other states for the purpose of broadening awareness of IAH), please check the GRA web page (see “Support GRA” tab and Membership), or for a PDF file discussing the option, see http://www.grac.org/IAH_GRA.pdf .

IAH AND SUSTAINABLE DEVELOPMENT

by Lenny Konikow

“Sustainable Development” has become a rallying point for environmentalists around the world. A U.N.-sponsored World Summit on Sustainable Development concluded last month in Johannesburg was considered by many to be a success, with commitments made to increase access to clean water and proper sanitation. U.N. Secretary-General Kofi Annan said, “This summit makes sustainable development a reality.”

But “Sustainable Development” is not a new idea to ground-water specialists, who long have recognized the effects and limitations of ground-water mining and intensive development of ground-water resources. Thus, during the past decade many states have increased efforts to improve management of ground-water resources, optimize development, and limit overexploitation. Coupled with these efforts are more widespread implementations of artificial recharge plans.

Of course, these efforts have not solved all the problems, and more work needs to be done. The IAH and USNC are contributing to this. We have convened the special session on “Groundwater Depletion and Overexploitation: A Global Problem” at the October GSA meeting to bring attention to the issue and to air the latest research developments. In December, an IAH co-sponsored Symposium on “Intensive Groundwater Use: Challenges and Opportunities (SINEX)” will be held in Spain to gather a world-wide forum of scientists, stakeholders, sociologists, and decision makers with experience on groundwater intensive use issues (www.fcih.org/SINEX.HTM; and see more information below). These experts will study, discuss, and evaluate the challenges and opportunities of intensive use of groundwater from a wide-scope point of view in order to show the real benefits and costs, and to fight down myths that prevent the sustainable use of such an essential resource. The Symposium is timed to allow the findings of the meeting to be reported to the World Water Forum, Kyoto, in March 2003.

This was also the subject of a new UNESCO report, “Intensively exploited aquifers: Main concepts, relevant facts and some suggestions” by Ramon Llamas (Past President of IAH) and Emilio Custodio (Current president of IAH). It presents the main results obtained in the Madrid Workshop on Intensively Exploited Aquifers (Madrid, 13–15 December 2001) and includes ideas on how to improve water management in regions where there is an intensive use of groundwater. Copies of the report can be downloaded (in English or Spanish) from the IAH web site (www.iah.org/News/2002/027.html)

-- Lenny Konikow

IAH AND WORLDWIDE EVENTS ON GROUNDWATER AND WATER RESOURCES

by Ramon Llamas and Vicki Kretsinger

IAH is actively involved in worldwide groundwater/water conferences planned later this year and next year. These events illustrate the increased attention being placed on the role of groundwater in sustaining earth systems and the role that we have as groundwater professionals in advancing hydrogeologic research, furthering the understanding of fundamental water science, applying interdisciplinary approaches to problem solving, and educating others about the importance of science for addressing global water issues.

SINEX – Symposium on Intensive Use of Groundwater December 10-14, 2002, Valencia, Spain

Eleven years ago, IAH conducted a *Symposium on Groundwater Overexploitation* held at Puerto de la Cruz, Tenerife, Spain. More recently, in December 2001, a *Workshop on Intensive Use of Groundwater: Challenges and Opportunities (WINEX)* took place in Madrid. As a result of that workshop, a book is being printed which will provide the background for the upcoming *Symposium on Groundwater Intensive Use: Challenges and Opportunities (SINEX)* that will be held December 10-14, 2002 in Valencia, Spain. IAH, and also NGWA and others, are co-organizers of the SINEX symposium. The SINEX symposium is expected to bring together hydrogeologists, engineers, water managers, ecologists, economists, and social scientists to discuss the role of groundwater for supplying human needs, providing sustainable development, and alleviating poverty.

Among the symposium topics to be discussed are:

- Circumstances leading to intensive groundwater use;
- Environmental implications of intensive groundwater use;
- Water management, technical, political, economic, and social issues related to intensive groundwater use;
- Global case studies on intensive groundwater use;
- Regional and continental issues for intensive groundwater use, including transboundary problems and shared aquifer issues and significance for mankind;
- Ethical issues of intensive groundwater use, including present versus future generations, use of non-renewable reserves, sustainable use, water quality degradation, desertification, alleviation of poverty, and social stress.

