



# 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

## Thai National Chapter successfully hosts its inaugural symposium



The IGC-TH-2009 on “Efficient Groundwater Resources Management - the challenge of quantity and quality for a sustainable future” set a new benchmark for regional groundwater conferences. It was organised by the Thailand Ministry of Natural Resources and Environment - Department of Groundwater Resources (DGR) and co-sponsored by the IAH. The Conference Chairperson, Ms Somkid Buapeng, Director General of DGR, played an active role throughout the full technical and social programme which enlivened the conference atmosphere, and is seen in the photo above enjoying a well-deserved drink at the end of the conference.

The 425 attendees (308 from Thailand and 117 international) all felt warmly welcomed.

The hosts had an eye for detail, style and spectacle - one example being the elaborate opening ceremony which included the launch of a new groundwater film, together with a laser-light display, billowing clouds from dry ice and a multi-handled pump (pictured below) that, when operated by invited participants from around the world, cooperatively watered the globe.



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

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The social programme provided wonderful opportunities for participants to interact, while being immersed in displays of Thailand's rich artistic and culinary culture, with half of the international participants attending one of the 2 post-conference technical excursions. There were 160 presentations, 106 oral and 54 posters in 3 parallel thematic sessions, with 6 plenary keynote addresses including presentations by IAH Past-President, Stephen Foster, and HJ Editor, Cliff Voss.

The Conference provided ample opportunity to hear about advances from around the globe (but emphasising Asia) in a range of fields - including artificial recharge, land subsidence, coastal aquifers, determination of safe yield, and groundwater governance.

This was decidedly a time to celebrate the coming of age of Thailand's Department of Groundwater Resources, which has been transformed from the groundwater development mode to the groundwater management mode. The history of Bangkok's groundwater over-exploitation and highly intractable land subsidence is rather well known - but in Stephen Foster's keynote address and a subsequent talk by Sucharit Koontanakulvong of Chulalongkorn University, Bangkok (pictured above



describing the results of a ground water and land subsidence monitoring project being conducted at the Asian Institute of Technology) it was revealed that this problem has now been brought under control by an integrated package of measures, consistently applied and refined. A recurring theme of the conference was that the toughest problems can be overcome or avoided by good groundwater resources management. The conference was a celebration of success as well as an opportunity to explore other good examples and strategies of effective groundwater management.

Shahbaz Khan of UNESCO hosted a small side meeting at the conference to explore the formation of a network on Managed Aquifer Recharge in conjunction with our IAH Commission. This was a successful meeting with consensus being formed on future directions, and it is intended that more news will emerge at the IAH/IAHS Congress in Hyderabad in September. On the second day of the conference, UNESCO delegates presented 7 papers and a poster among 15 papers accepted for oral presentation in the sub-topic "artificial recharge"/MAR. This is a subject of growing interest and importance in this region.

*Peter Dillon, Stephen Foster, Ken Howard and Cliff Voss*

## Advertising and Copy Information

IAH News and Information is published 3 times a year in 170mm x 240mm page format. It is distributed as an insert in Hydrogeology Journal and reaches all members and associated members of the International Association of Hydrogeologists and subscribing members of the Geological Society of America - totalling over 4,000. Some 45% of the membership is in Europe.

Advertising rates are €600 per full-page advert and €450 per half page. These rates apply for one issue. If you take an advert in two successive issues then the third is offered free of charge. Corporate sponsors and corporate members of IAH are entitled to 50% off the above rates.

Copy must be provided electronically - please contact [knicholson@iah.org](mailto:knicholson@iah.org) for acceptable formats. You will be invoiced for payment in euros or at the equivalent rate in sterling or US dollars when the advertisement is agreed.

Copy dates are 1 March, 1 July and 1 November each year.



## President's Column - The First from our New President The IAH Today



Willi describing maps to his audience

Over the past fifty years the International Association of Hydrogeologists (IAH) has become the largest groundwater organisation worldwide. With about 3800 members in 140 countries it is presently the largest international non-governmental organisation (INGO) specialising in groundwater. Since 2001 IAH is officially registered in the UK as a charitable international company according to British law.

Physically speaking, the IAH Secretariat based in the UK has been at the heart of the Association. It was established and continuously improved by Andrew Skinner and Christine Watson for more than a decade and is now run by our Executive Manager, John Chilton, and his team - Kellie Nicholson and Sharon Warden. This professional crew really keeps the wheels of IAH turning and assures the membership services of the Association. They keep the IAH web site [www.iah.org](http://www.iah.org) up to date (*well...we could do better...ed*) compile the meetings calendar, and issue electronic news as well as the *News and Information* newsletter produced several times a year. They also keep the contacts with the editorial team of *Hydrogeology Journal* (headed by Cliff Voss of the USGS) and supply the sales-editor of the *Hydrogeology Journal* at Springer-Verlag with up to date addresses for the mailing of the journal, now provided to all IAH members eight times per year, as a free publication covered by their membership fees.

