NEWS

MAY 2014

Also in this issue:

Congress latest Book releases Income diversification Chapter, commission and network news Media focus New members Conference listings

and the usual IAH announcements and updates



INTERNATIONAL ASSOCIATION OF HYDROGEOLOGISTS

& information

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

OPEN CHOICE FOR OUR HYDROGEOLOGY JOURNAL?



Global scientific publishing is evolving fast and we are grateful for our regular opportunities to discuss this changing world with our journal publisher Springer. Recent conversations suggest that we now need to consider allowing Open Choice for Hydrogeology Journal. *See page 6*

IAH AND EDUCATION -HAVE YOUR SAY



Many of IAH's core activities relate to educational development,

including our academic journal, our books series and our congresses. IAH has been considering future efforts; your opinions will help us to prioritise and plan. *Page 5*

Keep up to date: visit our website for the latest news http://iah.org

WORLD WATER DAY REPORTS



John Chilton reports from a collaborative meeting held

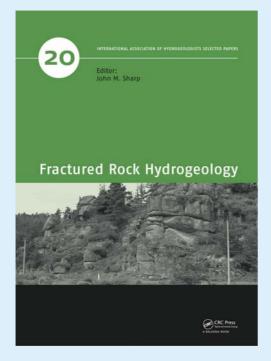
in London and reflects upon this year's World Water Day theme, and how it might concern those in groundwater related professions. *Page 8*

Contact us: email info@iah.org with your news, views or questions

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About the IAH Book Series

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Another busy year ahead...

We are grateful for the continuing positive feedback and comments we have received on the new IAH website. This is your website and to help us build up the services it provides, we would be grateful for continuing comments, opinions and feedback as you use the site. One benefit has become clear already; the system we have established for distributing electronic messages such as alerts and e-news allows us to tailor our messages and target them to members and non-members and to specific groups of members. You will see from this newsletter that the sub-site for our Early Career Hydrogeologists' Network (ECHN) is now up and running. Priorities for 2014 include establishing sub-sites and pages for IAH's other groups and beginning to provide suitable resource material on the education and knowledge parts of the site.

Of course, the latter is much easier to write here than to do, and one component of this, which follows from the Forward Look review, was the establishment in 2013 of a Working Group on Education. Their task is to assess where the Association's educational priorities should lie in terms of the content of the material and the ways it should be made available through downloadable resources, courses or webinars. The initial findings of the working group are reported in this newsletter. As in everything that IAH

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does, our members' views are important, and you are urged to provide your own views about our educational priorities by taking part in the educational survey. JOHN CHILTON

ADVERTISING AND COPY INFORMATION

IAH News and Information is published 3 times a year. It is distributed as an insert in Hydrogeology Journal and is also published via IAH's website and email alerts.

It reaches all members and associated members of the International Association of Hydrogeologists, reaching more than 4000 people and can also be freely downloaded by individuals worldwide.

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. Why not contact us now?

All copy must be provided electronically - please contact knicholson@iah.org for acceptable formats. Copy dates are 1 March, 1 June and 1 October.

Email info@iah.org



MEDIA FOCUS

A selection of groundwater features from around the world

Japan: Further news on groundwater at Fukushima

March: Following from our previous news reports, we can provide links to further information about the condition of groundwater at and around the Fukushima site. Professor Jun Shimada, IAH's Regional Vice President for Asia has drawn our attention to the detailed documentation in English provided on the website of the Ministry of Energy, Trade and Industry (METI). Technical proposals have been sought from national and international companies in late 2013 and selections of preferred approaches to dealing with the contamination have been made. Further technical information can be found on the website of TEPCO, the electricity company which operated the Fukushima nuclear generating reactor.

JOHN CHILTON, IAH SECRETARIAT

http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/index.html#cw http://www.tepco.co.jp/en/decommision/index-e.html

UK: Record Rainfalls Risk Groundwater Flooding

February: Record rainfalls in southern parts of the United Kingdom caused dramatic scenes of prolonged river flooding with large areas of land being inundated and many properties damaged. In addition, rapidly rising groundwater levels are likely to pose a threat of flooding; discharging groundwater into sewer systems, basements and up through the floors of buildings. Hydrogeologists from the British Geological Survey report that water levels have risen by more than 30 metres in some observation boreholes in the Chalk aquifer in Hampshire. Of a network of 32 boreholes across the country, nine show record water levels and one has never been so high in its 179 years of operation.

http://www.bbc.co.uk/news/science-environment-26136975 https://www.bgs.ac.uk/research/highlights/2014/groundwaterFloodingFeb.html

USA: EPA review of soil and groundwater cleanup operation on nuclear site

January: A number of US news sites featured the recent review undertaken by the Environment Protection Agency (EPA) on efforts to clean up soil and groundwater contamination at Pantex; the country's site for assembling and disassembling nuclear weapons.

