

Furthering the understanding, wise use and protection of groundwater resources throughout the world

WINTER 2010

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IAH CONGRESS, KRAKOW

CONGRESS REPORTS IN WORDS AND PICTURES...



This issue of IAH's News and Information is somewhat dominated by words and pictures from Krakow. We make no apology for this; it was by all accounts one of the best of recent years, and the organisers are to be warmly congratulated for the technical, logistical and social success of our 38th congress. The picture shows a representative of the City Fire Service, temporarily transported from his perch high up on the tower of St Mary's Church in the main square to open the congress by playing the traditional hourly signature call to the North, East, South and West in turn.

NATIONAL CHAPTERS SHARE VIEWS AND CONCERNS

IAH has just over 40 national groups of varying sizes and levels of activity, which have grown up in different ways over time and operate rather independently of each other and of IAH centrally. In the Forward Look questionnaires and at the Reading meeting there were suggestions that IAH's national groups could be given more prominence and could provide improved benefits to members. Specific comments were made that they could be governed in a more uniform and transparent (but not entirely rigid) way, they could communicate more with each other and with IAH centrally, pass on their experiences and learn from each other, and that the IAH Secretariat could provide more support to national groups. It was agreed in Reading that

the first step was to convene a meeting of national chapters at the Krakow congress.

Thus members of the IAH Executive and Secretariat met with 22 colleagues representing 16 national groups during the Krakow congress. IAH President Willi Struckmeier in the chair welcomed the participants to the meeting and provided an introduction based on the background given above. It was clear, he said, that for all component parts of IAH we should consider what things we do well and what could be done better. He reminded us that national committee members are volunteers who give up their time but that we could still improve the way we operate, provide more *(continued over)*

(from previous) and better benefits to members, improve the recruitment and retention of members, improve reporting, and share good ideas from one chapter to another. He invited participants to report on their activities and comment especially on issues related to the above.

The Chapters present highlighted some of their own views and concerns. Many hold highly successful national meetings and field visits. Some, including Ireland, Canada and Australia have good experience in attracting younger professionals as members, others less so. Chapters have varying views and intentions with regard to the value of recruiting students, but agreed it was something for which IAH should develop an overall strategy. Chapters were also concerned about the need to improve efforts to retain existing members and to try to find out why members do not renew and what could be done to change this. Overall, in recent years the Association has gained and lost about 350-450 members each year, ie we have a turnover of some 10-12% and retaining a good proportion of these would greatly enhance our membership total. Several chapters also felt we could do more to attract membership from the private sector.

Several of our chapters are in countries where groundwater professionals have more than one association providing choice

of membership. The US, German and British chapters mentioned this situation which provides both competition for membership and potential for collaboration for meetings and events. Many chapters reported that they join with other national groups to organise meetings and field trips, and would also like to have better cooperation and joint activities with chapters in neighbouring countries. Other useful suggestions were for better communication with the IAH Secretariat, improved links between the main IAH website and national websites, better communication and advertising of educational and job opportunities, featuring specific national chapters in the IAH newsletter, and for more sponsoring and possibly twinning between established chapters and new chapters.

Overall, all present agreed this was a very useful initiative and should become a regular part of our congress programme. The full report of the meeting will be placed on the website and distributed to all Chapters. The Secretariat will develop a questionnaire for National Chapters to obtain basic information about each chapter and the way it operates, its own ideas of what works well and what doesn't and its views about the future development of the Association and the part that Chapters should play in this.

SECRETARIAT

IAH BOOK NEWS

LATEST BOOK RELEASE

Selected Papers 16: Groundwater Response to Changing Climate

Makoto Taniguchi, Ian P. Holman, ISBN 9780415544931

This book provides an up-to-date description of the relationship between groundwater behaviour and ancient, historical, current and future climates for a range of diverse aquifer systems around the world. Groundwater systems are vital to both society and the environment, supporting food production and many other ecosystem services. Sustainable management of this vital resource for future generations requires a sound understanding of how groundwater might respond to the inevitable changes in future climate. In this volume, recent developments within the interlinked areas of the response of groundwater systems to climate variability and climate change are highlighted, using contemporary field investigations and monitoring of aquifers, numerical simulations of aquifer response to climate change predictions and paleohydrogeological studies of ancient groundwater systems.



BACK CATALOGUE PROJECT

The project to make the IAH book back catalogue available which was mentioned in the May 2010 newsletter has moved on. The books have been scanned and we are currently working out the most effective way of archiving them and making them accessible. This has been put on temporary hold as (responding to the Forward Look findings) we are also planning some broader developments to the IAH website. Watch out for further news in the New Year.

