



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

Message from the Secretary General



Andrew Skinner has been Secretary General of IAH since 1989 and will be standing down from the position at the General Assembly in Mexico in October.

The IAH office is now drawing up the report of the activities of our Association in 2003. It is clear that we can regard last year as one of the most successful in our history. Membership numbers are buoyant. Although we did not repeat the strong membership growth of 2002, in the face of falling membership numbers in many scientific societies, we can be pleased that membership of IAH is seen as an attractive option for professionals across the world interested in groundwater. We organised or co-sponsored, through our national chapters, a record

number of professional meetings and we put a substantial and worthwhile effort into the 3rd World Water Forum in Kyoto. We have quite a way to go to get groundwater issues firmly on the world water development agenda, but our partnership with the key UN agencies and other active groups, including our Japanese professional colleagues, gave groundwater a profile that it had never previously enjoyed at any international water conference. Already we are building on that success in many ways, including the preparations for the next Forum in Mexico in 2006.

At many meetings during 2003 the "family" that is IAH was clearly in evidence; old friendships renewed, experiences shared, debates and arguments worked through. And because we are a family we feel it especially hard when we lose colleagues in tragic circumstances. We began 2004 with the accidental death of two National Chapter presidents who have done much for IAH in their own countries and who were both outstanding professionals in their own right - we honour the memory of Matthias Eiswirth and Fernando Peixinho de Cristo on page 2.

There is a lot of work for IAH to do in the coming year and we will miss these outstanding colleagues in our endeavours.

How to contact IAH

PO Box 9, Kenilworth, CV8 1JG, U.K.
Fax: +44 1926 856561
E-mail: iah@iah.org; Web: www.iah.org

To join IAH please visit the web site and either join on-line or download the membership application form

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In Memoriam



Matthias Eiswirth

Matthias Eiswirth, Associate Professor in the Department of Applied Geology at the University of Karlsruhe and president of the IAH German Chapter, died on 30 December 2003, together with his baby son Lennert in a freak avalanche while on holiday in the Swiss Alps with family and friends. He was 39 years old.

Matthias was a popular and highly respected colleague with a growing international reputation. He had a specialist interest in hydrogeology of urban areas, hydrochemistry and contaminant transport. Matthias was an innovative researcher and had developed and successfully concluded many challenging projects. With his enthusiasm and friendliness he inspired both students and colleagues around him.

Matthias was elected President of the German Chapter in September 2001 on the occasion of the 31st IAH Congress in Munich. He organised his last national IAH workshop with the theme "Groundwater problems in urban areas" at his home university Karlsruhe from 31 July to 1 August 2003, which included a field trip to the Karlsruhe outskirts and to the town of Rastatt, to look at some major research subjects of Matthias and his co-operators. Matthias was a key collaborator in the IAH CGUA (Commission on Groundwater in Urban Areas) and was for a time a Vice-Chairman. This Commission will be dedicating its session on Groundwater Management in Urban Areas at the 32nd International Geological Congress in Florence, Italy to his memory. For many of his international friends our last and happy memory of Matthias was his active collaboration in the Bled Conference and the field trip that followed.



Fernando Peixinho de Cristo

The President of the Portuguese Chapter of the International Association of Hydrogeologists (IAH-GP), Fernando Peixinho de Cristo, died in a road traffic accident while on a field visit on the 26 February 2004.

Fernando Peixinho de Cristo was born at Coimbra and was 57 years old. He was a graduate in geology at the Faculty of Sciences and Technology of the University of Coimbra in 1977 and in 1983 he completed the Post-Graduate Certificate at the International Course at the Technical University of Catalonia, Barcelona, Spain.

His professional career was in the public service and water administration where he led work on groundwater management and development, mainly in the aquifer systems of the sedimentary Post-Palaeozoic Basin of Portugal on which he became a recognised expert. He was sometime President of the Regional Administration of the Environment and Management (DRAOTC), which required a great deal of experience to resolve issues of development and the environment.