Outcomes of the 2002 SINEX symposium are anticipated to include: 1) conveying management strategies to local water authorities that address the challenges and opportunities of intensive groundwater use; 2) generating discussion among participants on the real costs and benefits of groundwater exploitation; 3) producing a position paper containing a declaration (including recommendations) for later worldwide distribution; and 4) preparing a special publication with selected contributions. For more information, visit the web site at http://www.fcih.org/sinex.htm#_top

Hydrogeology and the 3rd World Water Forum, March 17-23, 2003, Kyoto, Japan

The Third World Water Forum (3WWF) will be held in Kyoto, Japan (March 17-23, 2003). The first WWF was in Rabat (Morocco) in 1997; the second WWF was held in The Hague (The Netherlands) in March 2000. The 3WWF will be the most relevant conference on water within the next three years, particularly since the 3WWF will encompass more groundwater issues than prior Forums. Attendance is anticipated to be about 10,000. The World Water Council (<http://www.worldwatercouncil.org>) together with the host country (Japan) is organizing the 3WWF. Representatives of IAH (and also NGWA) will be participating at the 3WWF.

The World Water Forums are envisioned as “a series of stepping stones towards the solution of the world’s pressing water problems.” The theme of the 3WWF, “sustained commitment to action on global water problems”, has the goal of implementing the World Water Vision established at the second WWF. Participants of the WWF come from diverse sectors representing water resources interests, including water resources and groundwater professionals, national governmental organizations, trade unions, business, industry, agriculture, and many others. Parallel to the General Conference, a Ministerial Conference will be conducted with the objective of creating a Ministerial Declaration on water issues. This Declaration will represent a consensus of the 3WWF directed at informing world politicians of important technical and scientific issues, establishing public awareness, and creating momentum for solutions to the global water crisis. Most importantly, it will emphasize the necessity of a sustained commitment to action that ensures "Water Security for the 21st Century."

As noted above, the 3WWF will assign much greater relevance to hydrogeology and its role in solving global water problems. The second WWF had only one session out of about 100 sessions that was directly related to groundwater. The number of groundwater sessions in the 3WWF will be substantially larger as a result of the sessions offered as part of the current Virtual Water Forum. The Virtual Water Forum is a kind of “chat” exchange that is logistically organized and controlled by the Secretariat of the 3WWF. Any interested person can apply to the Secretariat to open and chair a session, or participate in any of the already opened sessions. More than one hundred sessions are presently open. Of these, more than ten sessions are directly related to groundwater issues, and about forty sessions are indirectly related to hydrogeological topics.

Detailed information on the 3WWF, participation in the Virtual Water Forum, and the second WWF can be obtained at <http://www.worldwaterforum.org>

MORE MEETING ANNOUNCEMENTS

IAH 32ND CONGRESS – MAR DEL PLATA, ARGENTINA, OCTOBER 21-25, 2002

Groundwater and Human Development

INFO: Dr Emilia Bocanegra, Centro de Geología de Costas y del Cuaternario, Facultad de Ciencias Exactas y Naturales, Universidad Nacional de Mar del Plata, Casilla de Correo 722. 7600 Mar del Plata, ARGENTINA. Tel: +54 223 4754060. Fax: +54 223 4753150; E-mail: ebocaneg@mdp.edu.ar ; Web: www.mdp.edu.ar/exactas/geologia/iah2002/iah2002.html

GEOLOGICAL SOCIETY OF AMERICA, Annual Meeting, Denver, Oct. 27-30, 2002.

Lenny has described above some of the activities at GSA in his Message from the Chair – please note especially the IAH-sponsored sessions on “Groundwater Depletion and Overexploitation: A Global Problem” and “Groundwater and Hard-rock Mining.” Also, please visit our poster display in the Exhibit Hall.

