
◆ BULLETIN ◆

Fall 2001

"American Institute of Hydrology, the Society for Registered/Certified Hydrologists and Hydrogeologists"

Volume 19, Issue 3

2001 AIH International Conference, 20th Anniversary and Annual Meeting

Hydrologic Science: Challenges for the 21st Century October 14 —17, 2001

By the time you receive this newsletter the 2001 annual meeting of AIH, also the 20th Anniversary meeting for the Institute, will soon be underway. The venue for the meeting is excellent and the conference program is excellent as well.

A pre-meeting activity involves a two-day hydrogeology field trip sponsored by the Minnesota Ground Water Association. The field trip starts on Friday and takes participants near Brainerd in northern Minnesota to view the area geology. The official AIH meeting kicks off on Sunday with a short course by John Moore and Ivan Johnson, and a workshop by Andrew Stone, with the American Ground Water Trust. The short course covers the topic of standard guides for collection of hydrogeologic data for environmental site characterization. The workshop is on ground water education. Both of these activities carry professional development credits.

The regular conference program begins on Monday morning with Dr. Mark Seeley from the Univ. of Minnesota giving a keynote presentation entitled: "Climate Trends: Implications for Hydrologic Science in the 21st Century." This will be a very interesting presentation because we as hydrologists all know that it is the weather that drives the surface and subsurface processes that we study in our profession. The uncertainty about the weather inputs is becoming an ever increasing important consideration in our analyses and designs.

A special session follows Dr. Seeley's presentation. The session is on the challenges in registration/certification of professional hydrologists. Dr. Doug James is the keynote speaker for this session.

Starting with Monday afternoon there are 13 concurrent technical sessions at the meeting. The main themes of the technical sessions with the associated keynote pre-

sender for each theme are:

- * Status of Water Quality and Aquatic Biology, Tim Miller, U.S. Geological Survey
- * Ground Water Challenges in the 21st Century; T.N. Narasimhan, Univ. of California, Berkeley
- * Scale Issues in Hydrologic Science, Efi Foufoua, Univ. of Minnesota
- * Role of Hydrologic Science in Watershed Management, Nathan Buras, Univ. of Arizona
- * The Minnesota and Mississippi River Basins; Flooding and Runoff Issues, and Water Quality and Ecology Issues, John O. Anfinson, Mississippi National River and Recreation Area, National Park Service
- * Sustainability of Ground Water, William M. Alley, U.S. Geological Survey.

A poster session is being held starting on late Tuesday afternoon and lasting into the early evening. The posters cover topics related to those topics in the various technical sessions.

Two field trips are planned in the afternoons of Tuesday and Wednesday. One field trip is to the St. Anthony Fall Laboratory at the Univ. of Minnesota. The other field trip is to the tour of the Lock and Dam in Minneapolis and tour of the Historic Milling District.

A luncheon honoring past recipients of AIH awards is being held after the Monday morning special session. The luncheon is presided over by AIH President Vijay P. Singh.

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20th Anniversary and Annual Meeting**

Find the program on the web <www.aihydro.org>

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The AIH *Bulletin* is the official publication of the American Institute of Hydrology, 2499 Rice St., Ste. 135, St. Paul, MN 55113, Tel. (651) 484-8169, Fax (651) 484-8357, E-Mail: <AIHydro@aol.com>, Web Page: <www.aihydro.org>. Material published in this newsletter may be reprinted with proper attribution. AIH is a professional organization providing certification of competent professionals, in *all* fields of the hydrologic sciences. The Institute is dedicated to the advancement of hydrology and hydrogeology as a science and profession, and to the professional education and advancement of its members. Contributions and articles of interest to the general membership of AIH are welcomed and should be submitted to the AIH office. Advertisements should also be submitted to the AIH office.

Advertisement Rates are as follows:

SPACE	RATE	SIZE
1 page	\$525	9½ x 7½"
1/2 page (1 column)	\$275	9½ x 3½"
1/2 page (1 banner)	\$275	4½ x 7½"
1/4 page (1/2 column)	\$135	4½ x 3½"
1/8 page (1/4 column)	\$ 85	2½ x 3½"
Business Cards, non-members annual (4 issues)	\$225 members, \$325	

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PRESIDENT'S MESSAGE

The terrorist attacks on September 11, 2001, in New York and Washington, D. C., have shocked the entire country and have caused untold pain and suffering to millions of people around the globe, not to speak of the loss of thousands of lives. I hope and pray that none in the AIH family has been directly hit. Like you all, my prayers are with the families who have lost their loved ones in this senseless carnage. In the face of this tragedy, it is hard to get back to normal. But life must go on.