For more information on IAH Publications go to

www.iah.org/publications_books_sp.asp

A BUSY TIME FOR MAR COMMISSION

Managing Aquifer Recharge - Latest News

IAH's MAR Commission has had a busy autumn. Firstly we held a side event supported by UNESCO at Stockholm International Water Week. This provided strong support to the 3Rs workshop (Recharge, Recycle, Reuse) convened by Dutch and German partners who are actively promoting MAR as a management strategy to buffer water storage and secure supplies. The purpose was to explore how MAR can better meet the objectives of development banks in addressing water security needs and the millennium development goal for drinking water. The lessons have been posted on the IAH-MAR web site at www.iah.org/recharge.

Secondly, twenty seven folk attended the IAH-MAR Plenary at the Krakow IAH Congress. Progress has been made against a number of the issues around which working groups had formed, but more is needed and several new initiatives were proposed. Notes of the meeting are on the Commission website.

Finally, on 9 October in Abu Dhabi UNESCO and IAH ran a workshop for MAR-NET, our UNESCO-supported network for MAR in drinking water supplies. This was attended by 26 people from a wide variety of countries. Salvatore D'Angelo, Albert Tuinhof, Ian Gale, Weiping Wang, DK Chadha and Peter Dillon made presentations and an extensive discussion ensued, focussed on how to address the gaps revealed at Stockholm. Notes are in production for the website.

This was one of three concurrent workshops leading into ISMAR7 attended by 320 people from more than 30 countries. 80 oral papers and 88 poster papers were presented and the conference included an Arabian desert dinner and a trip to the US\$0.5B water security project (as seen on the right) to recharge 25 Mm³ near Liwa as an emergency supply. Such a volume of water could only be economically stored and recovered by recharging an aquifer.

Another plenary was held, attended by about 53 people and the issues canvassed in Krakow and the workshop resurfaced and some very constructive ideas came forward. These included consolidating

information on the economics of MAR which Albert Tuinhof will lead and links with a 3R activity. Several other initiatives will be further distilled, including assembling information on clogging in MAR operations, and ways of accessing information on other topics in MAR, including ISMAR papers. ISMAR8 was announced and is to be held in Beijing on 15-19 October 2013. Please note in conference diaries.

Finally three men with distinguished careers in advancing the science and practice of MAR were acknowledged with certificates of appreciation from IAH. Peter Stuyfzand (NL) has made a huge contribution to the science of MAR, notably in geochemistry and water quality evaluation and interpretation and shared this freely at all ISMAR meetings since the first in 1988. David Pyne (USA) produced two editions of the bible on ASR, has championed the technology internationally and has freely imparted his knowledge of the science and engineering of ASR at many training programmes over a sustained period. Finally Ian Gale (UK) the Co-Chair of IAH-MAR was recognised for his wise counsel and contribution to the leadership of the Commission, through a widely-cited UNESCO document on strategies for MAR, contributions to workshops and projects and via the management of the website.

PETER DILLON

[Visit \[www.iah.org/recharge\]\(http://www.iah.org/recharge\) for more information.](http://www.iah.org/recharge)



Report by Stanislaw Witczak, Greg Malina and John Chilton

IAH 38TH CONGRESS

Over 500 hydrogeologists gather in Krakow



At a glance - congress facts

The highly successful 38th IAH Congress took place at the Auditorium Maximum of the Jagiellonian University Conference Centre in Krakow, Poland.

The programme included:

190 oral presentations

115 posters

Meetings of Council, National Chapters, Commissions, Young Hydrogeologists and the General Assembly

Rich and varied social activities

A round table discussion

There were 520 participants from 70 countries. The total included 190 from within Poland and other well-represented countries were Germany (37), Australia (22), Spain (22), France (21) and the UK (18)

The 38th international congress of IAH in Krakow, Poland was, by general acclaim, a great success in all respects.

Within the overall congress theme of “Groundwater Quality Sustainability”, the rich and varied technical programme of the Congress offered 190 oral presentations in plenary sessions with invited speakers and in parallel sessions and 115 posters. Abstracts were made available on registration in a two-volume Abstract Book, with extended abstracts on a CD. Selected congress papers were published in a Special Issue of the Bulletin of the Polish Geological Institute and a special congress edition of the Polish Geological Review provided some excellent background for participants on the hydrogeology of Poland. It is intended that further papers will be published in the IAH – SP Series.

The congress programme also provided for meetings of the Council and the General Assembly of the Association and for the IAH Commissions on Managing Aquifer Recharge, Urban Groundwater, Hydrogeology of Hard Rocks, Climate and Groundwater Change, Coastal Aquifer Dynamics, Thermal and Mineral Waters and Groundwater Protection. Innovations for 2010 included a very well-received pre-congress extended lecture presentation by Art Becker of NGWA on “Drilling Technologies for Groundwater Extraction”, and meetings for young scientists and national chapters. These latter two are reported elsewhere in this newsletter, and are likely to become regular features of IAH congresses.