Alas, I was too late in getting this newsletter out to advise you of the early registration bargains. However, it’s still almost two weeks away from the meeting and you can get information and online registration instructions on the GSA Web site at <http://www.geosociety.org/meetings/>

2ND INTERNATIONAL CONFERENCE ON SALTWATER INTRUSION AND COASTAL AQUIFER MONITORING, MODELING AND MANAGEMENT (SWICA II)

March 30- April 2, 2003 - Merida, Yucatan, Mexico

The 2nd International SWICA conference will be held in Merida, Mexico, March 30-April 2, 2003. IAH/USNC is a co-sponsor of the meeting. The abstract deadline has been extended to **October 31, 2002**, so there is still time to submit an abstract. It will not be a requirement to submit an entire manuscript. Two workshops are scheduled prior to the conference, including a two-day theoretical workshop (presented by Prof. Jacob Bear) and a three-day workshop to provide training on principles as well as hands-on computer modeling (using USGS model SUTRA by Cliff Voss). There will also be field trips and other social events. For more information, go to the conference web site <http://www.igeofcu.unam.mx/swica2/> or contact Prof. Luis E. Marín, Universidad Nacional Autónoma de México, Mexico City, Mexico CP 04510; MEXICO. Tel: +52-555-622-4212; Fax: +52-555-550-2486; E-mail: lmarin@tonatiuh.igeofcu.unam.mx

GROUNDWATER IN FRACTURED ROCKS Sept. 15-19, 2003 - Prague, Czech Republic

Conference organized by the IAH Working Group on Hard Rock Hydrogeology.
INFO: Jiri Krasny E-mail: krasny@natur.cuni.cz
Web: <http://www.natur.cuni.cz/gwfr2003>

**1ST INTERNATIONAL CONFERENCE ON GROUNDWATER IN GEOLOGICAL ENGINEERING
September 22 - 26, 2003 - Bled, Slovenia.**

INFO: Andrej Juren. E-mail: andrej.juren@siol.net;

Web: <http://www.drustvo-skiah.si> or <http://www.pivo-union.si/ICGGE-2003/>

**NGWA SOUTHWEST FOCUS CONFERENCE
WATER SUPPLY AND EMERGING CONTAMINANTS
February 20-21, 2003, Hyatt Regency Phoenix**

Topics:

- ◆ Emerging Contaminants: Perchlorate; 1,4, Dioxane; n-nitrosodimethylamine (NDMA)
- ◆ Metals and Radionuclide Geochemistry and Transport
- ◆ Artificial Recharge and Water Banking
- ◆ Estimating Natural Recharge and Safe Yield
- ◆ Effects of Forest Fires on Ground Water
- ◆ Salt Management for Irrigation
- ◆ Effects of Sewage Irrigation on GW Quality
- ◆ Ground Water/Surface Water Interactions
- ◆ Characterization and Remediation of Mine Tailings Sites
- ◆ Well Drilling and Well Re-Development
- ◆ Aquifer Storage and Recovery in Karst Aquifers
- ◆ Innovative Remediation Technologies
- ◆ Water Supply Planning
- ◆ Membrane Filtration
- ◆ Brine Disposal
- ◆ Economics of Water Policy

The conference will cover a broad range of topics in the region famous for scarcity of water. The emerging contaminant portion of the conference will focus on three specific compounds: n-nitrosodimethylamine (NDMA), 1-4,dioxane, and perchlorates. NDMA exposure has been shown to result in an increase in liver and lung cancer in animals, and the Department of Health and Human Services has determined that NDMA may reasonably anticipated to be a human carcinogen. NDMA was produced in relatively small amounts as a rocket fuel, yet has become an important contaminant in the Southwest because it is also a disinfection byproduct. Perchlorates, also components in rocket fuel, are now present in Lake Mead and municipal water. Contamination by 1,4, dioxane caused the closure of a municipal well in Orange County, California. It is a stabilizer in solvents, is water soluble and very recalcitrant, and has been identified in numerous solvent plumes throughout the nation.

IAH/USNC is a co-sponsor of this conference.