Work to clean up the soil and groundwater is essential. A shallow aquifer lies beneath the site, which is perched some 200 feet (approx. 60m) higher than the Ogallala Aquifer, a major source of water in the region. The task will continue for some years, with reviews being undertaken every five years.

http://news.yahoo.com/review-39-groundwater-soil-cleanup-working-060746818.html http://www.epa.gov/

IAH AND EDUCATION -HAVE YOUR SAY



Bruce Misstear, IAH Vice President for Finance and Membership

Many of IAH's core activities relate to educational development, including our academic journal, our books series and our congresses. Moreover, many of our national chapters run short training courses, and there are also usually a number of courses arranged to tie in with major congresses, including the recent ones in Niagara Falls and Perth, and the forthcoming congress in Marrakech.

One of the priority objectives in IAH's Forward Look Action Plan is to enhance the Association's role in education and academic development. Specifically, the Action Plan recommended a feasibility study to consider options for short courses and for producing educational materials. The Action Plan also prioritised the development of a new IAH website and clearly this, which was launched in October last year, offers excellent opportunities for IAH to provide educational services.

A working group was set up last year to undertake this feasibility study. The members of the WG (in alphabetical order) are: Bruce Misstear, Ireland (IAH Executive); Daniel Nkhuwa (African Groundwater Network); Suzanne Pierce (US Chapter); Viviana Re (Italian Chapter; Early Career Hydrogeologists Network - ECHN); Andrew Stone (Commission for Groundwater Outreach); and Andrzej Witkowski (Polish Chapter).

It is likely that the main targets for short courses are our members and other hydrogeologists, whilst educational materials may be aimed primarily at policy makers, the general public, school children, etc. From questionnaire responses collected at the time of the Forward Look meeting back in 2010, and from more recent feedback from the ECHN, it is clear that there is a strong demand amongst our members for short courses and other training opportunities.

The WG has identified many possible options for enhancing the role of IAH in training courses and for providing additional educational materials. These options include (but are not limited to): producing webinars; compiling an international list of experts who would be available to assist chapters in providing short courses; better advertising of national chapter training initiatives through our website; preparing lecture materials that would be available for download; preparing IAH-templates for talks and courses; creating an IAH YouTube channel or similar; becoming an active supporter of other websites; preparing IAH promotional materials such as calendars and screensavers; developing thematic papers on key strategic topics to help IAH increase awareness of groundwater issues amongst policy makers and water managers, and the wider public.

The next step is to identify priorities for short courses (including webinars) and educational materials. In doing this, we would very much welcome input from our members, and so we have prepared a short online questionnaire for readers to give their views. Once priorities have been established we will then prepare a report with recommendations (and outline costs) for the Executive and Council.



Have your say: https://www. surveymonkey.com/s/IAHandEducation



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Open Choice?

Global scientific publishing is evolving fast and we are grateful for our regular opportunities to discuss this changing world with our journal publisher Springer. Recent conversations suggest that we now need to consider allowing Open Choice for Hydrogeology Journal.

Introduction

IAH's Hydrogeology Journal (HJ) is published in eight issues annually, totalling around 1650 pages. Since its inception in 1992, HJ has acquired a large worldwide readership and steadily increasing scientific quality. The full journal content is only available to members of IAH while non-members are able to view summary content and abstract pages. In addition, each year five articles are designated as "Editors' Choice" and made freely available for a limited period.

Open Access

An Open Access journal exclusively publishes articles that are freely available to everyone online. Authors pay a fee to the publisher to make their articles freely available. At this time, we are not seriously considering changing to Open Access for HJ because: (1) this would require that the paper journal no longer exist; HJ would become on-line only and (2) it would totally change the IAH business model with respect to the relationship between membership fees and the cost of the printed journal.