The excellent social programme included a welcome cocktail party and an evening concert in the magnificent St Mary's Church in the main square of the city. The congress dinner comprised a fine classical concert and buffet supper in the elegant Slowacki Theatre which was opened in 1893. The mid-congress visit by so many people to the fascinating salt mine at Wieliczka required several buses and the careful division of participants into smaller groups to enable the guides to manage such a number. The post-congress trip to the Tatra Mountains was also greatly appreciated by those who went.

At a round table discussion on the final day, congress participants agreed that global deterioration in water quality and land degradation, and the consequent impacts on human health and on human and environmental security should be a worldwide concern and will require increased global efforts to assess the current situation and identify appropriate measures. During the discussions, a

draft Krakow Declaration on groundwater quality was presented, has been further discussed and will appear before the end of 2010 on the IAH website as a lasting product from the IAH Congress in Krakow. Congress participants thoroughly enjoyed their time in the ancient capital of Poland, which is still considered by many Poles to be the cultural capital of the nation. Moreover, the organisers' claim that the historical centre of the city has the greatest density of restaurants and bars of any European city was thoroughly tested during the week.

From the reactions of delegates during the congress and afterwards, it can indeed be concluded that the IAH2010 Congress in Krakow was very successful. Our hosts on the the organising committee, the Polish National Chapter of IAH, the AGH University of Science and Technology and all their other helpers and supporters are thanked for their hard work before and during the congress and can be congratulated on an excellent all round performance.

[See the full photo gallery on www.iah2010.org](http://www.iah2010.org)

YOUNG/EARLY CAREER MEETING

Discussions in Krakow as to how IAH can better support young hydrogeologists



Photo kindly provided by Anicetas Stuopsis

A meeting of young/early career hydrogeologists, nominally (but not very strictly) those less than 35 years old, was held on the Tuesday of the IAH Congress in Krakow. The meeting was convened by Mark Cuthbert (University of Birmingham, UK) with support from Kate Thatcher (UK), Sophie Vermooten (Netherlands) and Anna Kuczynska (Poland) and from not-so-young John Chilton (UK). Following the example of IAHS in Hyderabad, the meeting aimed to provide an opportunity for interaction between young/early career hydrogeologists and a forum to discuss:

- how IAH could work better to involve and support those in their early careers, and
- how to make IAH more attractive to young/early career hydrogeologists.

We were really pleased that more than fifty participants from four continents attended the meeting. Less than half were IAH members and most were from academia, with a minority from industry and government departments.

After initial introductions, a series of small group discussions followed on the themes of conference participation, membership, involvement in IAH and ways forward. The feedback was very positive, with many participants remarking that the meeting provided a useful forum to meet and exchange ideas with other young/early career hydrogeologists. It is clear that younger hydrogeologists would like more support from IAH and more opportunities to become involved in IAH activities.

A brief summary of the meeting was provided to the IAH AGM the following day. An informal working group has been established to discuss the issues arising from the meeting. Draft

recommendations are as follows:

1. National chapters to always have a young hydrogeologist on their committee;
2. An annual prize for the best young scientist paper published in Hydrogeology Journal;
3. Improve the IAH website, e-community and information sharing e.g. posting of international jobs and voluntary work experience placements, and a discussion forum;
4. Actively seek younger members for every IAH Working Group and Commission;
5. A young hydrogeologist on every Congress organizing committee with a specific remit to help make the Congress work as well as possible for younger participants;
6. Collate best practice from national chapters about activities they have found stimulating/successful for younger members, with a view to other chapters trying similar initiatives;
7. Encourage more senior members to take an active interest in developing the skills and careers of younger people through informal 'mentoring'. Consider a formal mentoring scheme within IAH to enable younger members to learn from more senior members with regard to career development;
8. Improve communication to younger members regarding the benefits to members and opportunities to get involved;
9. If there is a clear remit, consider the formation of a formal IAH young/early career working group linked to the re-structuring of the IAH Commissions.

The meeting ended with a chance to socialise over drinks for which we were also joined by a few members of IAH Council. Thanks to the IAH Secretariat, Council and Congress organisers for supporting the event. Keep an eye on the website and newsletter for future developments.

MARK CUTHBERT

[...at about the same time we have received a suggestion from a recently-retired IAH member that we should harness some of our collective experience in a mentoring scheme. In the follow-up from this highly successful meeting we need to look at how this might be achieved....]