A reliable administration is fundamental to the health of the Association, and I am happy that IAH can now afford to operate the Secretariat on a professional basis and in an efficient way. However, we are always interested in your ideas for

improvements, and suggestions from our membership are always welcome. Each member's voice counts and is appreciated, even in our large Association.

All the other official functions of IAH are run entirely on a voluntary basis, by a large number of dedicated professionals who engage in national chapters, commissions or working groups, and in the IAH council. The Council is the highest administrative body of IAH and comprises the Executive (President, Secretary General and the two Vice-Presidents for finance and science) and eight regional vice-presidents, and is answerable to the General Assembly. This forms the highest authority of our Association and generally meets once a year during IAH congresses and includes whichever chairs of the IAH Commissions and National Chapters are able to be there each time, and the IAH members attending the Congress.

Since the Toyama Congress in October 2008, IAH has a new Council and Executive. I am happy to work closely together with Shammy Puri (Secretary General), Antonio Chambel (Vice President - Finance, formerly called Treasurer) and Ken Howard (Vice President - Science and Programme Coordination) for the next four years, and we will all enjoy the continuing help of Stephen Foster as Past President. This group of IAH officers runs the daily business of the Association on behalf of Council.

Within Council, regional and national wisdom is presented by our newly elected or re-elected regional Vice-Presidents (Mohammed Aboufrass for the Middle East and North Africa, Ian Acworth for Australia, New Zealand and Oceania, Segun Adelana for Sub-Saharan Africa, Luis Amore for Latin America and the Caribbean, Lenny Konikow for North America, Didier Pennequin for Europe, Shivendra Nath Rai for South and East Asia and Igor Zektser for Eastern Europe and Central Asia).

While not formally part of Council, the Chairpersons of the 40 or so IAH National Chapters and the Chairpersons or representatives of the eleven IAH Commissions and two networks, Burdon Network and the education and training panel, are invited to the meetings of IAH Council, as well as the editors of *Hydrogeology Journal* (Cliff Voss) and the IAH books (Nick Robins).

*continued over*

At its first meeting in Toyama the new Council discussed priorities for action for our Association during the 2008 - 2012 term. There was unanimous agreement that the commissions, working groups, networks and panels need some face-lifting and restructuring. The need for this was also derived from the membership assessment carried out in 2006/07. Hence, the new Council will open a discussion about the future and encourage new input to and activities of these important bodies of the Association. The Commissions are key to the scientific life of IAH and should not only play their

role as thematic think-tanks for our profession but also focus on scientific outputs, such as publications and thematic symposia.

*Willi Struckmeier*

*In his first President's message, Willi wished to concentrate on the structure of the Association and the relationships of its component parts. Later in the year, now the new Council has settled into its tasks, we will ask him to provide some fuller indications of Council's intentions and aspirations for the 2008-2012 term (ed).*

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## Update on the Time Capsule Project

The Time Capsule Project is proceeding well. Philippe Renard and Craig Simmons report that they continue to make progress despite their own extremely busy schedules, and some very eminent hydrogeologists now appear on the site. A number of new videos are in preparation and ideas are being discussed for 2009.



In addition to Professor Jacob Bear's tape, several new tapes have been released, and a number have been also published as Profiles in *Hydrogeology Journal*. These include:

- C.V. Theis: Full interview by John Bredehoeft
- C.V. Theis: Short edit on his scientific achievements - this is a 15 minute edited version of the full interview
- A conversation between Paul Witherspoon and Alan Freeze
- William B. White and Elizabeth L. White: their contributions to karst hydrogeology - interview by Nico Goldscheider, Priscilla Baker, Wu Yuexia and Chris Groves highlighting the different aspects of the career of W.B. White.
- Yuan Daoxian: An interview with a distinguished hydrogeologist from China - again an interview by Nico Goldscheider, Wu Yuexia and Priscilla Baker allowing better understanding of the development of hydrogeology in China.

In addition, interviews of Jozef Toth by Ben Rostron and Shlomo Neuman by Jesus Carrera, Alberto Guadagnini and Daniel Tartakowsky have been taped during 2008 but are not yet released. Plans for 2009 include interviews of Ghislain de Marsily by Philippe Renard, Irwin Remson by Steve Gorelick and Mary Anderson and Gerard de Josselin de Jong by Ruud Schotting. Schwartz, Freeze, Dagan, Papadopoulos, Pinder and Custodio are amongst a list of names that have been put forward as other possibilities, and Craig and Philippe would welcome suggestions from IAH members as to people who might be interviewed for the project.

While IAH centrally provides continuing financial support to the project, Craig and Philippe are increasing their matching funding and sponsorship, usually for the taping and editing of specific interviews. Thus the Paul Witherspoon conversation was sponsored by the Lawrence Berkeley Laboratory, the interview with William and Elizabeth White by Enviroscan Inc of Lancaster, Pennsylvania, and part of the editing cost of the interview with Yuan Daoxian by the Hoffman Environmental Research Institute, Western Kentucky University. The Spanish Geological Survey, one of IAH's corporate members, has already provided a contribution to the programme for 2009.