Open Choice

A compromise arrangement is Open Choice. This is the Springer option for many of its journals in which an author may choose to pay a certain fee in order to make his/her article freely available to everyone online. Open Choice could be used in combination with our usual nonopen articles that are available only to members and subscribers. Some HJ articles would be freely available, whenever the author selects Open Choice and pays the fee. If we were to allow Open Choice for HJ, the paper journal could continue to be published.

Until now, although Springer has potentially made Open Choice available to IAH/HJ for a few years, we have not made this available to HJ authors. The main reason for not allowing Open Choice has been that our developing country authors would probably not have equal access to publishing their articles in this way, due to the high cost of Open Choice. Springer's regular fee for Open Choice is 2200 euros. The author must pay this amount after acceptance of an article for publication by the editorial team and before Springer will process it as Open Choice. The Open Choice model generally assumes either the author's institute or employer pays the fee. In due course this cost should be built into the original research funding.

Changing circumstances

Many funding agencies (UK, EC) have begun to require, or will soon require (USA in 2015) that the results of publicly-funded research be made freely available. If HJ did not allow Open Choice, then authors from these countries who are reporting the results of government-funded research would not be interested in publishing their articles in HJ. This potential loss of a large part of our primary author pool trumps our previous reservations – and it seems that we should now allow Open Choice.

Until recently, there were two negative factors associated with Open Choice for HJ. One major problem has been that the fee would be the same for all authors, IAH member or not – and IAH members would have no advantage in publishing in HJ. A second problem is that, should most articles in HJ become freely available to everyone, we would take away one of the primary reasons for joining IAH – to receive access to HJ articles. Both of these factors might negatively impact interest in IAH membership, reducing the number of members. However, discussions with Springer have led to a special case discount offer such that IAH members would pay only 1200 euros, a discount of 45%. With this two-level pricing, both negative factors are to a large extent alleviated; the saving to authors of joining IAH would be significant. While there obviously needs to be a consistent policy about eligibility for the discount in the case of multi-authored papers, the additional work load is not great. Information from Springer suggests that at present journals in the Earth Sciences lag well behind those in Life Sciences in terms of take-up of Open Choice and initially this might apply to only a few of our 120-130 papers published annually.

CLIFF VOSS AND JOHN CHILTON

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QUESTIONS OR COMMENTS? Email info@iah.org

Editors' Choice articles

As mentioned in the previous item, our publisher, Springer, offers a selection of articles freely available to view and download for a limited period. Known as Editors' Choice, the articles are chosen by the journal's editorial team for any of several good reasons including:

- •outstanding science
- innovative approach
- potentially important conclusions
- •interesting field area or phenomenon
- unusual topic
- •political/social/historical/philosophical interest, etc.

This process takes place at the end of each publishing year, when up to five articles from among the year's crop of about 150 peer-reviewed published articles are selected and made available at no cost for two years. To access the selection for 2013 follow the link below.



http://www.springer.com/earth+sciences+and+geography/hydrogeology/ journal/10040?detailsPage=press



WORLD WATER DAY

John Chilton reports back from a World Water Day event in London...

To mark World Water Day on 21 March, the Overseas Development Institute (ODI), the University of East Anglia and the Global Water Initiative East Africa convened a meeting at ODI in London. Entitled "From Ground to Growth" the objective was to explore whether Africa's groundwater resources could help secure future agricultural growth and food security. The starting point was the recent news headline about Africa's large hidden groundwater reserves (see August 2012 News and Information). While greater attention on Africa's groundwater storage is welcome, do such headlines go too far? Can resource availability necessarily equate to affordable and economically rational access to water, particularly for smallholder farmers?

The day started with a summary of the African groundwater resource picture from Alan MacDonald of BGS, lead author of the report which made the headlines. He pointed out that some of the largest volumes of groundwater storage are not located where the densest and most needy populations live, and showed the modest productivity in terms of borehole yields of much of the continent's aquifers. While the water may be there, it may be neither technically easy nor cheap to exploit.