JOHN CHILTON

KRAKOW PRIZES AND AWARDS

IAH AWARDS



As is the normal custom, the IAH annual awards were announced at the Krakow General Assembly. The President's Award is given in recognition of outstanding international contributions to groundwater science and to furthering the Association's mission to promote understanding and management of groundwater resources in the interest of humankind and the environment. Willi Struckmeier announced that the 2010 award goes to Professor Ghislain de Marsily, who meets both criteria and has moreover made outstanding achievements in communicating hydrogeological science.

Within his scientific career, Dr Marsily covered a wide range of research fields, including basin analysis, fluid mechanics, solute transport, waste disposal, surface hydrology as well as hydrogeology and water resources management. His books on quantitative hydrogeology, fluid transport and geostatistics qualify Ghislain as a first class scientist and engineer and ground-breaking modeller in hydrogeology. He has always been willing to make practical use of his expertise, and his advice is greatly appreciated by expert groups in the French ministries of the environment, research and agriculture. Unfortunately Professor Marsily could not attend the congress, and will be presented with the award at the ISARM meeting in Paris in December.

The General Assembly approved the award of Honorary Membership to Professor Stephen Foster. Stephen really needs no introduction to IAH members, having been Vice President for Western Europe from 2000 to 2004 and President of the Association from 2004 to 2008. He spent most of his working career in and then leading the Groundwater Programme of the British Geological Survey and as Divisional Director for

Groundwater and Geotechnical Surveys from 1990 to 1999. Since leaving the Survey, Stephen has been the leader of the World Bank's Groundwater Management Team. The presentation was made by Willi Struckmeier, as shown in the photo, left. The full citations for both awards will be placed on the IAH website in due course.

Willi then explained that the IAH Distinguished Associate Award would not be given for 2010 as, after considerable discussion, no suitable candidate had been identified who, despite not being a groundwater professional, had made an outstanding contribution to the understanding, development, management and protection of groundwater resources internationally. Consideration of the award will be given again in 2011.

POSTER PRIZE FOR YOUNG SCIENTISTS

In keeping with our desire to encourage much greater involvement of young professionals in our congresses, a poster prize for young scientists was instituted in Krakow. A small but expert team of judges independently assessed the more than thirty eligible posters from which two were selected. Prizes of a small plaque and a book were presented to Marcus Soares (Marcus B. Soares, Gunter Gunkel and Thomas Grishek: Comparison of common and new methods to determine infiltration rates in lake sediments) and to Dmytro Sergejev (Dmytro Sergejev, Zhiqing Wang, Angela Lundberg, Andreas Winderlund and Bjorn Ohlander: Hydropower regulation impact on river-groundwater interaction and the riparian zone - a geochemical approach). The picture below shows Dmytro being presented with his award by President Willi Struckmeier during the concert at the Slowacki Theatre.



PRESIDENT'S PAGE

There is no doubt that the Reading Forward Look meeting was a milestone for the future of IAH and its strategy towards 2020.



WILLI STRUCKMEIER

IAH - 2010 AND BEYOND

The year 2010 is ending soon, giving me an appropriate moment to summarise the latest achievements of our Association and to look ahead to the new challenges of 2011 and beyond.

First and foremost, we enjoyed a very good congress in Krakow, as extensively reported in this newsletter. I join the many IAH colleagues in congratulating the organisers, in particular Stanislaw Witczak and Greg Malina and their team for one of the best IAH congresses ever held. They did an excellent job; it all looked so perfect but at the same time easy going, a really memorable event. Many thanks!

During the congress we tested a number of new ideas originating from the Forward Look discussions in Reading. In addition to the usual IAH Council Meeting, we convened a meeting of officers of National Chapters and a Young Scientists' meeting. Both were well attended, and are reported separately. Importantly, both meetings produced a wealth of useful suggestions, many of which will be added to the list of actions agreed in the Forward Look review.

There is no doubt that the Reading Forward Look meeting was a milestone for the future of IAH and its strategy towards 2020. This meeting, carefully designed and moderated by Shammy Puri and nicely prepared by the Executive Manager John Chilton and the IAH Secretariat, in particular Kellie Nicholson, resulted in a number of actions to be taken very soon in 2011. These include the reforming the IAH Commissions and Working Groups (a process led by Ken Howard that was finally approved by Council in Krakow), improving the website and the services it provides, maintaining and increasing membership, and embarking on a new assessment of groundwater resources worldwide using the wisdom and experience of IAH members, Council, National Chapters and Commissions.

This IAH project called "Facts and Figures" is designed as an immediate action to get a better grasp of current information about quantitative data for the main aquifers in the world including their groundwater reserves in storage. Until now, the only facts and figures about global groundwater resources originate from the Russian school under the leadership of Igor Shiklomanov and his team, who calculated the world's fresh groundwater resources in the 1960s and 1970s. Since then, many detailed hydrogeological studies and groundwater models have been conducted in large aquifer systems in the world, but their results have never been collected and summarised to provide a more recent and more precise figure for the global volume of fresh groundwater. IAH Executive and Council believe it is time to determine the total volume of fresh groundwater or at least come up with

a new estimation. We are convinced the most relevant and up-to-date information lies within the IAH membership, and think we should make a particular effort to use it to underpin IAH's role as the leading international groundwater NGO by providing sound information about groundwater and aquifers. We hope to be able to produce good and relevant information soon, and will be seeking the participation of all the components of IAH mentioned above.