The Executive and Secretariat are very happy with progress in 2008 and urges members to take a look at the new interviews at <http://timecapsule.iah.org>.

*Philippe Renard, Craig Simmons and John Chilton*

## More from our National Chapters...

### New Danish Chapter of IAH launched

We are happy to be able to report that Denmark has taken steps to revive their national IAH group. At a meeting on March 9th 2009, fifty-three mostly Danish colleagues working on groundwater research and management got together to discuss the way forward to a formalised IAH National Chapter in Denmark. The process was aptly facilitated by IAH Past President Dr. Stephen Foster. On this occasion, several presentations were given on groundwater challenges in Denmark, the EU, and beyond, especially focusing on agricultural and climate change impacts and EU directives.



Klaus Hinsby speaking at the meeting

After a full day of technical presentations, a short introduction to IAH by Stephen was followed by a discussion to agree on the rationale for collectively joining IAH as a national group. It was strongly felt that both the Danish groundwater society and IAH would mutually benefit from a closer collaboration.

The Danish Chapter will now establish itself, through the initiative of three hydrogeologists from the Geological Survey of Denmark and Greenland: Department Head Richard Thomsen (Department of Groundwater Mapping - contact point for issues on groundwater mapping), Senior Scientist Dr. Karen Villholth (Department of Hydrology - contact point for groundwater issues in developing countries) and, pictured above, Senior Scientist Klaus Hinsby (Department of Hydrology - contact point for issues related to groundwater science and policy in the EU).

*Karen Villholth*

*(We are sure that members will welcome this development. Denmark is a country highly dependent on groundwater and moreover has a long history of hydrogeological research and postgraduate training and has sufficient professionals to sustain a national chapter. The Secretariat pledges its continuing support to our Danish colleagues - ed).*

### New National Chapter for Mongolia

Following several months of preparation, a group of IAH members met at the Mongolian University of Science and Technology (MUST) in Ulanbataar on 16th February to establish the Mongolian Chapter of the Association. Nine members discussed and finalised a constitution for the Mongolian National Chapter and elected a committee, which comprises

Professor N. Jadambaa of the Department of Hydrogeology and Geoecology (Mongolian Academy of Sciences) as Chair, Professor Oyun Demchig of the School of Geology and Petroleum Engineering (MUST) as Secretary/Treasurer, and Mr Sanjdorj (VP Ivanhoe mines) and Mike Lelliott (Aquaterra East Asia) as members.

This initiative owes a considerable debt to Mike Lelliott and his Aquaterra colleagues who are currently working in Mongolia. Mike reports that the new committee are working on a list of seminars and meetings for this year. The committee was planning to meet again within two weeks to further develop their programme. Provisionally they intend to have quarterly meetings to combine working sessions of the committee with seminars and presentations.

*IAH Executive*

### New Committee for US National Chapter

The US National Chapter has a new committee. The incoming Chair is Mike Wireman of the US Environmental Protection Agency (EPA) office in Denver, Colorado, supported by the new Secretary Dave Kreamer of the University of Nevada at Las Vegas, Treasurer Vic Heilweil of the USGS office in Salt Lake City, and committee members Bill Alley, Chief of the Office of Groundwater for USGS, Vicki Kretsinger Grabert of Luhdorff and Scalmanini and Jim Lamoreaux of PE Lamoreaux and Associates. Jack Sharp, as immediate past Chair also remains on the committee.

In his incoming Chair's note for the USNC newsletter (*from which this is drawn*), Mike thanks Jack Sharp for his efforts in developing improved relationships with NGWA and GSA and for seeing the Chapter through the rather tedious administrative task of establishing the USNC as a registered non-profit organisation. This allows it to accept donations, establish endowments and set up student sponsorship funds. Mike also outlines some of the goals for the new term, which include a push to increase membership in the United States, participating in NGWA and GSA meetings, establishing closer relationships with the Mexican and Canadian chapters of IAH, and establishing a website. This last is already in hand, and the Secretariat has been in contact with the USNC to help facilitate this. We wish the new committee well, and look forward to reporting further on future activities in due course.

*Mike Wireman and John Chilton*

*continued over*

(National Chapters...)

### USA - Successful conference on Water Scarcity

The US National Chapter of IAH was a co-sponsor of the International Conference on Water Scarcity, Global Changes and Groundwater Management Responses held at the University of California, Irvine from 1st to 5th December 2008. Mike Wireman of the US National Chapter reports that more than 250 people from at least 55 countries attended the conference whose format included numerous sessions with oral paper presentations and summary plenary sessions with panel discussions, all embracing the five themes of the new UNESCO IHP VII programme:

- Adapting to the impacts of global changes on river basins and aquifer systems;
- Strengthening water governance for sustainability;
- Ecohydrology for sustainability;
- Water and life support systems;
- Communication, education and capacity building.

The most significant discussions were those related to the need for better governance of water resources at all levels and scales, and the need for increased understanding of the impact of global change on the availability of water resources.