This was followed by summaries of African agricultural and irrigation perspectives from Bruce Lankford of the University of East Anglia and Karen Villholth of IWMI (by video link) respectively. The other relevant news headline, from some ten years ago, was the Commission for Africa's ambitious objective of doubling the area of land under irrigation within ten years. Apart from issues of water accessibility and the high costs of abstracting groundwater, other constraints to agricultural growth relate to land and water ownership and rights, financing, communities and energy availability and prices. Even with a comprehensive approach involving large and small scale irrigation, rehabilitation and new construction, doubling of the area in this time scale was quite unrealistic, although some increase in the benefits from irrigation could be achieved.

The focus then turned to South Asia, and the extent to which lessons from there were relevant and could be applied in Sub-Saharan Africa. Excellent presentations from Shilp Verma from IWMI (also by video link) and Richard Taylor from University College, London illustrated some of the enabling pre-conditions for the rapid take-off of groundwater irrigation in South Asia. These include access to credit, rural electrification and heavily subsidised energy, cheap drilling and pumps, access to markets and road networks. Some of these are beginning to be met in Sub-Saharan Africa, and this is likely to stimulate a growth in irrigated agriculture.

Overall, it was a highly informative coming together of disciplines including groundwater (with IAH strongly represented), agriculture, irrigation engineering, social sciences and development economics. On the evidence of the day, such headlines do go too far, over-simplifying what are in fact complex natural and human resource settings. On the other hand, given the right enabling conditions, we should not be too pessimistic about the ability of increased irrigation to contribute to poverty reduction and food security in Sub-Saharan Africa, and for groundwater to play its part in this.

> Videos of the day's presentations can be seen at http://www.odi.org.uk/events/3871-worldwater-day-groundwater-food-security#audio/ video

and reflects upon the day's theme



As many of you will know, World Water Day has been held annually since 1993 on 22 March as a means of focusing attention on the importance of freshwater and advocating for the sustainable management of freshwater resources. Each year, World Water Day highlights and celebrates a specific aspect of freshwater, and is coordinated each time by different organisations within UN Water. This year's focus was on "Water and Energy" and the main celebration was organized by the United Nations University and UNIDO in Tokyo, Japan. On this occasion, the World Water Development Report 2014 on Water and Energy was launched, the UN-Water "Water for Life" Best Practices Awards were made and the winner of the Stockholm Water Prize, Professor John Briscoe, was also announced. The World Water Day website hosts information about its events around the world and a great deal of excellent educational and promotional material about the intimate links between water and energy and the challenges these pose for the adoption and implementation of sustainable practices.

As a partner in UN-Water, IAH should play its part, but how? Water and energy are indeed closely interlinked and interdependent. Energy generation, whether hydroelectric, nuclear or thermal, requires the utilization of water resources. Much of these resources probably come from surface water, but groundwater surely contributes. Conversely, water requires energy and, about 8% of global energy generation is used for pumping, treating and transporting water for urban, agricultural and industrial use. As mentioned opposite, the availability of cheap and heavily subsidised energy was one of the main enabling conditions which stimulated the rapid growth in groundwater abstraction for irrigation, particularly in India and China. While the agricultural benefits are clear to all, the consequent steep drawdown of groundwater levels now covers extensive areas. Once such energy availability is taken for granted by millions of farmers, it becomes entrenched and can be extremely difficult to change. From our hydrogeological perspective, the answer is obvious, but from an institutional and social standpoint, managing the link between energy and water in these huge agrarian economies is not so simple. What our profession can do is to continue to work to improve our understanding of the aguifer systems which provide the groundwater and collect and analyse the data which demonstrate the impacts of uncontrolled abstraction. But most importantly, we need to present this information in easily digestible forms to those who are most closely involved in managing the water/energy interface.

There are new ways in which water and energy are becoming linked. Farmers are increasingly being encouraged to grow fuelwood crops for energy generation, with potentially negative impacts on the quantity and quality of the underlying groundwater which need to be researched and monitored. The rapid growth of interest in the extraction of shale gas and the use of hydraulic fracturing to enhance gas recovery also poses environmental questions which are not yet fully investigated and answered. Our profession has a key role to play in both of these.



See http://www.unwater.org/worldwaterday for full information and resources

EXECUTIVE MEETING, UK

The IAH Executive met at the beginning of February in Dorchester on Thames, just at the peak of the serious and prolonged flooding in southern England. This is Secretary General Shammy Puri's home village and he had arranged for us to be taken to see a local riverside conservation area where the Rivers Thame and Thames join, but all we could do was gaze from the bridge at the large expanse of flooded fields!

