



NEWS AND INFORMATION

International Association of Hydrogeologists

The international groundwater organisation

Since 1956 a world-wide forum on the management of groundwater for the benefit of mankind and the environment

Munich - a Congress of mixed emotions

Those who attended the IAH Munich Congress (10-14 September 2001), thirty-first in a series stretching back to 1957, will have many reasons for remembering the event. It was one of the larger meetings convened by IAH, with over 450 attendees from a total of 53 countries. IAH welcomed the strong support for the congress from German federal and regional institutions with responsibilities for water and the environment. The challenges of implementing the European Water Framework Directive have heightened interest in the characterisation of groundwater systems and the tools for doing this. In multiple parallel sessions, speakers from all over the world presented their findings, now assembled in an impressive two volume set of proceedings – for details of availability please see page 6. The meeting was co-convened with the Association of Tracer Hydrology (ATH) who also produced a special congress publication.

However, the congress was overshadowed by the September events in New York and Washington. We honoured two of our US members at the IAH General Meeting as the news of the tragic events was coming through.

The President's Award for 2001 was presented to Lenny Konikow of the United States Geological Survey and President of the US National Chapter. In addition Bill Wilson, who stood down this year as the Managing Editor of Hydrogeology Journal, was elected an honorary member of the Association. The citations for these are reproduced on page 3.



Bill Wilson (left) and Lenny Konikow following the receipt of their awards

Other news from Munich

IAH Council Report September 2001

A meeting of the IAH Council was held in Munich on 9 September. Unapproved minutes of the meeting and related reports can be found on the IAH web site: www.iah.org/News/2001/011.html

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To join IAH please use the on-line service on our web site, download our membership form or contact the IAH office

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Key decisions at the Council meeting were:

- Approval the IAH Annual report for 2000 and the Report and Accounts for the year to 31 March 2001.
- Approval of a change to corporate membership to allow companies who are corporate members to register up to six members of their staff as personal members of the Association. This change will take effect from January 2002. (see right).
- Agreed that a review of fees for members in low-income countries should be undertaken and discussed further at the next Council meeting in May 2002.
- Agreed a review of the strategy for championing the work of IAH in developing countries (Burdon Commission); to be discussed further at the next Council meeting in May 2002.
- Agreed to work in collaboration with UNESCO on a series of Best Practice Guides in Hydrogeology.
- Agreed in principle to hold the 2004 Congress and General Meeting in Mexico City subject to a detailed scrutiny of the proposal submitted by the Mexican National Chapter, by the Executive Committee at its meeting in January 2002.

Changes to IAH Corporate Membership

One of the most important decisions at the Council meeting was to make a radical change to the structure of corporate membership of the Association from the beginning of 2002.

The change will mean that IAH will move, in line with many other international scientific bodies, to encourage companies to join IAH to provide personal membership of IAH to their staff. Under the revised scheme every corporate member will, for the basic corporate membership fee of EUR/\$US 300, be able to nominate three of their staff as individual members and a further three at a supplement of EUR/\$US 45 per member. If your company would like to support IAH through this scheme, please download details from: www.iah.org/News/2001/013.html

Membership fees for 2002

There will be no change in membership fees for 2002. However, for 2002 IAH is introducing on-line credit card payments and this facility will be available for all members who are invoiced directly by the IAH international office and also by members in the Dutch, British and US National Chapters, who are also participating in this new scheme.

IAH News

There are new IAH **National Chapters** forming in New Zealand, Namibia and Portugal. In New Zealand the initiative is being taken through the auspices of the New Zealand Hydrological Society (contact gcrowcroft@arc.govt.nz) and in Namibia through the Hydrogeological Association of Namibia (contact gwi@mweb.com.na).

The **Croatian National Chapter** of IAH has a new President with Ante Pavicic taking over from Ante Sarin, who has given long service to the Association and undertook the work to establish the strong IAH group in Croatia following independence.

IAH President Emilio Custodio visited Uruguay in November to attend the conference of the Geological Surveys of Latin America and the Annual Meeting of ALHSUD.

IAH Secretary General Andrew Skinner was a guest of the **Slovene National Chapter** of IAH and visited

Ljubljana and Bled immediately preceding the Munich Congress. The visit included a presentation to the Ministry of the Environment of Slovenia and the newly formed Slovene Environmental Protection Agency.