Although there will be no IAH Congress in 2011, we are invited by our South African colleagues to attend an interesting symposium in Pretoria entitled "Groundwater: our source of security in an uncertain future". The aspect of groundwater providing security (eg of life and ecosystems, water supply, wealth, food and health) should attract a great number of IAH members to Pretoria, and you are encouraged to submit an abstract.

Next year IAH and its officers will also be preparing for the key year 2012, the year of the fifth World Water Forum and the fourth World Water Development Report. Clearly 2011 will be another busy year for IAH and its officers!

For now, I wish you a happy Christmas and a peaceful 2011 with good health, success and wellbeing.

IAH MEMBERSHIP NEWS

MEMBERSHIP DRIVE - FIND A FRIEND!

One of our continuing objectives is to build up the membership of IAH. More members means more resources, better services and a stronger collective voice for groundwater in both national and international arenas.

For several years our total membership has stood at around 3800. We have been unable to break through the 4000 barrier, and in 2010 have even lost ground a little compared to 2009. Each year we gain several hundred new members but lose roughly the same number, meaning that we have an annual turnover of about 10-12%. We need to reduce these losses and make more effort to find out the reasons why members do not renew, and we will try to do this in 2011.

As one way of tackling this we would like to start a campaign for existing members to persuade those who are not members to join. In the universities, government departments and companies where you work, there must be colleagues along the corridor or in the building who are working in groundwater who are not members but who could be or should be, or maybe have been in the past. We would like you to talk to them at coffee time, explain the technical and social benefits of membership of such a world-wide professional organisation and show them how to join. If we could each find-a-friend or two in this way, we could soon pass the 4000 mark and continue growing beyond that.

Please try! Let's see what we can do.

2011 FEES

Following the decision not to raise the fee levels for 2010, Council decided in Krakow that a small increase would be needed for 2011. While the Association's financial position remains sound, and many of the conditions of a year ago still apply, two things have changed. Firstly, with the beginnings of economic recovery price inflation in the UK (where many of our costs are incurred) is likely to rise again, possibly to around 5% per year. Secondly, we are likely to see modest planned increases in expenditure to initiate some of the recommendations and activities arising from IAH's Forward Look. However, these are expected to lead in turn to improved benefits to members from the website, support for national chapters, congress organisation and many others. Most fee band rates will, therefore, rise by two or three euros for 2011 and 2012, representing an equivalent annual increase of 2-3%. We hope you will see this as a modest but needed adjustment more than compensated for by improved benefits, and will continue to see IAH membership as excellent value for money, and renew your subscription in the normal way!

UPDATE ON REFORM OF THE IAH COMMISSIONS

At its meeting in Krakow, Council received and approved the report from Vice President for Scientific Programme Coordination Ken Howard on the reform of the IAH Commissions. Council accepted the report's recommendations in full. In the future there will be provision for four categories of groups – commissions, networks, working groups and panels – each with slightly different objectives, activities, outputs, obligations and ways of working. The details of these are set out in Ken's report which is available on the main IAH website at <http://www.iah.org/downloads/commsrev.pdf>

To enable this to happen, Council passed a resolution that all existing Commissions will be dissolved on 30 June 2011 and new commissions, networks, working groups or panels established from 1 July 2011, ie the following day. A formal "call for proposals for commissions

and networks" will be issued by the end of November 2010. This will enable existing commissions to re-establish themselves should they wish to do so, either as commissions or as one of the other categories of groups, and will also encourage applications for new groups and subject areas. A process for reviewing the applications will be established, and the intention is that the process will be completed in the first quarter of 2011.

This is an opportunity for IAH members, including those who have felt our commissions to be a slightly closed world to become involved. Interested IAH members are advised to contact the chairs of the existing commissions whose contact details are given on the Commissions page of the IAH website and to look out for the formal call and application form if they have ideas for new groups.

KEN HOWARD AND JOHN CHILTON

SISTER ASSOCIATIONS JOIN FORCES AT STOCKHOLM WATER WEEK

As part of the continuing efforts of IAH and IAHS to work more closely together and pool our resources, a joint stand was taken at this year's Stockholm Water Week in September. Recent examples from the book catalogues of both associations were displayed and sold, and membership information and publicity for future conferences was laid out for the large numbers of passing delegates. Our thanks go to Cate Gardner of the IAHS Press who set up and occupied the stand during the week. We will be looking for further opportunities to collaborate in this way to reach new audiences beyond our own membership.