As always, the long agenda took up two full days. Consideration of the outcome of the previous year naturally forms the backdrop to much of the discussions. Thus, as anticipated, the Association came to a substantial operating deficit in 2013 because of the extra Council meeting in June, the development of the new website, the high cost of Council travel to Perth and support of developing country participants at Perth. Membership numbers were down from the 2012 peak of 4074 to 3897 at the end of 2013, and we have already been working to identify where the losses have occurred and to recover them with the support of our national chapters.

A number of important tasks are underway and were reviewed. As established by the new framework for IAH commissions and networks, the mid-term review is underway and will be reported on in the summer newsletter. We are also currently undertaking a careful review of the IAH Rules, which has not been done since 2007. It was already apparent that these would need to be updated to take account of the new strategy for commissions and networks. There are other areas related to national chapters and membership where the existing text in the Rules does not accord either with current practice or with our guidelines to chapters, and these inconsistencies need to be corrected. National chapters have been consulted, and Executive and Secretariat are now working on revisions to the text.

A linked question is that of student membership fee rates. While we already have a reduced fee rate for students, IAH does not attract large numbers of student members, and this may be a question of affordability or of the attractiveness of member benefits to students, or both. During recent discussions, there have been suggestions that the rate should be further reduced or that IAH should offer free student memberships. We are currently looking at what other societies do in this

> respect. The Executive meeting also featured extensive discussions about the question of open access and open choice for the Hydrogeology Journal and income diversification for the Association, which are reported on pages 6 and 7 and page13 of this newsletter respectively.

JOHN CHILTON, SECRETARIAT

TIME CAPSULE PROJECT

This brief note is taken from the report of the Time Capsule to the IAH Executive meeting in February. The most important activity of the project during 2013 was the finalizing of the new timecapsule.iah.org web site. The modifications designed in 2012 have been implemented and the site is now live and provides easy access from mobile platforms. It also facilitates the editing of meta data for all the videos and it is now much easier for those involved in a video within the project to enter a description of the video and of the people involved and to edit it.

Four videos were edited in 2013:

- Allan Freeze by his son Geoff Freeze (Hydrogeologist at Sandia National Laboratory);
- Gedeon Dagan by Aldo Fiori (Università di Roma Tre, Italy);
- Ghislain de Marsily by Philippe Renard, John Doherty, Jean-Pierre Delhomme and Philip Brunner;
- Jean Margat by a team of French hydrogeologists (Bernard Blavoux from the University of Avignon and Nathalie Dorfliger, Laurence Chery, Serge Lallier, and Damien Salquebre from BRGM).

The first two of these videos were published in 2013 and the last two are almost finalized. The interview of Ghislain de Marsily requires only to be formatted and published. The interview of Jean Margat still requires some additional work since it was recorded in French. Philippe Renard transcribed the whole video in French, which was then corrected by Laurence Chery and is now being translated. The English text will be used to provide subtitles for the video and, when this is ready, publication of the video could be rapid. An article for Hydrogeology Journal related to the interview of Jean Margat is also in preparation by those involved.

Several more interviews are lined up. Craig Simmons will interview Frank Schwarz in Adelaide. Mary Anderson is finalizing a revision of her book on groundwater modelling which is due to be completed at the time of writing. Chunmia Zheng and Randy Hunt are then confident that they will be able to organize the interview later this year. The project concerning John Cherry is still very much alive and Cathy Ryan from Canada is making plans to get this underway, possibly with the help of Beth Parker or Nico Goldscheider. Other less well defined plans include Russia and North Africa, and Philippe informs us that the project would still very much like to interview Emilio Custodio.