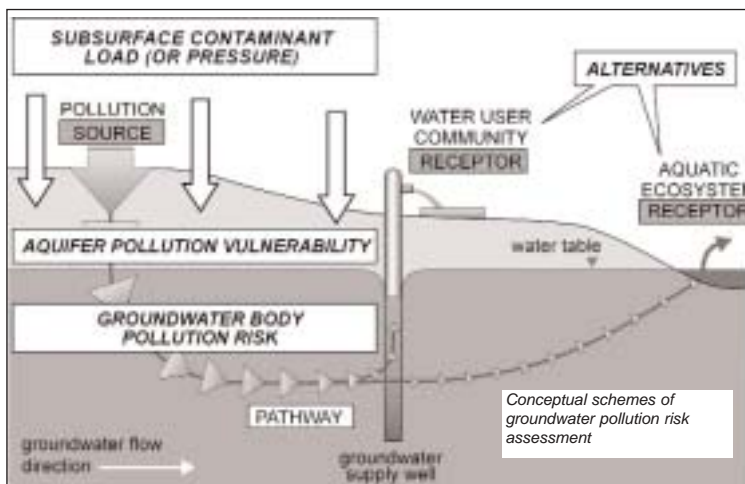
Prof Peixinho de Cristo was also an invited professor at the Universities of Coimbra and Faro and was a member of the Commission of the new Portuguese Water Law, which transposes the European Water Framework Directive into national law.

He was a long time member of IAH and the founding President of the Portuguese National Group. His influence was very important in realising the long held ambition of Portuguese members of IAH to have their own national group and his leadership was critical in its formation. He was highly respected by all those who knew him and his outstanding record of public service was honoured at his funeral.

(Photo: Paulo Cunha)

Update on groundwater management in Europe

The European Water Framework Directive, approved in the year 2000, is now being implemented in European member states. It is driving a higher profile and greater consistency of practice than has ever been achieved by previous European water directives. Although there are substantial new provisions relating to groundwater in the Directive, many issues could not be resolved in the original negotiations, reflecting the wide disparity of views across the Union and the unfamiliarity of many water policy and legal representatives from member states with groundwater issues. Therefore significant issues were left to be resolved in a so-called "daughter directive" on groundwater that would follow the main legislation. A similar approach was adopted on another contentious topic, the management of hazardous chemicals in the water cycle.



Both of these daughter directives are still in negotiation and overdue for adoption. A text of the groundwater daughter directive has now been published. The proposed directive ensures a common approach in the European Union to assessing the chemical status of groundwater and to identifying and reversing upward trends in groundwater pollution. When the proposal was published in September 2003 Margot Wallström, the EU Commissioner for the Environment, said: "Groundwater is a very important natural resource on which we greatly depend and which we must safeguard. The proposed Directive will help us find out more and make sure that our groundwater is not being polluted. It will ensure a high level of protection based on a common approach,

while still leaving a considerable degree of flexibility to the Member States on how to achieve the environmental objectives". The proposal is now going through the European Parliament. It is unlikely that agreement will be reached during the term of the current presidency and it is expected to be agreed during the Dutch presidency period (July-December 2004).

Although the groundwater daughter directive is linked to the Water Framework Directive, there are strong interactions with many other land and water policy initiatives of the EU, some of which give rise to ambiguities yet to be resolved, such as the relationship with the EU Nitrates Directive.

A meeting of the EC groundwater working group was held on 28 January 2004 to update member states and to discuss groundwater risk assessments. Dr Stephen Foster, IAH Vice president for Western Europe, represented IAH. Risk assessment methodologies are widely used in site specific assessments of land contamination and this important topic area has not been well integrated with the Water Framework Directive up to now. However there was not a consistent view on how contaminated land approaches could be integrated with the Framework Directive policy concepts of trend reversal as a means of triggering groundwater protection intervention.