Congratulations to Peter Dillon, Research Group Leader, and the Australian Research Group on Aquifer Storage and Recovery (ASR) for the award of the first **Great Man-Made River International Water Prize**. This is a new \$20,000 Prize, funded by the Libyan government, to recognise remarkable scientific research and scientific studies and discoveries in the field of exploration of groundwater and surface water usage in arid zones. For further details see www.iah.org/News/2001/015.html

The **Norwegian Church Aid** have undertaken to sponsor four Afghan water specialists as members of the Association. IAH member David Banks reports on groundwater work in Afghanistan on www.iah.org/News/2001/014.html

IAH awards 2001

Citations for awards presented at the IAH 2001 Annual Meeting

2001 PRESIDENT'S AWARD Dr Leonard F Konikow

Dr. Konikow has made many significant scientific contributions to hydrogeology. He has developed several key hydrogeologic models, and he has made post-audit analyses of hydrogeologic-model predictions. He has taught at the University of Virginia, Stanford University, and the U.S. Geological Survey. His research includes the development of solute-transport models for the evaluation of groundwater contamination; his method-of-characteristics solute-transport model is widely used worldwide. Dr. Konikow has made critical evaluations of model predictions, and this research has generated much interest and opened the eyes of many hydrologists to the limitations and accuracy of models. He has been a Research Hydrologist with the U.S. Geological Survey Water Resources Division in Reston, Virginia for 29 years. He has presented short courses in Europe, participated in United States/Spanish cooperative hydrogeologic research program and worked for the U.S. Agency for International Development on hydrogeologic problems in Morocco and Gaza.

He received a BA from Hofstra University, and an MA and PhD in geology from Penn State University. He has received most of the major American awards in hydrogeology. He has been Chairman of the American Geophysical Union's Ground Water Committee, Board of Directors of National Ground Water Association, and Chairman of the Geological Society of America's Hydrogeology Division. He is currently President of the U.S. National Chapter of IAH.

HONORARY MEMBERSHIP William E. Wilson

Dr. Wilson's exceptional service to the Association occurred in his seven-year role as the first Managing Editor of Hydrogeology Journal (1994-2000). The improvements in appearance and content resulting in a Journal of professional scientific quality are largely a result of his efforts. These efforts include not only Dr. Wilson's ever-patient and careful attention to journal editorial style and technical soundness of articles, but also his great labors to aid authors (irrespective of their native language) in publishing their articles in professional scientific English.

His career spans 42 years of work as a research hydrogeologist, manager, teacher, and consultant. He received a BA cum laude in geology from Harvard College in 1956, and a PhD in geology from the University of Illinois in 1963. He spent most of his professional career with the U.S. Geological Survey (USGS), culminating as the Chief of the USGS Nuclear Hydrology Program. He retired from the USGS in 1990 and thereafter worked for two years as a consultant to Swiss nuclear-waste disposal agencies, before returning to the US to assume his role as Hydrogeology Journal's Managing Editor. Dr. Wilson has published more than 30 research papers and abstracts dealing with the hydrogeology of Nevada, Connecticut, Florida, and California. Dr. Wilson is active in many professional societies: the Geological Society of America, American Institute of Hydrology, American Institute of Professional Geologists and the International Association of Hydrogeologists. He served as Editor for the Hydrogeology Division of GSA from 1987-90 and received their Distinguished Service award.

Transboundary Aquifer Resource Management (TARM)

Report by Shammy Puri, chairman of the IAH TARM Commission

Background to TARM

Although the hydrogeological community had been aware of the complexities of the management of transboundary aquifers since the early 1970s, very little was done to elevate the problem in international circles. In contrast transboundary rivers have received much greater attention leading to several treaties and conventions. No such treaties exist for aquifers. The significant differences between transboundary aquifers and rivers have not been given prominence, resulting in poor appreciation by decision makers of the value of these resources. Some transboundary aquifers hold water resources to provide the drinking water needs of the whole planet for many tens of decades e.g. the Guarani Transboundary aquifer of Latin America. To remedy this gap an IAH Commission on transboundary aquifers was approved by the IAH Council, meeting at the Bratislava Congress in September 1999. From the very beginning the work of the Commission has attracted a considerable interest among scientists and international agencies.