PHILIPPE RENARD, TIME CAPSULE PROJECT JOHN CHILTON, SECRETARIAT

http://timecapsule.iah.org/

YOUR OPINIONS NEEDED FOR REVIEW CORPORATE MEMBERSHIP/SPONSORSHIP

We are undertaking a survey regarding our current benefits under IAH's corporate membership and sponsorship schemes. We also wish to encourage ideas for new benefits and services IAH might provide to its corporate members and supporters. We are seeking representation from current and potential IAH corporate/organisational supporters, so please do pass the message on. The results will be published later in the year and will be considered carefully by IAH's Executive and Council.



https://www.surveymonkey.com/s/IAHcorporate-organisation-survey

COMMISSIONS & NETWORKS

ECHN web site: opportunities and challenges

The IAH Early Career Hydrogeologists' Network (ECHN) is happy to announce the launch of its brand-new website. This is another step towards more effective involvement of Early Career Hydrogeologists within the Association, while promoting networking and information exchange at local and international level. In the spirit of lifelong learning, the website will be constantly updated and improved, thanks to the great work of our webmaster, Carlos Maldaner. We are also very thankful to Kellie Nicholson and John Chilton, whose help was fundamental during the website construction, and to the IAH Executive for facilitating access to our own site.

Concerning the constant efforts of ECHN to enhance social and professional networking opportunities for Early Career Hydrogeologists, we would like to encourage all IAH members to contribute to our LinkedIn initiatives and discussions. One of the key actions is to increase access to career opportunities by facilitating job advertising activity. For this reason we invite you all to post any groundwater-related vacancies, PhD and/or Post Doc fellowships, scholarships and grants available in your companies and institutions on our LinkedIn group page. ECHN counts on you to promote information sharing and strengthening hydrogeological competence and experience worldwide!

Last but not least...have you read a paper about hydrogeology this year that made you jump out of your seat? Here's your chance to have a say, and vote for your favorite paper of 2013. Vote for the "Early Career Hydrogeologists' 'Coolest Paper of 2013' Award" and you will also be entered in the prize draw to win an IAH book. More information and details on how to vote can be found on our website, http://echn.iah.org/coolest-paper.

VIVIANA RE AND LINDSAY MCMILLAN



http://echn.iah.org/

[... having supported the establishment of the ECHN site, we will be moving on to work on those of other IAH groups. Watch this space. Ed...]

IAH Karst Commission to meet in Trebinje

Chair Nico Goldscheider reminds us that the Karst Commission will also hold its annual conference and meeting in Trebinje, and draws attention to several items of news on the updated website: www.iah.org/karst. Several new commission members can be introduced and welcomed; Augusto Auler, Brazil, Michel Bakalowicz, France, Andreas Hartmann UK, Petar Milanovic, Serbia, lancu Orășeanu, Romania, Ezzat Raeisi, Iran Geary Schindel, US and Vu Thi Minh Nguyet from Vietnam now have their portraits on the "Members" page.

Vu Thi Minh Nguyet has recently created the first Vietnamese Centre on Karst and Cave Studies, affiliated to the Vietnamese Academy of Science, and the IAH Commission is looking forward to fruitful cooperation. The commission is also proud to report that two renowned International Lecture Series on karst hydrogeology can now be considered as official dissemination activities of our commission (www.iah.org/karst/activities/html). The preliminary announcement of the Karst Conference in Birmingham in June 2015 is now available.

SECRETARIAT

http://www.iah.org/karst

DIVERSIFYING IAH's INCOME?



Where does the money come from?

IAH's income derives largely from its individual and corporate membership fees, with lesser amounts from publishing contracts and royalties. These are regularly supplemented by modest amounts from donations and investment income and more rarely by returns to the centre from the operating surplus of IAH congresses. Income diversification for the Association has frequently been a Council and Executive agenda item which gets squeezed off the end when earlier and more immediate concerns take up the time available.

It was also an important point of discussion in the Forward Look review. Now that important components of the Forward Look activities have been completed or are under way and improvements to many aspects of the running of the Association are in hand, it is time to take a serious look at the security of our income. We also need to be prepared for the challenges to our present business model that could be posed by the Open Access/Open Choice publishing developments summarised on pages 6 and 7 of this newsletter.

Where could it come from?

When the Secretariat takes part in events and seminars organised by the UK Charity Finance Group (CFG) we see how NGO's and charities are affected by recession, inflation, budget cuts and by changing operating conditions and regulatory frameworks. These are just some of the factors driving such groups into thinking about their traditional income sources. Charitable organisations are finding that, with increased competition for grants and donations, they need to rethink their business models and explore other options, such as earned income or merchandising of products.