IAH FORWARD LOOK

Update on progress and next steps

The Forward Look meeting in Reading was extensively reported in the August newsletter. The purpose of the meeting was to develop and flesh out the skeleton ideas of the Forward Look, including those which arose from the questionnaire responses. The two and a half days of intensive discussions on five aspects of the Association's future produced short reports and notes in a standardised format, setting out strengths, weaknesses, constraints and opportunities that the future IAH would be concerned with. After the meeting these were drawn together into a substantial draft meeting report which summarises the discussions and sets out some of the actions that IAH will need to take over the next ten years.

The draft report was presented to Council in Krakow for discussion and further comment and a brief presentation was made to the IAH General Assembly. At the time of writing this contribution to the Newsletter, comments on the draft Report have been received from participants at the meeting and from those who completed the questionnaire. These will be taken account of in finalising the meeting report during November, which will then be submitted to Council for approval and made available to members via the IAH website. The report includes an extensive, structured list of actions, identifying those for the immediate short-term, those for the next two to five years and those for the longer term over the Forward Look's ten year time scale. Council approval will be sought to proceed with this strategy and to develop its components further.

The Forward Look recommendations and actions will then be implemented. For some activities, their feasibility needs to be investigated and the human and financial resources that would be required need to be

further defined. Some urgent and essential activities on which a clear consensus was reached or already existed, such as making significant improvements to the IAH web site and strengthening the organisation and management of IAH Congresses are underway. Other activities, such as strengthening the communication with and between National Chapters and developing the position of young scientists within the Association have been initiated with successful meetings in Krakow which are reported elsewhere in this newsletter. Actions for the coming year also include the preparation of a Facts and Figures document (more information on this is given in Willi Struckmeier's President's article on page 8), and support for the implementation of the UN Law on the use of transboundary aquifers.

Other activities will be scheduled to commence and be implemented in the medium term (2 to 5 years) and over a longer (5 to 10 years) timescale. These will include the ambition to reach a membership of 5000 professionals engaged in all aspects of hydrogeology and sister disciplines, widely available and accessible educational and awareness raising materials and involvement of the Association with global institutions concerned with sound use of groundwater resources for ensuring sustainable global human-natural environments.

Many of these activities can only be achieved by the combined action and energy of our members and at various times we are likely to be seeking inputs and contributions. Please be prepared to support these initiatives, many of which are primarily aimed at improving the benefits that IAH members will enjoy in the future.

SHAMMY PURI AND JOHN CHILTON

LOCAL AWARD FOR IAH PAST PRESIDENT

We are delighted to report that Past President Emilio Custodio has been made a "Distinguished Visitor" of the historical municipality of Cusco in Peru on the occasion of his presence there as a principal invited presenter at the 15th Geological Congress of Peru on 1st October 2010. During his visit, Emilio also held talks with IAH colleagues in Peru with a view to re-invigorating the National Chapter which has not been active in recent years.

United States

International Conference held in San Francisco

“Toward Sustainable Groundwater in Agriculture – An International Conference Linking Science and Policy” was the title of an international conference held in Burlingame/ San Francisco in June. The conference was organised by the University of California, Davis and the Water Education Foundation with help from the Groundwater Resources Association. The meeting brought together leading scientists, policy analysts, policy and decision makers, and agricultural and environmental stakeholder groups to define and highlight the science, challenges, and potential policy solutions in agricultural groundwater resources management and agricultural groundwater quality protection that will provide a sustainable future at regional, national, and global scales. The US National Chapter of IAH was a key co-sponsor of this conference.

Groundwater is the lifeline for many rural and agricultural regions and their associated cultures and populations around the globe and a cornerstone of global food production. Groundwater constitutes nearly half the world’s drinking water and much of the world’s irrigation water supply. Population growth, overexploitation, salinization, nonpoint source pollution from agricultural activities (including animal farming, ranching, and forestry activities), impacts to surface water from groundwater depletion and degradation, and groundwater quality and quantity conflicts at the urban-rural interface have reached global dimensions and threaten the health and livelihood of this planet.

This international conference attempted to bridge the multiple disciplinary and geographic divides around groundwater in agricultural regions: between groundwater resources management and groundwater quality protection; between groundwater scientists working in agricultural regions, groundwater managers, and policy and decision makers governing agricultural groundwater basins; in the Southwestern, Central, and Eastern U.S., in northern, central, or southern Europe, in the Mediterranean, the Middle East, Africa, Asia (China, India, Pakistan foremost), Australia, and South America.