This time I am writing to solicit your help. As we all know, AIH has not been growing for some time and indeed its membership has even declined in some years. For the past several months, we have been making a concerted effort to boost its membership. To that end, we have taken two initiatives.

- * First, under the leadership of Dr. Roman Kanivetsky, we are trying to establish national sections of AIH in different countries. We have made contacts with many countries and based on the initial feedback we have received, it seems we are making a modest headway in this direction.
- * Second, we want to establish state sections in each state, although some states already have such sections but in most cases their activity is virtually nil. Likewise, we want to establish student chapters on university campuses.

I believe through the state sections and student chapters, we can grow as an institute but even more importantly we can contribute to the growth of hydrology as a profession. The advantages these sections and chapters within the U. S. and the national sections outside will bring to AIH can hardly be over-emphasized. We have been looking for a real dynamic person as National State Section Chair who can take the charge and run with it. I know many of you have been enormously successful in life and have been a source of strength and inspiration to a lot of us. Some of you know a lot of people, perhaps a lot more than I do or some of us do. If you can help us identify a person or persons, we and AIH would be most grateful. This is a real important task and we want to do it as best as we know how. Any help or guidance you can offer will be sincerely appreciated.

Currently I am in Singapore and will be here through the end of the year. My e-mail address is: cvijay@ntu.edu.sg and I would like you to use it, although my LSU address will remain in effect.

If anyone of you are coming toward this part of the world, please call on me and I would be only too happy to have you. I have plenty of space to have you stay with me, if you like. I look forward to hearing from you.

Vijay P. Singh, President
American Institute of Hydrology

2002 AIH INTERNATIONAL CONFERENCE AND ANNUAL MEETING

Hydrologic Extremes: Challenges for Science and Management *October 13-17, 2002*

Check out the web page for the 2002 International Conference and AIH annual meeting. You can find it by visiting the AIH web page <www.aihydro.org> and clicking on the calendar for the Fall 2002 Annual Meeting. Currently, only the call for papers is on the web, but the information includes proposed conference topics and location. You should expect there to be changes to the web page between now and the conference date, so you should visit it periodically to find the most up-to-date information.

Those people in Oregon involved with the conference organization include: Antonius Laenen (Chair), James D. Ruff, Ivars Steinblums, Jon Lea, Jolyne Lea, John Risley, Richard Cassidy, Stuart McKenzie, and (of course) our Office Manager in Minnesota, Helen Klose.

For those wishing to contribute a paper or poster for the conference, the instructions for the submission of abstracts are outlined on the web page. The due date for submission of abstracts has been set for February 28, 2002. The plan is to have the program finalized and posted on the web page (under the heading of Conference Program) by June 15. It is also planned to have abstracts and papers both published for distribution and posted on the AIH web page.

The technical program for the 2002 Meeting is aimed to cover all of the areas of the hydrologic sciences. The tentative program themes are:

- * Riparian Processes
- * Climate Change
- * Droughts and Floods
- * Stream Temperature Standards and Modeling
- * Endangered Species -- Competition for water -- environment, power, and irrigation
- * Managing Forest Health
- * Ground Water Variability -- response to extremes
- * Water Quality Variability -- response to extremes
- * Channel and watershed morphology -- response to extremes

Tentatively, activities in planning are two half-day workshops and two field trips. For short courses, we thought

we might offer something in climate, temperature modeling, and ground water quality. For field trips we thought since the Lewis and Clark bicentennial was a year away, a historic presentation along with a geologic and hydrologic tour of the beautiful Columbia River Gorge would be of interest. Another interesting visit would be a geologic and fluvial tour of the Mt. St. Helens National Monument. We are also considering a half-day conference session to be held on the Portland State campus in downtown Portland.

Of course, there will be plenty of activities to take part in while you are in the Portland area. The Hotel offers beautiful views of both Mt. Hood and Mt. St. Helens. The Hotel will also provide transportation to our nearby light-rail system, and downtown is only 20-minutes away. All public transportation in the city center is free and readily available. Portland is considered one of the most livable cities in the USA and is beautiful as well. There is never any guarantee that October weather will be dry, but if the past years are any indication, then we will have plenty of sunshine.

The conference will be held at the Sheraton Portland Hotel, 8235 Northeast Airport Way, Portland, Oregon 97220-1398. Reservations can be made by calling (800) 325-3535 or (503) 281-2500.

—A. Laenen

LOOK FOR US AT THE GSA MEETING

Look for us at the GSA Meeting—Boston 2001: A Geo-Odyssey, November 1—10, 2001 in the Exhibit Hall, **Booth Number 121**. We are again sharing it with the Association of Hydrogeologists (IAH). John Moore, Dickie Moore, Bruce Cutright and Phil LaMoreaux will be happy to see you. If anyone would like to help out at the booth, they would appreciate it.