For a professional association such as IAH, this could mean our congresses becoming profit-earning activities

from the outset and organising other conferences on a commercial basis. Other possibilities include undertaking paid consultancy work, preparing educational products for sale, taking paid-for job postings or equipment/services adverts on the website, applying for grants, working with professional fund raisers and encouraging endowments from members. Some of these are far from our traditional approaches, and most require careful thought and investigation before embarking on any new incomegenerating activities.

What are the next steps?

A first step agreed at the Executive meeting in February is to look back at the stability of our income and expenditure over the last few years and to look forward at possible trends over the next five to ten years. The latter is not easy, and traditionally we have not looked very far ahead in predicting income and in setting IAH's budgets and membership fee rates. The global economic uncertainty over the last five years has made this more problematic. Another important step for the Association is to look carefully at other professional societies. Some have very similar business models, others have alternatives in which book and journal publication and conference surpluses contribute greater proportions of their total income.

Obviously this is a discussion which is at its early stages; and all options need careful consideration. Income diversification will be discussed again at the Executive in June and at Council in September. In the meantime, if you have any personal views or suggestions please contact ShammyPuri@aol.com or John Chilton at jchilton@iah.org. This is an important and timely discussion for the Association, and we welcome your views.

SHAMMY PURI AND JOHN CHILTON

National Chapters to meet in Trebinje

A meeting of IAH's National Chapters will be held during the Karst Without Boundaries Conference which will take place in Trebinje and Dubrovnik between 11 and 15 June 2014. Representatives of the European Chapters of IAH are invited, but all conference delegates who wish to learn about current and planned IAH activities are also welcome. An open discussion is planned, in addition to chapter reports and discussion of the next Central European Groundwater Conference and upcoming IAH Congresses. If you have further questions regarding the meeting, please contact Teodóra Szőcs (szocs.teodora@mfgi.hu).

SECRETARIAT



China National Chapter Thriving

We are happy to report that the IAH National Chapter in China is flourishing. There are 52 IAH members in the P.R. China and regular contact is maintained with the 5 IAH members in Hong Kong and 6 in Taiwan. All are actively working to further the understanding, wise use and protection of groundwater resources.

To this end, the Chapter has recently assisted in the organisation of two important IAH conferences. The first was the International Symposium on Regional Groundwater Flow held in June 2013. This symposium with 160 participants was convened by IAH's Regional Groundwater Flow Commission and hosted in Xi'an by the China Geological Survey (CGS) and the China University of Geosciences. The IAH China National Chapter was one of the associated organizers of the 8th International Symposium on Managed Aguifer Recharge (ISMAR8) held in Beijing in October 2013 and reported in the December 2013 IAH News and Information. It is good to see IAH's national chapters and commissions working together on the organisation of international scientific meetings.

Amongst its other activities, the Chapter is

working with the Institute of Hydrogeology and Environmental Geology and the Commission on Hydrogeology of the Geological Society of China to develop an English language Journal of Groundwater Science and Engineering. The chapter also provided 117 abstract translations for Hydrogeology Journal during 2013, for which we are very grateful. SECRETARIAT



Our colleagues in the Indian National Chapter have informed us that their new website www.iahindia.org was launched on World Water Day. The website will help to project the importance of groundwater in the economy of India and provide information on the latest research publications. They also advice us that a National Conference on "Ground Water Governance and Regulation" will be held on 26th July 2014 at the India International Centre, New Delhi. SECRETARIAT

United Kingdom

The UK National Chapter and the IAH Burdon Network are supporting the UK section of Hydrogeologists Without Borders (HWB-UK) in organising and promoting a meeting to pose the question: "What can hydrogeologists contribute to safe water supply and poverty reduction? Groundwater plays a key role in the provision of reliable water supplies in many lessdeveloped regions of the world. Due to its complexity, a

detailed understanding of the groundwater environment is often required to ensure that resources are exploited in a safe, sustainable and cost-effective way. The one day meeting will comprise a combination of invited presentations and structured discussions with short contributions and will take place at the Geological Society in Burlington House, London on 5th June. SECRETARIAT

HWB UK website: http://www.hydrogeologistswithoutborders.org.uk/

Poland and Europe- conference news

Our good friends Andrzej Witkowski at the University of Silesia and his colleagues in the Polish National Chapter have advised us that they have begun work on a second Groundwater Vulnerability conference. This follows the successful meeting held in June 2004 which led to the publication of 23 of the presented papers in IAH Selected Papers 11 in 2007. Moreover, it will permit more recent work on vulnerability mapping and land planning related to the EU Water Framework Directive and Groundwater Directive to be presented and discussed.