A summary of the presentation given by Stephen Foster and a report of issues discussed at the working group can be found on the IAH web site <http://www.iah.org/News/2004/039.html>

For more information on the groundwater daughter directive see: <http://europa.eu.int/comm/environment/water/water-framework/groundwater.html>

More information on the Water framework Directive in general can be found at: http://europa.eu.int/comm/environment/water/water-framework/index_en.html

News on publications

Great savings are coming your way - discount for IAH members on Springer books

Starting 1 May 2004 Springer-Verlag, publishers of Hydrogeology Journal, are offering members of IAH a 20% discount on all their English-language books. From that date current members will be able to register through the member-only web pages to receive this generous discount. To ensure that only paid-up members can enjoy the benefit the special authorisation code will be changed every 12 months. Full details can be found at: <http://www.global-groundwater.org/OnlineDirectory/login.asp>



A new publication that has a number of IAH contributors and which IAH members can obtain under these discount arrangements is "Water in the Middle East and in North Africa Resources, Protection and Management" edited by Fathi Zereini and Wolfgang Jaeschke, 2004, XVIII, 369 p. 136 illus., Hardcover, ISBN: 3-540-20771-6

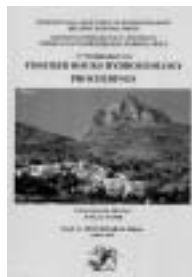
The papers come from the first environmental symposium of the German-Arabic Society for Environmental Studies which took place on 25-26 November, 2002 in Frankfurt am Main. More than 120 scientists from different fields of study from universities and research institutes, representatives from different development organisations together with economists and politicians from the Arab countries and Germany participated in this international symposium. This book presents a comprehensive overview of the current subject "Water in the Middle East and North Africa". Their interdisciplinary articles are the most recent research results on the present water situation in the Middle East and North Africa and their importance for a peaceful co-existence of the population.



Management of Aquifer Recharge and Sustainable Storage

This is the title of a monograph published by the Netherlands National Committee of IAH as the fourth volume in their occasional series of reports on topical conferences. It reports

on a meeting held in December 2002 on the topic of Recharge Enhancement and Subsurface Water Storage sharing experiences from around the world. The publication supported by UNESCO and Dutch advertisers provides an accessible summary of recent developments in managed recharge. Copies can be obtained from UNESCO and from the Netherlands IAH (j.heederik@nitg.tno)



Fissured Rock Hydrogeology

The Hellenic National Group of IAH have published the outcomes of a workshop held on Fissured Rock Hydrogeology in June 2002 under the auspices of the Middle East and Mediterranean working group of the IAH Commission on Hard Rock Hydrogeology. The editor of the proceedings volume is

George Stournaras, Vice President of the Hellenic National Group, who was also the principal organiser of the workshop and who should be contacted regarding availability of the publication stournaras@geol.uoa.gr

Prevention and resolution of water related conflicts

This is the subtitle of an initiative of UNESCO and Green Cross International to address questions of peace and co-operation in water management. Operating under the acronym PC-CP (from potential conflict to co-operation potential) a wide range of publications have been produced on the topic of water security, water law, conflict resolution and education, supplemented by case studies of specific regions and institutions which oversee water sharing. References to groundwater are notable for their almost complete absence but the compilation of over 30 volumes provides a good reference source on the broader issues. The volumes are available in the UNESCO Technical Documents in Hydrology Series or in .pdf format. Details can be found at:

http://webworld.unesco.org/water/wwap/pccp/events/pccp_publications.shtml

National Research Council Reports available on line

The National Research Council of the USA produces many reports of international interest but they have

not been very accessible outside the US. The web site of the Water Science and Technology Board <http://nationalacademies.org/wstb/> now provides on-line ordering and, for developing countries, .pdf format downloads are available free of charge.

Vulnerabilidad de Acuíferos - Conceptos y Métodos is the title of an e-book which can be freely accessed at:

<http://tierra.rediris.es/hidrored/ebvulnerabilidad.html>



It consists of eight sections and is supported by 18 figures, a bibliography and references to data sources in Latin America. It has been produced by Miguel Auge of the University of Buenos Aires and is e-published by Hidrored, part of Rediris (Red Académica y Científica de España en Internet).