THOMAS HARTER, US NC

SPOTLIGHT ON SPONSORSHIP

US Chapter support for students and international members



JOSEPH ASANTE

“My interest in studying hydrogeology reached a pinnacle during my work at the Community Water and Sanitation Agency in Ghana, after I graduated in 1998 from the University of Ghana with a B.Sc. degree in geology, to supply water for the scattered rural and farming communities in the Upper West Region of Ghana. For the most part of the year the region’s surface water dries up; therefore, groundwater is a valuable resource. During my work I was humbled by the communities’ support to our teams siting, drilling, developing, and installing wells and the communities’ joy and appreciation for every successful well... The IAHS sponsorship means that they are dedicated in helping to build the technical capacity needed especially in developing nations like Ghana to tackle the water problems of the 21st century.

For my PhD dissertation, I am studying the recharge sources, hydrochemical evolution, and groundwater movement and hydraulic interconnectivity in an

intermountain basin. The data being used for this investigation are pH, temperature, and concentration of major ions, stable isotopes of water, and noble gases which are being collected from the lower Virgin River Basin, Nevada, Utah, and Arizona. This study’s objectives are to integrate these methods in a way that will increase confidence in the hydrologic conclusions that one makes from interpretations of the data, to delineate hydrochemical facies, to determine the sources of recharge into the lower Virgin River Basin, to determine the possibility of hydraulic connection between the Virgin River and basin aquifers, and to decipher the hydrogeochemical processes in the basin. The picture above was taken during a field work at the lower Virgin River Basin.”

MELANIE REED

“I am presently a Geoscience Masters Candidate studying at the University of Nevada Las



Vegas focusing on solving water related problems in developing nations. I’ve studied the effects of fog harvesting while serving as a Peace Corps volunteer in the Cape Verde Islands in West Africa. Recently I was awarded the Ambassadorial Scholarship through Rotary International and plan to expand on research related to the artificial recharge of water collected from fog harvesting.”

FUTURE CONGRESSES

Planning underway in South Africa, Canada and Australia



As reported in the August newsletter, the South African National Chapter has stepped in to fill the gap in 2011 left by the withdrawal of our Irish colleagues and we are very grateful to them for this offer. Planning is proceeding apace, and Martin Holland made a presentation to the General Assembly in Krakow. The conference will be hosted by the Groundwater Division of the Geological Society of South Africa at the CSIR Convention Centre in Pretoria.

The biennial national groundwater conference will be augmented to provide opportunities for the IAH Council, General Assembly and Commissions to meet, but the conference itself will be confined to the three days of 19-21 September. The overall theme of the conference is confirmed as “Groundwater: our source of security in an uncertain future” and this will allow for submissions on a range of topics of national and regional interest. Field trips will take place to the nearby world heritage site at the Cradle of Humankind, and to the gold mining areas of the Witwatersrand basin. Watch the main IAH website, the newsletter and the conference website at <http://gwd.org.za/gwc2011/home>

2011 conference website:
<http://gwd.org.za/gwc2011/home>

Plans are also proceeding apace for the 39th congress in Canada in 2012. This is confirmed for September 16-23, and will take place at the Sheraton on the Falls Hotel in Niagara Falls. The overall theme of the congress will be “Confronting Global Change”, and again the topics allow for submission of abstracts on a broad range of groundwater subjects. Plenary sessions will feature some of Canada’s most esteemed hydrogeologists. Proximity to the US means that good participation is anticipated from the southern neighbours, and the US and Canadian chapters met in Krakow to prepare some joint sessions. The scope for field visits is extensive and the organisers made a very tempting presentation to the General Assembly in Krakow. A first flyer has been prepared and was distributed in Krakow and will be included in an upcoming issue of the Hydrogeology Journal. Further details can be seen on the conference website at www.iah2012.org.

2012 congress website:
<http://www.iah2012.org>

Preliminary plans for the 2013 congress were also presented in Krakow. The IAH Australian Chapter has selected the city of Perth in Western Australia, the groundwater state. In making the presentation, Ryan Vogwill said this would be perfect timing to hold an IAH Congress in Australia as the country is experiencing a mining boom which shows no signs of slowing. Moreover, the National Groundwater Research and Training Centre is now fully established, the Murray Darling Basin Plan is due to be finalised in 2012-2013 and the Australian Emissions Trading Scheme has been deferred until then. All of these make 2013 an ideal time to gather in Perth.

The overall theme of the congress will be “Solving the Groundwater Challenges of the 21st Century” and it will be designed as a showcase for the world’s groundwater profession with an Australian focus. There will be a major focus on technical hydrogeology and research but sessions will also highlight links to international politics, economics and indigenous and western social values. Our Australian colleagues look forward to welcoming us to Perth in September 2013.