MEMBERSHIP ACTIVITY

Applications Received

Terry A. Rightnour, Gannett Fleming, Inc., Clearfield, PA (1593-H)
Aaron S. Zonin, Zonin Engineering, Inc., Dayton, OH (1594-H)
Michael S. Kasch, HDR, Boise, ID (1492-H) (Transfer from HIT)
Chimin Chian, Everest International Consultants, Long-Beach, CA (1594-HWQ)

New Student Members

Fahmy Ismail, Univ. of Minnesota, Minneapolis, MN (333-S) (M. Pettus)

New Members

Howard M. Goebel (1553-H)
Valerie A. Swick (1554-H)
Carla J. Rumsey (1555-H)
Sharlene VanKommer (016-HIT)
Gary Rule (017-HIT)
Justin T. Iverson (018-HGIT)
Joseph R. Amann (019-HIT)
Jeremy S. Appt (020-HIT)
Christine E. Briese (021-HIT)
Benjamin Jacob (022-HIT)
Mindy M. Simmons (023-HIT)
Ethan L. Scott (024-HIT)
Timothy E. Link (025-HIT)
Joshua R. Wyrick (026-HIT)

New Member Addresses

Howard M. Goebel, Hydrologist, New York State Canal Corp, 200 Southern Blvd., P.O. Box 189. Albany, NY 12201-0189, Tel. (518) 471-5888, Fax (518) 471-5936, E-Mail: howard_goebel@canals.state.ny.us (01-H-1553)
Valerie A. Swick, Senior Hydrologist, Flood Control District of Maricopa County, 2801 W. Durango St., Phoenix, AZ 85009, Tel. (602) 506-4872, Fax (602) 506-4601, E-Mail: vas@mail.maricopa.gov (01-H-1554)
Carla J. Rumsey, Hydrologist, Western Water Consultants, Inc., 611 Skyline Rd., P.O. Box 4128, Laramie, WY 82071-4128, Tel. (307) 742-0031, Fax (307) 721-2913, E-Mail crumsey@wwc.laramie.wy.us

CANDIDATES SOUGHT FOR AIH OFFICES

AIH is in the process of selecting candidates for a two-year term (Jan. 2003 – Jan. 2005) for the following AIH offices:

- * **President-Elect (automatically assumes presidency for the next term)**
- * **Vice President for Academic Affairs**
- * **Vice President for Institute Development**
- * **Vice President for International Affairs**
- * **General Secretary**
- * **Treasurer**

Note: President (President-Elect from the last election was P. Patrick Leahy who automatically assumes presidency for this term.)

Members are invited to send suggestions for candidates for these offices to the AIH office via mail, fax or e-mail, 2499 Rice St., Ste. 135, St. Paul, MN 55113, Fax (651) 484-8357 or E-Mail: AIHydro@aol.com. When submitting a suggestion, include the full name of the individual being suggested, the office for which the individual is being suggested, and a brief statement (4 or 5 lines) indicating why you think this individual would be a good person for the office. The nominating committee (J. Westphal, Chair) will evaluate all names submitted in putting together its final slate of candidates. All suggestions need to be received at the AIH office by December 1, 2001.

MEETINGS OF OTHER ORGANIZATIONS

ASCE—Challenges in the Completion of Civil Engineering Projects in a Global Setting—Lessons Learned and Successes Accomplished, October 25, 2001 (8 a.m. to 7 p.m.), Hosted by the ASCE Student Chapter, at the Univ. Conference Center, Titan Student Union, 800 N. State College Blvd., California State Univ., Fullerton, CA. To register, contact: Tim Hancuff, (562) 699-7411, Ext. 1614, E-Mail: <thancuff@lacsds.org>. Info submitted by C.T. Bathala.

2001 AWARDS

AIH has established three major awards that are presented at the Annual Meeting. The **C.V. Theis annual award** is given for a major contribution in the field of ground-water hydrology, the **R.K. Linsley annual award** is presented for major contribution in the field of surface water or engineering hydrology, and the **AIH Founders Award**, given periodically at the discretion of the Executive Committee, to an AIH member for outstanding, long and dedicated service to the Institute.

2001 C.V. Theis Recipient

Richard R. Parizek (908-HG) became a member of AIH in 1990. He is awarded the C.V. Theis Award for his contribution as one of the pioneers in the study of macro-scale fracture patterns (fracture traces and lineaments) with particular emphasis on their role in water supply and movement of contaminants.