For questions and more information, contact Bob Masters at NGWA, 1-800-551-7379, rmasters@ngwa.org or visit the web site: www.ngwa.org.

SYMPOSIUM ON UNDERGROUND INJECTION SCIENCE AND TECHNOLOGY
October 22-25, 2003, Berkeley, California

This symposium, to be held at the Lawrence Berkeley National Laboratory, is sponsored by the US environmental Protection Agency and the US Department of Energy, with co-sponsorship from a number of professional societies.

The subsurface environment is increasingly being used for the injection disposal or storage of liquids, gases and even slurries generated by industrial, oil and gas, and municipal facilities, in addition to its widespread utilization as a source of drinking water. With such exploitation, numerous technical and scientific problems arise, which are commonly addressed in various research studies and case history analyses. In recent years, the pace of development continues to accelerate, and as new applications of underground injection are developed, both the science and technology addressing safety assessment and monitoring methods become ever more sophisticated.

The Symposium will provide for a dialog and exchange of ideas, which will enhance the ability of participating scientists and engineers to address the challenges and opportunities attending utilization of the subsurface environment for underground injection practices.

Further details are on the website: <http://www.lbl.gov/Conferences/UIST> and you can also email the conference organizers at cftsang@lbl.gov or jaapps@lbl.gov to be put on the mailing list for further announcements.

-- Chin-Fu Tsang

OTHER ITEMS

Status of Academic Geoscience Departments - AGI Reports

The American Geological Institute (AGI) recently released the *2001 Report on the Status of Academic Geoscience Departments*, which describes and analyzes enrollments, employment trends of recent graduates, faculty demographics, and other department characteristics at degree-granting geoscience departments in the United States. Over 700 geoscience departments were included in the comprehensive survey that was the basis of the report. The free 12-page report is available online in pdf format at <http://www.agiweb.org/career/rsad2001.pdf>.

AGI also produces two companion online publications, the *Guide to Geoscience Departments* and the *Guide to Geoscience Careers and Employers*. Both are accessible from the web site <http://guide.agiweb.org>.

IAH/USNC is a member society of AGI.

AGI Awareness Series – *Living with Karst: A Fragile Foundation*

AGI continues to issue posters, booklets, and educational materials in the Environmental Awareness Series designed to promote better understanding among citizens and policy makers of the role of the Earth sciences in all aspects of mitigating environmental concerns. A recent production is:

Living with Karst: A Fragile Foundation. AGI Environmental Awareness Series, Booklet 4. By: G. Veni, H. DuChene, N.C. Crawford, C.G. Groves, G.N. Huppert, E.H. Kastning, R. Olson and B.J. Wheeler (Foreword by Philip E. LaMoreaux): 64 p. Contact AGI at www.agiweb.org or National Speleological Society at www.caves.org

International Glossary of Hydrology - UNESCO

UNESCO has made a comprehensive glossary for hydrology available from its “Water” web site at: <http://www.cig.ensmp.fr/~hubert/glu/aglo.htm>. The glossary is available in 11 languages.

JOB ANNOUNCEMENT

The IAH/USNC Newsletter does not accept advertising of services or products. However, we consider job announcements to be a service to our members and are happy to include them in the newsletter.

Hydrogeologist – Seattle area

Mid- to Senior-level Hydrogeologist. Bender Consulting, LLC is a consultancy in groundwater science and engineering, specializing in construction dewatering design services, dispute resolution related to hydrogeology, and water rights support. We support the construction, legal, engineering, and environmental industries.

We are seeking an applied hydrogeologist. The applicant must have a Master's degree in Hydrogeology, or an equivalent degree with a hydrogeologic emphasis. 5 to 10 years of applied experience must be demonstrated. The position requires excellent communication skills. Fieldwork is a position requirement. This is an excellent opportunity to join a growing firm with a wide variety of hydrogeology-related projects. Please send correspondence to:

Bender Consulting, LLC
1721 132nd Ave. N.E., Suite C
Bellevue, WA 98005
bender.consulting@verizon.net