2011

27 Mar - 1 Apr 2011

MONACO. International Symposium on Isotopes in Hydrology, Marine Ecosystems, and Climate Change Studies. Organised by International Atomic Energy Agency (IAEA).

Web: <http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=38297>

2-5 May 2011

Vienna, AUSTRIA. HydroEco'2011 – 3rd International Multidisciplinary Conference on Hydrology and Ecology: Ecosystems, Groundwater and Surface Water – Pressures and Options.

Email: Hans_Peter.Nachtnebel@boku.ac.at or Karel.Kovar@pbl.nl Web: <http://web.natur.cuni.cz/hydroeco2011/>

9-12 Jun 2011

Zloty Potok, POLAND. The Impact of Human Activities on Groundwater. II International Field Workshop for Young Hydrogeologists. Organised by Student's Association of Hydrogeologists "AQUA", University of Silesia, Sosnowiec, Poland.

Email: awitkows@us.edu.pl

1-3 Sep 2011

Besançon, FRANCE. H2Karst, the 9th Conference on Limestone Hydrogeology. Organised by Universities of Franche-Comté (France) and Neuchâtel (Switzerland). Email: h2karst.besancon@gmail.com

19-21 Sep 2011

Pretoria, SOUTH AFRICA. Groundwater: our source of security in an uncertain future. GSSA/IAH Conference. Organised by Groundwater Division of GSSA and IAH. Email: confplan@iafrica.com Web: <http://www.gwd.org.za>

19-22 Sep 2011

Leipzig, GERMANY. ModelCare 2011, The 8th International Conference on Calibration and Reliability in Groundwater Modelling. Organised by Helmholtz Centre for Environmental Research. Email: modelcare2011@fu-confirm.de

27-30 Sep 2011

Madurai, INDIA. The Impact of Climate Change on Groundwater Resources with special reference to Hard rock Terrain. IGWC 2011 - 4th International Groundwater Conference. Email: navaraj2k1@yahoo.co.uk or mthangarajan@hotmail.com

5-7 Oct 2011

Kalavrita, GREECE. 9th International Hydrogeological Congress of Hellas. Organised by Hellenic Committee of Hydrogeology (Hellenic Chapter of IAH) and Association of Geologists & Mining Engineers of Cyprus.

Email: nlambrakis@upatras.gr Web: <http://www.hydrogeocongress.gr>

18-21 Oct 2011

Salta, ARGENTINA. 7th Argentine Congress of Hydrogeology & the 5th Spanish-LatinAmerican Seminar of Modern Groundwater Hydrology Topics. Organised by IAH Argentine Chapter and Dept. of Hydrogeology of Salta University. Sponsored by Sponsored by ALHSUD and IAH Spanish Chapter. Email: viiconahi@gmail.com

[For a fuller list of conferences and more details, including links to websites 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 with full details.

ADVERTISING AND COPY INFORMATION

IAH News and Information is published 3 times a year and distributed as an insert in Hydrogeology Journal. It reaches all members and associated members of the International Association of Hydrogeologists and subscribing members of the Geological Society of America – a distribution of around 4000 individuals.

Advertising rates are €300 per full-page advert and €200 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 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 June and 1 October.

PICTURE THE IAH

IAH Launches Photo Competition

How do you regard the role of IAH in the world today? This was a question posed during this year's Forward Look process and much discussed during the meeting in Reading.

One key outcome of this was a new mission statement for IAH which is currently under review. This will probably state that IAH aims "to further the understanding, wise use and protection of groundwater resources throughout the world".



We would like to put these words into pictures and seek your help to do this. IAH badly needs images to use in its website, publicity material and reports. Instead of buying stock photos we would far prefer to receive meaningful groundwater images from those who are important to us – our members – and reward them for their time and effort.

We are therefore announcing a photo competition entitled "Picture the IAH", with submissions invited for the following four categories:

1. Education in Action
2. Out in the Field
3. A Problem Solved
4. Groundwater Protected

One winner from each category will receive €100 (or sterling/dollar equivalent) of Amazon vouchers and a free IAH book of his or her choice. The winning photographs will be used in IAH web and printed material.

Entry information

This competition is open to all IAH subscribed members (2011 dues paid), with the exception of the current IAH Council and the IAH Secretariat. Entrants may submit up to 2 images for each category.

High (print) quality images should be zipped and emailed to info@iah.org or posted to IAH Secretariat, PO Box 4130, Goring, Reading, RG8 6BJ, United Kingdom. Please give your full contact details and membership number and provide a brief explanation about your photo(s).

The winning photographs will be used for IAH-related publications. IAH will therefore take it in good faith that entrants have considered copyright and privacy issues prior to submitting photographs.

The closing date for entries is the end of April 2011. Winners will be notified by the end of June 2011, and will be announced on the IAH website and in the summer edition of News and Information.

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