Hydrogeology Journal Theme Issue

Every year Hydrogeology Journal leads off with a theme issue. These popular issues are now available for individual sale to members, non-members and libraries. Each issue contains peer reviewed articles and provides a valuable overview of current perspectives on the topic.

Each issue is priced at Euro 25 (US\$ 30 at current exchange rates) including postage. Please order through the IAH office iah@iah.org

Groundwater - From Development to Management

Editor: Karin E Kemper (USA) (2004)

Hydromechanics in Geology and Geotechnics

Editor: Ove Stephansson (Sweden) (2003)

Groundwater Recharge

Editors: Bridget R Scanlon (USA) and Peter G Cook (Australia) (2002)



Balkema Publishers
Netherlands

IAH publishes a book series IAH Hydrogeology Selected Papers in association with Balkema.

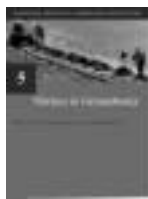
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NEW IAH PUBLICATION

Razowska-Jaworek, Lidia/Andrzej Sadurski (eds): **Nitrates in Groundwater**
2004, 25 cm, 320 pp., ISBN: 90 5809 664 5
IAH Hydrogeology Selected Papers 5
EUR 89.00 / \$ 99.00



Nitrates in Groundwater provides an extensive overview of a wide spectrum of current studies of nitrates in groundwater. This is the first book devoted entirely to discussing the problems associated with risk and behaviour of nitrate in groundwater.

The volume includes 27 papers selected from those presented during the Euro-meeting of the International Association of Hydrogeologists Nitrates in Groundwater in Europe. The meeting, organised by the Polish Geological Institute, was held in Wisla, Poland in 2002. The presentations and discussions in Wisla covered all aspects of nitrate pollution of groundwaters. Although the section describing case studies is limited to groundwater in Europe, the overall scope of the book is not limited to the European situation but deals with a broad range of aspects related to nitrates in groundwater. The remaining chapters treat the main chemical and physical processes which affect nitrate in groundwater as well as describe nitrate distribution in various aquifers across Europe.

Notice of Annual General Meeting

An Annual General Meeting of the International Association of Hydrogeologists will be held on 12 October 2004 in Zacatecas, Mexico.

All members of the Association who have fully paid their subscription for the current year are entitled to attend and participate in the proceedings. Guests are welcome.

Please note that the Annual Report of the Association will be distributed with the August issue of News and Information and will be posted on the IAH web site not later than 1 August 2004.

Andrew Skinner on behalf of the IAH Council
1 May 2004

Congress XXXIII IAH - 7^o ALHSUD

GROUNDWATER FLOW UNDERSTANDING from local to regional scales
Zacatecas City, Mexico. 11 - 15 October, 2004

Keynote Lectures

Past-climatic and environmental records preserved in groundwater: W Mike Edmunds, UK
Groundwater flow system and subsidence mechanisms control: Mexico City: Adrian Ortega, Mexico
Groundwater evaluation in thick aquifer units: theory and practice in Mexico: J Joel Carrillo-Rivera, Mexico
The flow of groundwater information: science into policy at local and regional scale: Andrew Stone, USA
Modern scope of hydrogeology and the history of its evolution: a one man's viewpoint: Joseph Toth, Canada
Overview of groundwater flow in bedrock media: from site to regional scales: Alfonso Rivera, Canada

Full details from: <http://indy2.igeograf.unam.mx/aih/>

International Conference on "Groundwater Vulnerability Assessment and Mapping"

Ustron, Poland, 15 - 18 June 2004

Keynote Lectures

Can Groundwater Vulnerability Change? Brian Adams, UK
Implementing the EU WFD - the Role of Risk and Vulnerability Concepts: Donal Daly, Ireland
Vulnerability Maps in Groundwater Pollution Risk Evaluation & Control: Stephen Foster, UK
Groundwater vulnerability assessment: Jaroslav Vrba, Czech Republic
Polish experience on groundwater vulnerability assessment and mapping: Stanislaw Witczak, Poland
Testing the groundwater vulnerability maps in the field: Alexander Zaporozec, USA
Vulnerability and Risk Mapping for the Protection of Karst Aquifers: Zwahlen and Goldscheider, Switzerland