A key product of the conference is the "Irvine Action Framework" which is a statement of the key actions that are needed to address the growing and increasingly inter-connected world water-energy-food crisis, emphasising those related to governance, communication and groundwater management responses. This framework will be passed on to UNESCO to contribute to the implementation of IHP VII, and can be seen at the conference website [http://www.waterunifies.com/irvine\\_declaration.html](http://www.waterunifies.com/irvine_declaration.html) or a copy can be obtained from the US National Chapter Chair at [wiremen.mike@epa.gov](mailto:wiremen.mike@epa.gov). The photo (*below*) kindly provided by Professor Han Zaisheng shows himself and new Regional Vice President for Eastern Europe, Professor Igor Zektser, in the front of IAH desk at the conference.

*Mike Wireman*



### 3rd Conference of the Nigerian Association of Hydrogeologists held in Ibadan

The 3rd International Conference of the Nigerian Association of Hydrogeologists (NAH) was held between 23rd and 26th November 2008 at the University of Ibadan Hotels and Conference Centre. The programme commenced with the valedictory council meeting and NEC of the outgoing Council on Sunday 23rd November, attended by all of the 2006-2008 Council members.

Monday 24th November 2009 was used for a Conference Workshop which was facilitated by Professor M.O.Olorunfemi of the Department of Geology, Obafemi Awolowo University, Ile-Ife and Dr. Alan MacDonald of the British Geological Survey/IAH Burdon Groundwater Network. This workshop (attended by 61 participants) focused on developing groundwater from the crystalline basement aquifers and pumping test techniques. The 20th AGM of the Nigerian Association was held on Monday 24th November 2009 culminating in the election of a new set of Council members for session 2008-2010, and this was followed by a welcome cocktail for all the participants on the same evening.

The Conference was officially declared open on Tuesday 25th November. Two special plenary sessions were held with eminent scholars as speakers, followed by six parallel technical sessions covering topics addressing the theme of water and sustainable development. Over 80 Technical Papers were presented at the conference by participants from Nigeria, Cameroun and South Africa. 211 participants registered for the conference including 55 students. The Conference was brought to a befitting close on the 26th November with a dinner and awards night where Fellowship of the Association was awarded to three deserving members.

*Segun Adelana*

### IAH "News and Information" is your newsletter

We welcome articles from everyone involved with IAH, from individual members and corporate supporters through to National Chapters, Commissions and Working Groups. Remember, our key aim is to improve our members' understanding of groundwater issues and support its better management - the newsletter can be an excellent means to support this. Wherever you are in the world we want to know about your plans and achievements!

Email [jchilton@iah.org](mailto:jchilton@iah.org) with forthcoming events, article submissions and ideas.



## IAHS PUBLICATIONS

### **BENCHMARK PAPERS IN HYDROLOGY**

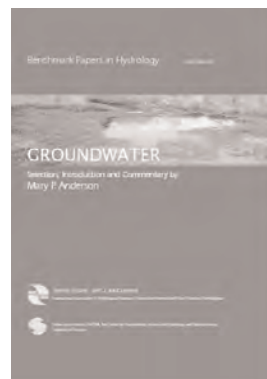
This IAHS Series collects together, by theme, the outstanding papers that provide the scientific foundations for hydrological science today. Each thematic volume reprints ~30 papers selected by an expert, who comments on the significance and context of each one. Originally published across a wide spectrum of disciplines, the papers brought together in each volume define the field and provide an overview of the development of ideas that have led to our current concepts and understanding. The books are excellent resources for graduate and post-graduate level courses, and will be of interest to scientists and engineers generally as they reproduce many seminal papers which are otherwise difficult to access.

### **GROUNDWATER**

#### ***Selection and Commentary by Mary P. Anderson***

Mary Anderson's selection and the commentaries that she has prepared to accompany the 35 reprinted papers, detail the development of groundwater hydrology during the 20th century. The fundamentals are introduced with a translation of Darcy's (1856) experimental results that led to Darcy's law, as well as classic papers by Meinzer, Theis and Hubbert, among others. The development of pumping test theory and practice, approaches to estimating aquifer parameters in the field, and flow system analysis are dealt with. Papers reflecting early concerns regarding quantification of uncertainty, how recognition of groundwater interaction with surface water grew, and early research on contaminant occurrence and transport, are included. Slichter's (1905) seminal contribution that identified dispersion in the field, and Skibitzke & Robinson's (1963) laboratory findings, are linked with more recent attempts to represent dispersion and heterogeneity with models.