Dr. Parizek received a bachelors in geology from the Univ. of Connecticut, a Masters and Ph.D. in geology from the Univ. of Illinois in 1960 and 1961, respectively. His work experience included research with Dr. George B. Maxey in Urbana, Illinois, served as Party Chief and Acting Head of the Ground water Mapping Program in Saskatchewan, and started as Professor in the Geosciences Dept. in 1961 at the Penn State Univ.

He has published more than 100 papers in scientific journals and is co-developer of the "Living Filter" concept of treating liquid wastes and sludge.

2001 R.K. Linsley Recipient

John J. Cassidy is awarded the R.K. Linsley Award for his many exceptional intellectual, managerial, and research leadership in hydraulics and hydrology.

Dr. Cassidy received both a Bachelors and Masters degree in Civil Engineering at Montana State Univ. in 1952 and 1960, respectively. He later received his Ph.D. in Hydraulics from the Univ. of Iowa in 1964.

His work experience includes working with Bechtel, Inc. in many responsible positions as Chief Hydrologic Engineer and Assistant Chief Hydraulic Engineer from 1974 through 1998. Prior to working at Bechtel, Dr. Cassidy served as Professor and Department Chairman at the Univ. of Missouri in Columbia and was the Head of the Washington State Water Resources Research Center at Washington State Univ.

2001 Founders Award Recipient

Dr. Verne H. Scott (267-H) became a member of AIH in March, 1984. Shortly after becoming a member, he agreed to serve on the Task Force on Professional Evaluation. The task force was formed to assist the Board of Registration in evaluating the many applications that were received in late 1983 and 1984. On July 1, 1984, Dr. Scott was appointed Chairman of the Board the Registration and served until April 1, 1986. He became Chairman in the critical period of AIH growth, after the first Chairman, Ralph Heath resigned. Although he served only two years, he was instrumental in eliminating the backlog of application and introduced improved procedures for the evaluation of applications. More than 500 applications passed through his hands during this period, and each of them received his personal attention. He has also served on the AIH Advisory Board since January 1997.

Verne Scott received a Bachelors in 1944, a Masters in 1948 in Civil Engineering at the Univ. of Michigan in Ann Arbor. He received his Ph.D. in Civil Engineering from Colorado State Univ. in 1959. His work experience started in 1948 until his retirement in 1989 as Professor of Water Science and Civil Engineering in the Departments of Land, Air and Water Resources and Civil Engineering at the Univ. of California in Davis. Dr. Scott also provided consulting services to private and public organizations in water resources, ground water, irrigation, draining and water quality in the U,S, as well as Chile, Puerto Rico, India, Europe and Egypt.

Dr. Scott has other interests also. He became very interested in sports management. This interest involved watching the Scott's son, Dave, become a professional triathlete winning the Hawaiian Iron Man World Championship six times. Following retirement from the Univ. of California, Dr. Scott and his wife moved to Boulder, Colorado.

AIH Examination Committee Restructured

A new examination committee of AIH membership has been formed to administer the Wisconsin examination for professional hydrology registration. Tony Laenen is the temporary chairman, and Robert Bubeck, Kenneth Potter, Stuart McKenzie, Bill Fetter, Ronald Santini, Richard Hawkins, and John Sharp are members. Alan Cohen from the University of Wisconsin is our test consultant, and Darwin Tichenor from the Wisconsin Department of Regulation and Licensing (DRL) is our liaison with the state.

On May 22-24, 2001 there was an initial meeting both to determine the role of the examination committee, and begin the administration of the Wisconsin test. The examination committee is also entrusted to accordingly modify existing AIH test procedures. On October 14, 2001 the committee will meet again to finalize changes to the fundamentals test of the Wisconsin Examination and to begin work on a Water-Quality practice test.

At the May meeting, Mr. Tichenor explained the test content and provided results of the examination. To date only 7 have taken the Wisconsin exams; 4 have taken the surface water practice examinations (and fundamentals exams) and all have passed. The reason for so few tested is because so many had been grandfathered in before testing began. The rate of testing hereafter is expected to increase substantially. The cut score was discussed, as was the test rating procedure. Copies of the fundamental and the two practice examinations were provided to all members. After cursory individual reviews, the committee members discussed their impressions of the examinations. It was felt by the committee members that the fundamental examination needed improvement. The practice examinations looked to be sound, however, detailed review was not made for these examinations at this time. It was agreed unanimously that AIH should accept the responsibility for the future development, maintenance and use of the Wisconsin examinations and to incorporate these examinations into future AIH certification. AIH will assume this responsibility by December 14, 2001 and be able to provide the examinations by the second Friday of June 2002.