Full details from: <http://khgi.wnoz.us.edu.pl/vulnerability.htm>

National Chapter News

On 21 November 2003 the **Ecuador Group** of IAH, GEC-AIH, was founded. The inaugural meeting was presided over by Dr. Remigio Galárraga, Professor of the National Polytechnic School and by Emilia Bocanegra Vice-President of IAH for Latin America and the Caribbean.

Congratulations to the **Hellenic National Committee** of IAH who have inaugurated a national web site which can be found at www.iah-hellas.geol.uoa.gr through the initiative of Professor George Stournaras, Vice President of the Committee.

Congratulations to the **Netherlands National Chapter** on their initiative to support the establishment of a national chapter in **Nepal**, initially by sponsoring the IAH membership of Nepalese groundwater colleagues and subsequently by supporting the Nepal NC further in becoming an active Committee.

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Model Calibration Using PEST:
Applied to MODFLOW and Other Numeric Models

Regulatory Model Review:
Approaches and Insights for Reviewing Groundwater Modeling Reports

Aquifer Test Analysis:
Principles of Pumping Test Design and Techniques for Data Analysis

Environmental Risk Assessment:
Soil and Groundwater Clean-up Levels: Practical Approaches to Risk-Based Decision Making at Contaminated Sites

Hydrogeochemical Data Interpretation:
Principles of Network Design, Applied Aqueous Geochemistry, Environmental Data Management, and Data Interpretation

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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 links to web sites visit www.iah.org/confs/

2004

April 7, Sacramento, California, USA. The 10th Symposium in the Groundwater Resources Association series on groundwater contaminants. Web: <http://www.grac.org/dcreg.html>

April 12-13, Lima, Peru. Seminar on Aquifer Vulnerability. Protection of Groundwater Quality. E-mail: fernando.lopez-vera@uam.es

April 14-16, Norway. Workshop on "Groundwater Dynamics and Global Change". Web: <http://inqua.nlh.no/commpl/palgw.htm>

April 15-16, Tampa, Florida, USA. Aquifer Storage Recovery IV. A two day information-exchange forum. Web: <http://www.agwt.org> (click on workshops and conferences).

May 24-27, Monterey, California, U.S.A. Fourth International Conference on Remediation of Chlorinated and Recalcitrant Compounds. Web: www.battelle.org/chlorcon

May 24-28 Neuchâtel, Switzerland. Short Course "Hydrogeology and Management of Karst Groundwater Resources. Web: <http://www.unine.ch/foco/html/MANKARST-2004.html>

May 31-June 3, Cartagena (Murcia), Spain. 18th Salt Water Intrusion Meeting. Web: <http://www.upct.es/swim2004>

June 07-09, Helsinki, Finland. Fennoscandian Regional IAH Working Group on Hardrock Hydrogeology. E-mail: esa.ronka@ymparisto.fi

June 15-18 Sosnowiec, Poland. International conference on groundwater vulnerability assessment and mapping. Web: <http://khgi.wnoz.us.edu.pl/vulnerability.htm>

June 28-30 Stratford-upon-Avon, UK. 4th BGA Geoenvironmental Engineering Conference. Main theme "Integrated Management of Groundwater and Contaminated Land". Web: <http://www.grc.cf.ac.uk/4bga/>

July 19-22, Waterloo, Ontario, Canada. 4th International Conference "Bringing Groundwater Quality Research to the Watershed Scale". INFO: Web: <http://www.science.uwaterloo.ca/earth/conference2004/gwrc/index.htm>

August 3-6, Gaborone, Botswana. Water Resources of Arid and Semi-Arid Regions of Africa. E-mail: waterconference@mopipi.ub.bw; shema@mopipi.ub.bw