ISBN 978-1-901502-74-9 (December 2008) A4 format, hardback, 626 + x pp.  
Price £55.00 (25% discount for IAHS members)



**Selected and reviewed papers from GQ07, the groundwater quality conference held in Fremantle, Australia, in December 2007:**

### **GROUNDWATER QUALITY: SECURING GROUNDWATER QUALITY IN URBAN AND INDUSTRIAL ENVIRONMENTS**

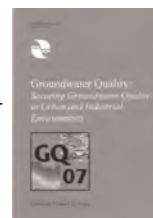
#### ***Edited by Michael G. Trefry***

Our relationship with groundwater is bipolar. Increasingly, we depend on it for our very survival, both in developed and developing nations. However, our urban and industrial activities involve routine and detrimental impacts to the quality of our groundwater reserves. The science of groundwater quality is therefore paramount to underpin successful and sustainable management of this precious resource. GQ07 focused on a range of urban and industrial groundwater quality issues, including:

- major instances of groundwater contamination and consequent human impact,
- emerging chemicals of concern and the ability of the environment to assimilate them,
- new contamination assessment, characterization and remediation techniques,
- data integration and analysis for decision making,
- development of water management policy and controls,
- groundwater quality transformations near receiving environments.

The research papers published here, by scientists and water professionals from around the globe, form a valuable summary of the state of knowledge in these areas. Key topics are arsenic contamination, management of radioactive sites, non-aqueous phase liquids, biogeochemical and isotopic processes, land-use influences, surface water-groundwater interaction, and the regulation and protection of groundwater supplies.

IAHS Publ. 324 (December 2008) ISBN 978-1-901502-79-4  
566 + x pp. Price £90.00



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For more information about other IAHS publications and IAHS activities and membership see our website: [www.iahs.info](http://www.iahs.info)

## IAH Congresses - Latest Information

### Hyderabad

Preparation for the Joint International Convention (JIC) combining the 37th IAH Congress and 8th IAHS Scientific Assembly is progressing on schedule, reports Dr Rai. The JIC will be held during September 6th-12th, 2009. So far, 755 delegates from 73 countries have registered. Many more registrations are expected by 31st May, which is the last date for submission of abstracts for the Joint Workshops (JW1-4). Response to the IAH congress theme is also very good. Contributors to the IAH theme sessions on "Hydrogeology of Hard Rocks" are invited to submit full papers by 31st May, 2009. "Guidelines to the author" are available on the JIC website. Delegates are advised to pay their registration fee before 31st May to avoid the higher late payment registration fee. Members should consult the congress website <http://www.appliedhydrology.org/iahs/> regularly during the next few months for updates, and are urged to consider attending.

### Kracow

The 38th Congress will be held in Kracow, Poland from 12th to 17th September 2010 on the theme of "Groundwater Quality Sustainability". This choice partly reflects the timescale for Water Framework Directive implementation, within which 2010 is the year by which the formulation of programmes of

measures for preventing further deterioration in groundwater quality must be in place. The congress will of course go beyond this specific but important topic, and will also feature sessions intended to help science be more effectively communicated to broader audiences, and a range of the traditional hydrogeological topics to enable IAH members to present their recent work.

The conference will be hosted by the Polish National Chapter and the AGH University of Science and Technology in the excellent facilities of the Jagiellonian University Conference Centre. The historic centre of Kracow is a UNESCO World Heritage site, so an exciting scientific, cultural and social experience is promised. The first circular has just been mailed out to members with the *Hydrogeology Journal*.

### Ireland

An organising committee has been set up within the Irish National Chapter and has begun meeting to work towards holding the 39th Congress in Dublin in 2011. A draft business plan has been prepared and is currently being reviewed by the Secretariat and Executive. Watch this space for further information.

*John Chilton*

## Codification of the Law of Transboundary Aquifers

The United Nations General Assembly adopted the resolution on the law of transboundary aquifers by consensus on Thursday, December 11, 2008. The General Assembly (a) took note of the set of 18 draft articles presented by the UN International Law Commission, (b) encouraged the States concerned to make appropriate bilateral or regional arrangements for the proper management of their transboundary aquifers, taking into account the provisions of these draft articles and (c) decided to include in the provisional agenda of its sixty-sixth session in 2011 an item entitled "The law of transboundary aquifers" with a view to examining whether the draft articles should become a treaty.

The UN International Law Commission embarked on the work of codification of the law of transboundary aquifers in 2002 and appointed me as the Special Rapporteur. Establishment of a legal framework for the proper management of transboundary aquifers is an urgent matter in view of the global water crisis. For the last six years, the Commission and the Special Rapporteur have received valuable support from hydrogeologists and groundwater administrators, including members of the IAH. I am happy to say that the UN General Assembly recognised explicitly the contribution by the IAH in formulating the draft articles. The draft articles set out the principles for reasonable and equitable management of transboundary aquifers on the basis of international cooperation and I am firmly convinced that they will contribute to solve the global water problems.

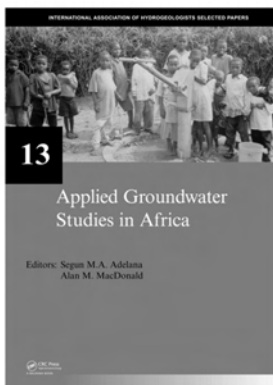
It was indeed a pleasure and a great honour for me to receive "Distinguished Associate Award 2008" from the IAH (see *December News and Information* - ed). I am truly grateful.