The IAH TARM Commission holds a central position in an international and inter agency initiative This has been termed the ISARM (Internationally shared aquifer resource management) Programme and a Framework Document describing a six year work plan has just been published (UNESCO 2001). A full text of this Document is available on the IAH web site.

After the IAH Bratislava Congress, TARM was discussed at the Tripoli Conference in November 1999, devoted to Regional Aquifer Systems in Arid Zones. The resulting 'Tripoli Statement' urged governments and international agencies to focus on such aquifers. The IAH Commission sought, and received cooperation from UNESCO, FAO and the UN ECE to further promote a multi disciplinary project. Several Expert Group meetings were held and the ISARM Programme was developed. ISARM is now incorporated within the IHP-VI Programme and benefits from the support of the IAH National Committees and the National Committees of the member states of the IHP (149 countries).

The Guarani Consultative meetings

The Guarani Aquifer mentioned above is shared by Brazil, Uruguay, Paraguay and Argentina. Cooperative study of this aquifer system has started and the GEF (Global environmental facility) Programme has recently announced a major investment project. The IAH Commission, working with the national IAH and the IHP Committees sponsored Guarani Consultative meetings, held between the 29th and 31st August 2001.

Under the auspices of the ISARM Programme, thirty one specialists and experts representing five governments, international agencies and academia, took part in three day consultative meetings held in Santa Fe, Argentina.

The consultative meetings were arranged with the objective of raising awareness of the ISARM Programme and to provide an opportunity for the regional experts to update themselves on the developments under the Guarani Aquifer Project, being promoted by the Governments of Argentina, Brazil, Paraguay and Uruguay. A full presentation of the UN's WWAP (World Water Assessment Programme) was also given, which will be based on case studies drawn from all over the world.

Discussions were held on the scope of assessments that are needed for shared aquifers. Presentations were made by representatives of the ISARM Programme on the six year work milestones planned, the progress in its activities in other regions and some case histories that are underway in Africa and Europe.

Governments are urged to respond positively to the resolution of the UNESCO IHP Intergovernmental Council, which inter alia: invited Member States to facilitate regional co-operation and provide their support to this (the ISARM) initiative.

UNESCO's continuing support

After the Guarani Consultative meetings the Deputy Director General of IHP UNESCO, Dr Andras

Szollosy-Nagy, sent the following message to the President of the IHP Committee for Latin America.

"The setting up of a World Wide Inventory of Transboundary Aquifer Systems within the ISARM programme will provide a valuable contribution to implementing the Ministerial Declaration of The Hague (Second World Water Forum, March 2000) that recommended governments and international agencies to give attention to problems related to management of shared water resources.

I believe that the process started in Santa Fe will provide significant scientific results for better understanding of aquifer systems. We will continue to support IHP National Committees in their efforts and we will seek to strengthen our cooperation with regional organizations such as OAS."

The 31st Session of the IHP Bureau, meeting in Paris 19-21st Sept 2001, while overviewing new projects, took note of the ISARM activities and advised the involvement of IHP National Committees in the preparation of a worldwide inventory of transboundary aquifers and welcomed the proposal to prepare thematic maps on regional transboundary aquifers during IHP-VI.

International Conference On Hydrological Challenges In Transboundary Water Resource Management

This meeting was held in Koblenz 25-27 Sept 2001

with participants from 34 countries and UNESCO, WMO, UNECE, UN-World Water Assessment Programme, FAO, International Commission for the Protection of the Rhine, International Commission for the Protection of the Danube River, the Mekong River Commission and the Permanent Joint Technical Commission for Nile Waters were represented. The conference supported IHP-V project 4.1 "International Water Systems". At the end of the conference the participants agreed to summarise their conclusions and recommendations as follows:

The participants called upon the UN system to continue their efforts to effectively facilitate collaboration in transboundary water systems management. The UN-wide World Water Assessment Programme projects and initiatives, e.g. International Shared Aquifer Resources Management (ISARM), HYCOS components and Potential Conflict to Cooperation Potential and the UN worldwide and regional (UN/ECE) conventions were welcomed.