August 16-20, Stockholm, Sweden. 2004 Stockholm Water Symposium. Web: <http://www.sivi.org>

August 20-28, Florence, Italy. 32nd International Geological Congress. Web: www.32igc.org Contact for hydrogeology sessions barrocu@crs4.it

September 6-8, Paris, France. International Workshop on the Application of Isotope Techniques in Hydrological and Environmental Studies. Web: <http://geosciences.geol.u-psud.fr/actualit/IWAITHES.HTML>

September 13-16, Karlovy Vary (Carlsbad), Czech Republic. FEM MODFLOW: Finite-Element Models, MODFLOW, AND MORE, 2004. Web: http://www.natur.cuni.cz/fem_modflow/

September 13-15, Portland, Maine, USA. 2004 NGWA/EPA Fractured Rock Conference. Web: www.ngwa.org

September 13-18, Hanoi, Vietnam. Conference on

Development and Conservation of Karst Regions (Trans-KARST 2004). Web: <http://www.vub.ac.be/trans-karst2004>

September 20-22, Tashkent, Uzbekistan. International symposium "Pollution of Fresh Waters in Arid Zone: Estimation and Decrease. E-mail: hydrouz@yahoo.com

September 20-24, Newcastle upon Tyne, United Kingdom. International conference on "MINE WATER 2004 - Process, Policy and Progress"; Web: www.IMWA2004.ncl.ac.uk

October 4-5, Amman, Jordan. Water Resources and Environmental Protection in the Middle East and North Africa. E-mail: zereini@dag-umwelt.de

October 9-12, Rome, Italy. Second Israel-Palestinian-International conference on "Water for Life in the Middle East". Web: <http://www.ipcri.org/water-conference.html>

October 11-15, Zacatecas, Mexico. XXXIII Congress of IAH - Conference on Groundwater Flow Understanding: From Local to Regional Scale. Joint conference IAH/ALHSUD. Web: www.igeograf.unam.mx/aih

October 24-26, Quebec, Canada. 57th Canadian Geotechnical Conference - 5th Joint IAH-CNC-CGS Conference. Web: <http://www.geoquebec2004.org/en/index.php?page=communication.html>

November 9-12, Perth, Western Australia. Engineering Salinity Solutions; 1st National Salinity Engineering Conference 2004. Web: <http://www.congresswest.com.au/salinity2004>

November 21-25, Adelaide, South Australia. International Conference on Water Sensitive Urban Design: Cities as Catchments. Web: <http://www.plevin.com.au/wsud2004/>

2005

May 10-13 Mendoza, Argentina. XX National Water Congress and III Symposium on Water Resources of the Southern Cone. Web: www.congresosdelagua.org

May 18-21, Evora, Portugal. Second Workshop of the Iberian Regional Working Group of the IAH Commission on Hardrock Hydrogeology. E-mail: achambel@uevora.pt

June 6-9, The Hague, The Netherlands. ModelCARE'2005, International Conference on Calibration and Reliability in Groundwater Modelling: From Uncertainty to Decision Making. E-mail: j.gehrels@nitg.tno.nl

June 12-17, Berlin, Germany. ISAR5 - 5th International Symposium on Management of Aquifer Recharge. Web: <http://kompetenz-wasser.de/>

September 14-19, Belgrade, Yugoslavia. International Conference on Environmental (Geoecological) Problems in Karst. E-mail jemcov@ptt.yu

September 21-23, Parma, Italy. Aquifer Vulnerability and Risk 05. 2nd International Workshop - AVR 05. E-mail: intercontact@libero.it

October, Alicante, Spain. IAH Conference "From data gathering and groundwater modelling to integrated management" E-mail: gerencia@fcihs.org

October 5-6, Athens, Greece. 7th Panhellenic Hydrogeological Congress and 2nd Workshop on Fissured Rocks Hydrogeology. E-mail stournaras@geol.uoa.gr