*Ambassador Chusei Yamada  
December 2008*

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## Latest IAH Publications - 60% Discount to IAH Members

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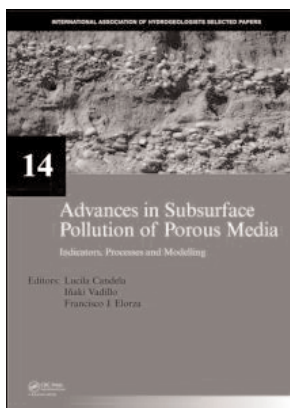


### **Applied Groundwater Studies in Africa** **Segun M.A. Adelana & Alan M. MacDonald**

September 2008: 246x174: 474 pp: HB: ISBN 978-0-415-45273-1:  
IAH-membership price: £24.00

Groundwater is Africa's most precious natural resource, providing reliable water supplies to many people, and the potential to supply many more. However, sustainable groundwater development is not a trivial task. It depends critically on an understanding of hydrogeology and skilled people to make informed decisions on how best to develop and manage groundwater. Scant attention has been paid to the systematic gathering of information on groundwater resources in the past few decades, with the result that data are patchy, knowledge is limited and investment is often poorly targeted.

This book aims to bridge the knowledge gap. The 29 chapters are written both by practitioners and researchers (mainly from within Africa) and are based on experience from recent and ongoing projects. It highlights the variety and complexity of issues surrounding the development and management of groundwater resources across Africa, and provides a snapshot of groundwater research in the early 21st century. The book will inform practitioners within Africa as well as the wider international community working towards better water coverage in Africa and elsewhere.



### **Advances in Subsurface Pollution of Porous Media – Indicators, Processes and Modelling (IAH Selected Papers on Hydrogeology, volume 14)**

**Lucila Candela, Inaki Vadillo & Francisco J. Elorza**

October 2008: 246x174: 240 pp: HB: ISBN 978-0-415-47690-4:  
IAH membership price: £23.60

This book of selected papers will fill the gap of the necessity to develop a high level of knowledge of the processes concerning common and emergent contaminants through their passage from soil to groundwater. It presents new methodologies and indicators to reach a better understanding of biogeochemical processes as a basis for environmental models. The combined use of the understanding of processes and models' prognosis will inform researches and water managers and will provide the possibility for better management and preservation of water resources.

The book will be a valuable reference for graduate students, researchers and professionals in government and public institutions, and for those interested in soil and groundwater contamination in various aspects.

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IAH members can order books at a discount by using the form at <http://www.iah.org/iahbalkema.htm>

The series editor for IAH is Nick Robins [nsro@bgs.ac.uk](mailto:nsro@bgs.ac.uk)

## IAH News

### New Executive Meets in Paris

The new IAH Executive met at the offices of the Division of Water Science of UNESCO in Paris on 6th and 7th February. New president Willi Struckmeier, Secretary-General Shammy Puri, VP Finance and Membership and VP Science and Programme were joined by the Executive Manager John Chilton and VP Western Europe Didier Pennequin. We had a useful meeting with UNESCO staff working on the seventh IHP to explore opportunities for closer linkages with the work of IAH, and also enjoyed a joint dinner with the committee of the French National Chapter who were meeting in Paris over the same weekend.

One of the most important items on the long and rather too ambitious agenda was a discussion about the IAH Commissions. Our Commissions have historically been one of the cornerstones of the Association, and they remain very important to the scientific and technical endeavours of IAH. However, their activities, outputs and ways of working should be reviewed from time to time, and it is clear that not all of the Commissions are currently as productive as they have been or could be. The outcome of the discussion is that a review process to be undertaken during 2009 is being initiated (see separate following article).

Following the decision made by Council in Toyama, the company Worldwide Groundwater Limited has been made dormant to reduce administrative costs in the absence of any immediate prospect of commercial operations for the company, but can be re-activated easily if the need arises.

The draft accounts for 2008 were reviewed. Membership numbers and income held up well in 2008, and costs were down somewhat (with some not accounted until early 2009) with the result that we have probably more or less broken even over the year, and the Association's finances remain healthy. Handling accounts in three fluctuating currencies is a headache at the present time, and we will not know the final position until we see the formal sterling accounts to be submitted by our Accountants, and which will be presented in the normal way in the Annual Report. As requested by Council, in the current uncertain and volatile global financial turmoil, we are keeping our bank holdings under review.

The Executive also resolved to take up the challenge from first meeting of the new Council in Toyama to undertake an overall strategic forward look at all aspects of the activities of IAH. This will include consultation with the membership, commissions and national chapters, so keep an eye on the website and newsletter for further information.