ISARM Framework Document

UNESCO has now produced a framework document summarising the achievements to date and setting out the future challenges of the ISARM/TARM project. The report was launched at the International Conference on Freshwater held in Bonn, Germany from 3-8 December 2001. The full framework document can be downloaded as a pdf file from the IAH web site at: www.iah.org/News/2001/016.html



Participants of the Guarani consultative meetings, Santa Fe, Argentina

Obituaries

Oliver Sililo



Many IAH members, especially those who attended the 30th IAH Congress in Cape Town, will have known Oliver Sililo and will be saddened to learn of his tragic and untimely death in October 2001. Oliver was chief editor of the congress proceedings of the Cape Town congress and this excellent

volume will remain, among many other achievements, a memory of his all too short contribution to groundwater science.

Hansjörg Schmassmann-Erb

Honorary Member of IAH and President of the Commission on Mineral and Thermal Waters (1976–1986)



Hansjörg Schmassmann was born on 27 May 1919 and grew up in Liestal, Switzerland returning there to live and work in 1976.

During the difficult war years, Hansjörg served with the catering corps. At the same time he took a major in Geology and minors in Mineralogy, Zoology and Botany at the University of Basle.

In 1944 Hansjörg Schmassmann was awarded the title of Dr. phil. II. He embarked upon a freelance career by opening a geology firm in his parents' house and subsequently opening branches elsewhere.

In his work Dr. Schmassmann-Erb concentrated on the areas of hydrogeological consulting for groundwater resources development (and numerous local authorities now enjoy a reliable supply of drinking water thanks to his expertise), consulting for the beverage industry in the search for brewing and mineral water, consulting on the problematic disposal of hazardous and nuclear waste and geological consulting for residential and industrial buildings as well as surveys for road and tunnel construction (making him an acknowledged expert).

In addition, Dr Schmassmann-Erb always found time to participate in the activities of specialist associations, commissions and public authorities. He was for instance an honorary member of IAH (elected 1988), Schweizerischer Bund für Naturschutz – Swiss Nature Conservation League (since renamed "pro natura") and Schweizer Heimatschutz – Society for the Preservation of Switzerland. Probably his most prominent position was that of President of the International Commission on Mineral and Thermal Waters, between 1976 and 1986, which enabled him to put his expertise to good use at conferences all over the world and to benefit from the experience of his international colleagues.

In 1995 Dr. Schmassmann-Erb was afflicted by a sudden stroke, resulting in speech and concentration disorders. Nevertheless, he remained active thanks to his positive approach to this 'stroke of fate' and the intensive support provided by his family. Dr Hansjörg Schmassmann-Erb's died on 15 July 2000.

Those of his colleagues who knew Dr Schmassmann-Erb personally will continue to remember him for his humour, unflinching diligence, promptness – and as a very reliable man with an all-round education.

Publication update

IAH Munich Congress Publications

The proceedings of the congress have been published in two volumes with a total of 1350 pages. They address issues of groundwater exploitation, management and protection, modelling of flow and transport and the appropriate use of environmental

and artificial tracers. Scales range from the laboratory to integrated field studies. Microbial processes have been recognised as particularly important for assessing the resilience of groundwater in addition to physical and chemical processes. You may order this volume direct from the IAH page of the Balkema web site (www.balkema.nl)

The Association of Tracer Hydrology (ATH), who organised the 8th International Symposium on Water Tracing in parallel with the Congress, have published a symposium volume *Tracer Studies in the Unsaturated Zone and Groundwater (Investigations 1996-2001)*. For information on availability please contact Joanneum Research, Graz, Austria. E-mail: ihg@joanneum.at

2001 issue of Hidrología Subterránea published

Every year since 1998 IAH has joined with UNESCO and ITGE Spain (the Spanish Geological Survey) to publish an annual journal on groundwater in Spanish and Portuguese. The 2001 issue is now available. Copies of the volume are distributed by UNESCO, Montevideo and ITGE, Madrid

Hydrogeological map of Namibia

In November 2001, after a two-year project led by Willi Struckmeier, IAH Treasurer and Chairman of the


Commission on Hydrogeological Maps, a new hydrogeological map of Namibia has been published. For details contact KirchnerJ@mawrd.gov.na

Groundwater and Society: Resources, Tensions and Opportunities. A UN publication by Jacob Burke and Marcus Moench,

This highly recommended book, subtitled “themes in groundwater management for the 21st century” gives a fascinating account of the principles and practices of groundwater management in the second half of the 20th century. This 170 page, abundantly illustrated volume will be of value to groundwater resource managers responsible for difficult to manage systems and a useful resource for lecturers in water resource management and geography.