The education committee as defined by the current membership would tentatively become the examination committee for the revision and maintenance of the Wisconsin (DRL) examinations. It was determined that the committee should consist of three members from each category of membership (i.e., hydrology, groundwater, and water quality) and a chairperson. The current chair would serve until the membership of the committee is completed. The Board of Registration of AIH would assume responsibility to formally communicate test scores of all Wisconsin candidates to the DRL and maintain a registry of all those taking the examination. We would need to keep an accounting of all costs and fees associated with the examinations separate from all other

AIH activities.

The examination questions from the fundamental test bank (271 questions) were provided to the examination committee members for critical review and modifications. The final review of the fundamental examination question bank is to be completed by October 14, 2001 at a meeting held in conjunction with the Annual AIH Conference in Minneapolis, MN. Following this meeting, the revisions to questions would be sent back to the Wisconsin DRL. Once in the hands of the DRL, local AIH committee members would participate in the rating of the questions in conjunction with the DRL Registry Board members. The Wisconsin DRL will maintain responsibility of the examinations until the transfer of responsibility to December 14, 2001, and the DRL will administer the examinations in January 2002.

At present the DRL has no examination for a water quality classification. It appears from the Final Report for the Practice Analysis (2000) by the Wisconsin DRL that there are sufficient data to develop a water quality examination content outline. With this outline, it is advantageous to first address the development of a water quality examination. Existing questions from all the question banks can be selected and may be used, with some modification, for this examination. However, some new questions would need to be written. Following the revisions of the fundamental examination, the examination committee will begin review of the two practice examinations now offered by the DRL. By the end of 2004, both the surface hydrology and groundwater hydrology examinations will be reviewed and modified as deemed necessary. In the interim, AIH will offer the existing practice examinations as developed by DRL. During the year 2005, the examination committee will conduct a new practice analysis and provide a report under the direction of the test consultant (Al Cohen).

—A. Laenen

AIH 2001 Registry

We are in the midst of updating the registry and will be preparing it for print. Due to the extra activity surrounding the meeting caused by the tragedy in New York and Washington, D.C., the schedule was set back. It will be completed, printed and sent out to you as soon as possible.

International Affairs

American Institute of Hydrology (AIH) is embarking on establishing National sections throughout the World. This initiative is sparked by a new world order of globalization of economies and overarching challenge to make transition from unsustainable, inequitable society to one that is sustainable, equitable and stable. The issues of long-term environmental, socioeconomic, and political stability is at stake. In this context the sustainable growth both in developed and developing countries will, in large part, depend on knowledge as organizing principal in environmental management and, in particular, hydrologic issues and water resources.

The hydrologic community and AIH should provide the leadership and build the knowledge partnership in management and protection of water resources and shape the future of hydrologic science and profession.

AIH sent letters to 35 countries and so far received replies with the expression of interest from nineteen countries. If we will be successful with this initiative we will be able to make AIH a truly global professional organization and fulfill the vision of AIH which are unification of profession, establishing standards globally and reform of educational system.

We need your help. If you know a well-known professional hydrologist in leadership position who may be nominated to lead the effort to establish national sections in other countries please contact AIH Headquarters or myself at kaniv001@umn.edu or call me at (612) 627-4780 ext.209.

—R. Kanivetsky

Continued from Page 1—2001 Meeting

On Monday evening is the Banquet and the AIH Awards Presentations. This year the awardees are:

- * C.V. Theis Award, Richard R. Parizek
- * Ray K Linsley Award, John J. Cassidy
- * Founders Award, Verne H. Scott

The Distinguished Speakers Luncheon takes place on Tuesday. The speaker this year is Dr. Vit Klemes, Chief Scientist (Ret.) National Hydrology Research Inst., Environmental Canada, Victoria, British Columbia, Canada. The title of his presentation is "There is more to the Vltava River than its 175-Year Streamflow Record". For those of you who do not know it, the Vltava River, also known as the River Moldau, flows through Prague in the Czech Republic. This will be a very interesting presentation as there will be more to it than just an analysis of hydrology. There is a lot of history there too!.

—John L. Nieber

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www.aihydro.org and press the meetings button

Remember the Alamo

Did you know that AIH receives a commission for all member rental of vehicles through Alamo Rent A Car? A 24-hour reservation is required and can be made by calling **1-800-354-2322** and request your membership I.D. No. as **93394** with the rate Code **BY**.



**The AIH Business Meeting will
be held during the 2001 Annual
Meeting and 20th Anniversary
at the Thunderbird Hotel on
Wednesday, October 17, 2001**