*Secretariat*

### Review of the work and working of the IAH Commissions

The Association's new Council agreed at its first meeting in Toyama that the structure of, arrangements for and work of its scientific Commissions were all in need of serious and detailed evaluation, and this issue was one of the main discussion points at the recent Executive meeting. Following an earlier questionnaire survey of members, the responses were presented and discussed at the Dijon meeting in 2007. Among other points and suggestions that were made at the time were that there should be more encouragement and recognition from Council and that there should be some (even small) level of funding to back this encouragement and appreciation. Links and collaboration with neighbouring sciences and professional associations should be fostered and collaboration with UNESCO IHP should be stronger. Some commissions have been able link their work closely to the UNESCO IHP and obtain funds for activities, meetings and publications that way. Other suggestions included that commissions should have a good, informative and up to date web site, there should be tangible outputs from commission activities, and greater linkage between the commissions, our congresses and the IAH publications. Members suggested there should be more transparent, open and democratic procedures for changing the officers and members of commissions.

The Executive agreed that Ken Howard would be the main point of contact on the Executive and Council for the commissions. He will lead the preparation and management of an information gathering exercise from the current commissions to obtain details of their chairpersons, members, recent and future work, and operating procedures, including the process for changing chair. While there was some discussion in the Executive about how many commissions there should be and whether all subject interest groups necessarily needed to be given the title of commission, or could be networks or working groups, the Executive did not want to pre-empt a broader review. The review of commissions will also at some stage seek to obtain the views of the overall membership, so watch this space and the IAH website for further news.

*Secretariat*

### National Mineral Award Presented to Dr. S.N. Rai

In recognition of his significant contributions in the field of groundwater exploration through predictive models and geophysical studies, the National Mineral Award of the Government of India has been conferred upon Shivendra Nath Rai. Dr Rai is IAH's

Vice President for Asia and Director Grade Scientist at the National Geophysical Research Institute in Hyderabad, and co-chair of the Hyderabad conference in September 2009. The award carries with it one hundred thousand Indian Rupees, a silver trophy and a citation certificate.

Dr Rai has developed a new generation of analytical mathematical models which are capable of predicting the rise or decline of the water table depending on increases and decreases in recharge or pumping rates. He has also made sustained efforts in the field of groundwater exploration. Notable amongst these is locating potential groundwater zones within the Deccan traps and in the Gondwana Supergroup below the traps in Maharashtra State of India.

This is welcome recognition of the importance of groundwater in India, and IAH congratulates Dr Rai on this award.



Dr. Rai (right) receiving the National Mineral Award from Shri Sis Ram Ola (centre), the Honorable Minister of Mines and Shri B.K. Handique, the Honorable Minister of State, Ministry of Mines, Government of India

## Annual General Meeting 2009

Notice is given that the 2009 Annual Meeting of the International Association of Hydrogeologists will be held at the National Geophysical Research Institute, Hyderabad, India on Wednesday 9th September at 16.00 hours. All members of the Association who have fully paid their subscriptions for the current year are entitled to attend and participate in the proceedings. Guests are welcome.

## Forward Look - IAH in 2015 and 2020

**Background:** At the first meeting of our new Council in Toyama, there was discussion of the need for a comprehensive "forward look" for the IAH in 2015 and 2020. Why these two time lines? Simply they would allow us to consider the short time span and a somewhat longer time span.

**IAH as a leader in promoting the sound use of groundwater:** IAH currently and in the future seeks a position in the international science and policy community as a leader in promoting the sound use of groundwater resources, representing the interests and the professional concerns of hydrogeologists. However, IAH is not alone in this endeavour, as there are other professional bodies, such as the IAHS, with interests in the sound use of groundwater. Nevertheless it is true to say that the IAH network alone represents professional hydrogeology internationally. At the country level, the hydrogeological community is also engaged in national organizations such as the UK's Geological Society and the US NGWA, among others. It would be useful to revisit the position that IAH seeks for the future, and also to consider the range of services provided to members.

**What kind of IAH in 2015 and 2020?** Some bullets for consideration, in no particular order of priority:

- IAH Congresses attract the interest of science media and findings are disseminated to a wider audience;
- IAH gains a more prominent profile in international fora such as WWF and WWW, representing a body of recognized scientists, able to help in sound policy development;
- Further development of the optimum mix of publication formats and media for IAH;
- Successful income diversification for IAH is achieved, and the funds generated utilised for improving the outreach of IAH and the services to members, but still allowing our charitable status to be maintained.

**The forward look process:** The Executive at its meeting in February asked Shammy Puri our new Secretary General to initiate and lead this forward look. There will need to be a formal consultation process which will include Council, the Commissions, National Chapters and broad Membership. Initially we would like to gather together informal views by email. Once these have been collected a more formal consultation process based on the initial findings and suggestions will be prepared. Please reply to ShammyPuri@aol.com with a copy to jchilton@iah.org and knicholson@iah.org

*Shammy Puri*



## 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/](http://www.iah.org/confs/)

We are happy to accept information concerning upcoming groundwater events from organisers - email [knicholson@iah.org](mailto:knicholson@iah.org) with full details.