Copies may be purchased from the UN bookshop for US \$20 by going to: www.un.org/Pubs. A full review of the book by Peter Dillon of CSIRO, Australia is on the IAH website at www.iah.org/News/2001/017.html

Most of the content of this issue has previously appeared in the September and November issues of IAH Groundwater eNews - if you are not receiving eNews then you are not listed on the IAH e-mail database. You may sign up either by sending an e-mail to cwatson@iah.org or using the signup facility on the IAH home page www.iah.org



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Conference Listing

Summary details of conferences with e-mail or web addresses are given below. For a fuller list of conferences and more details, including hot links to web sites visit www.iah.org/conf/

2002

February 10-14 Las Vegas, Nevada, U.S.A. 15th Annual Symposium on the Application of Geophysics to Environmental and Engineering Problems, (SAGEEP 2002) Web: www.eegs.org

February 20-22, Dindigul, Tamilnadu, India. International Groundwater Conference on sustainable development and management of groundwater resources in semi-arid regions. E-mail: postmast@csngri.ren.nic.in

March 4-7 Bremen, Germany. International Conference on geochemical processes with long-term effects in anthropogenically affected seepage and groundwater. Web: www.geochemie.uni-bremen.de

March 23-27, Kuwait. International Conference on Water Resources Management in Arid Regions. E-mail: mrashed@kisar.edu.kw

March 25-29 Berkley, California, U.S.A. International Groundwater Symposium - Bridging the Gap between Measurements and Modelling in Heterogeneous Media. E-mail: anfindik@bechtel.com

May 12-17, Darwin, Australia. International Conference on Balancing the Groundwater Budget. Organised by IAH Australia - Northern Territory Branch. Web: www1.octa4.net.au/iahnt/conference.htm

June 4-7 Wisla, Poland. IAH Euromeeting 2002 - Workshop on Nitrate in Groundwater in Europe. Web: <http://www.pgi.waw.pl/iah2002.html>

June 17-20 Prague, Czech Republic. ModelCARE 2002: Fourth International Conference on Calibration and Reliability in Groundwater Modelling. Web: www.guarant.cz/ModelCARE2002

September 9-12 Bremerhaven, Germany. International symposium on low-lying coastal areas - Hydrology and integrated coastal zone management. E-mail: strigel@bafg.de

September 15-21 Freiberg, Germany. International Conference on Uranium Mining and Hydrogeology. Web: www.geo.tu-freiberg.de/umh

September 16-20 Durban, South Africa. 9th Congress of IAEG - Engineering Geology for Developing Countries. <http://stanfield.und.ac.za/Durban2002/>

September 22-26, Adelaide, Australia. ISAR4 - 4th International Symposium on Artificial Recharge. Management of Aquifer Recharge for Sustainability. Web: www.groundwater.com.au/conf/ISAR4.htm

October 14-18 Kuala Lumpur, Malaysia. International Conference on Urban Hydrology for the 21st Century. Web: <http://htc.moa.my/htc/icuh2002/icuh2002/html>

October 15-19 Denver, Colorado, U.S.A. International Workshop on Integrated Water Resource Management. Web: www.usbr.gov

October 21-25, Mar del Plata, Argentina. 32nd IAH Congress on Groundwater and Human Development. Web: www.mdp.edu.ar/exactas/geologia/iah2002/iah2002.html

2003

February 3-8 2003 Spain. Symposium on Groundwater Intensive Use (SINEX) Email: gerencia@fcihis.org

April 7-10, Montpellier, France. International Conference on Hydrology in the Mediterranean and Semi-arid Regions. Web: <http://mpl.ird.fr/montpellier2003>



May, Esfahan, Iran. Third international symposium on water resources in karst and hard formations. E-mail: karstsympo2003@yahoo.com

September 15-19, Prague, Czech Republic. Conference on Groundwater in Fractured Rocks. E-mail: krasny@natur.cuni.cz

September 22-26, Ljubljana, Slovenia. Conference on Groundwater in Geological Engineering. E-Mail: andrej.juren@siol.net

2004

August, Florence, Italy. 32nd International Geological Congress. E-mail: 32igc@32igc.org; Web: www.32igc.org

	IAH/ALHSUD Congress Mar del Plata, Argentina	21-25 October 2002	
GROUNDWATER AND HUMAN DEVELOPMENT			
www.mdp.edu.ar/exactas/geologia/iah2002/iah2002.html			