### 2009

- 12 May. Madrid, SPAIN. Conferencia Nacional sobre la Reutilización del Agua. Web: <http://www.adecagua.es/>
- 20-21 May. Norwich, UK. Groundwater Recharge Assessment: are we any closer to an answer? Organised by the Geological Society. Email: [r.cullington@uea.ac.uk](mailto:r.cullington@uea.ac.uk) Web: <http://www.geolsoc.org.uk>
- 8-10 Jun. San Francisco, USA. 6th IWA/GRA Specialized Conference on Assessment and Control of Micropollutants/Hazardous Substances Control in Water. Organised by International Water Association and the Groundwater Resources Association of California. Web: <http://www.grac.org/micropol.asp>
- 8-10 Jun. Panama City, PANAMA. Groundwater for the Americas. Organised by National Groundwater Association. Sponsored by IAH. Web: <http://www.ngwa.org>
- 6-10 Jul. Bogota, COLOMBIA. III Colombian Congress of Hydrogeology. Groundwater: Let's make visible our invisible heritage. Email: [iicch.2009@gmail.com](mailto:iicch.2009@gmail.com)
- 19-26 Jul. Kerrville, USA. Karst Horizons. 15th International Congress of Speleology. Web: <http://www.ics2009.us/>
- 10-14 Aug. Changchun City, CHINA. 2009 International Symposium on Endemic Diseases and Geological Environment. Organised by Center for Hydrogeology and Environmental Geology, CGS (CHEG) and General Station of Geologic Environmental Monitoring of Jilin Province. Dr. Zhang Eryong. Email: [ffs@cgs.gov.cn](mailto:ffs@cgs.gov.cn)
- 24-28 Aug. Santa Rosa, ARGENTINA. VI Congreso Argentino de Hidrogeología y del IV Seminario Hispano-Latinoamericano. Organised by Grupo Argentino de la Asociación Internacional de Hidrogeólogos. Email: [viconahi@gmail.com](mailto:viconahi@gmail.com) or [aih\\_ge@aih-ge.org](mailto:aih_ge@aih-ge.org)
- 7-12 Sep. Hyderabad, INDIA. Sustainable development and management of groundwater resources of hard rock terrains. Joint IAH/IAHS International Convention combining 37th IAH Congress and 8th IAHS Scientific Assembly. Email: [iahs@ensmp.fr](mailto:iahs@ensmp.fr) or [w.struckmeier@bgr.de](mailto:w.struckmeier@bgr.de); Web: <http://www.appliedhydrology.org/iahs/>
- 14-18 Sep. Berlin, GERMANY. 2nd International FEFLOW User Conference (FEFLOW 2009). Email: [feflow2009@dhi-wasy.de](mailto:feflow2009@dhi-wasy.de); Web: <http://feflow2009.dhi-wasy.de>
- 15-18 Sep. cSao Paulo, BRAZIL. 1st International Congress on Subsurface Environment. Organised by Brazilian Groundwater Association. Web: <http://www.abas.org/cimas>
- 20-23 Sep. Wuhan, CHINA. ModelCARE2009: Managing Groundwater and the Environment. 7th International Conference on Calibration and Reliability in Groundwater Modeling. Organised by International Commission for Groundwater (ICGW) of the International Association of Hydrological Sciences (IAHS). Email: [modelcare2009@gmail.com](mailto:modelcare2009@gmail.com); Web: <http://www.modelcare2009.org/>
- 20-25 Sep. Brisbane, AUSTRALIA. Reuse 09. 7th IWA World Congress on Water Reclamation and Reuse. Web: <http://www.reuse09.org/>
- 23-26 Sep. Plitvice Lakes, CROATIA. Sustainability of the Karst Environment - Dinaric Karst and Other Karst Regions. Organised by Centre for Karst. Email: [jadranka.pejnovic@gs.t-com.hr](mailto:jadranka.pejnovic@gs.t-com.hr)
- 18-21 Oct. Portland, USA. From Volcanoes to Vineyards: Living with Dynamic Landscape. GSA Annual Meeting. Web: <http://www.geosociety.org/meetings/2009/>
- 26-31 Oct. Dhaka, BANGLADESH. Geoscience for Global Development. Organised by Association of Geoscientists for International Development (AGID), Bangladesh Geological Society (BGS), Geological Survey of Bangladesh (GSB), International Geoscience Education Organization (IGEO). Email: [afia@agni.com](mailto:afia@agni.com) or [gsb@agni.com](mailto:gsb@agni.com)
- 15-18 Nov. Somerset West, SOUTH AFRICA. Groundwater 2009 Conference. Organised by Geological Society of South Africa. Web: <http://www.kruger-associates.com/groundwaterconference2009/home/default.asp>

### 2010

- 15-17 Mar. Lille, FRANCE. Integrated River Basin Management under the Water Framework Directive (WFD) conference. Web: <http://www.WFDLille2010.org>
- 24-26 Mar. Agadir, MOROCCO. Integrated Water Resources Management and Challenges of the Sustainable Development. Organised by IAH Moroccan Chapter. Email: [lbouchaou@yahoo.fr](mailto:lbouchaou@yahoo.fr); Web: <http://www.fsa.ac.ma/gire3d>