2015 is shaping up to be a busy year for conferences in Europe and the calendar is quickly filling up. After discussion with IAH European Vice President Teodóra Szőcs and Karst Commission Chair Nico Goldscheider, our Polish colleagues have settled on 25-29 May in Ustroń, the same location as in 2004, avoiding the International Conference on Groundwater in Karst on 20-26 June in Birmingham, UK and the proposed second Central European Groundwater (CEG) Conference. For the latter, the Romanian IAH National Chapter have reconfirmed their willingness to organize the next CEG conference, and plans for this will be further developed at the upcoming Trebinje meeting. It is good news that IAH chapters are so active!

ANDRZEJ WITKOWSKI AND TEODÓRA SZŐCS

Asia Pacific Regional Conference in Korea

Preparations are well underway for the Asia Pacific Regional Conference in Jeju, Korea. The main conference theme will be coastal and island hydrogeology with an Asian focus. Our colleagues in the Korean IAH chapter have established a website http://www.iah2015jeju.com which in due course will have details about abstract submission, accommodation and transport within Korea.

SECRETARIAT



Conference website: http://www.iah2015jeju.com



NEW MEMBERS

A welcome to the following new members who joined our Association in the period 1 November 2013 - 31 March 2014:

ARGENTINA

Prof.Roberto ANDREONE

AUSTRALIA

Farzad AZAD Greg DASEY Dr Kevin HAYLEY Mr Stephen HOSTETLER Mr Evan JENSEN Peter KHOR Mr John P MASSIE Mr Robert OPPEDISANO Anthony ORTON Mr Nick PANNELL Dr Maria POOL Eng Sundravel VISVALINGAM Mr Mark WAKEMAN Ms Emma WHITE Mr Matthew YU

BAHRAIN Prof Waleed Khalil AL-ZUBARI

BELGIUM

Dr. Mohamed BOUEZMARNI Mr Vincent DEBBAUT Saadia IMERZOUKENE Mrs Simona STIRBU

BOLIVIA

Ms Daniela ALANOCA Ms Mónica Ximena GUZMÁN ROJO Mr Juan Carlos SOLIZ MORENO Mrs Olga ZALLES

BRAZIL Dr Augusto AULER

CANADA

Ms Kristina ANDERSON Ms. Caitlin COOKE Jolene HERMANSON Mr Sai MA Mr Dustin MARTIN

Matt NEUNER

Mrs Katrina SMALLACOMBE Mr Robert John STUETZLE Mr Simon THUSS Dr Laurie WELCH Miss Laura WYTRYKUSH Jeff YOUNG

CHILE

Mr Alan EDMUNDS Dr Maria Fernanda HERNÁNDEZ Mr Miguel Pérez MONTES

CHINA, PEOPLE'S REPUBLIC OF

Dr Peiyue Ll Mr Jun-Zhi WANG Mr Zhi YANG

CROATIA Nikolina BAKSIC

CZECH REPUBLIC Mr David ROZMAN

DENMARK Mr Jan Jul CHRISTENSEN

EL SALVADOR Mrs Marcia BARRERA Jose Mario GUEVARA RETANA

FINLAND Dr Pauli SAKSA

FRANCE

Simon BERNARD Marc BOISSON Mélanie CAPÉRAN Sarah CRESSENT Rémi DE LA VAISSIERE EDF CEIDRE TEGG/SGG (c) Delphine GIRAL Guillaume GRIGNARD Frederic LALBAT Céline NOWAK Jean Philippe RIZZA Francois VAYSSE

GERMANY

Ms Alexia CALVEL Kennedy Okioghene DORO Mr Jens Harold DRASER Ms Franziska GRIGER Mr Florian KRAUSE Osanne LYNCH-MACPHERSON Mr Sten-Magnus MOSTEK Mr Torsten NOFFZ Prof Gunnar NÜTZMANN Ms Esmeralda Parro RODRÍGUEZ Janina STREHSOW Mr Len VON SCHERENBERG Mr Julian XANKE Dr Yan ZHU

HONG KONG

Dr Ting Fong May CHUI Dr Xingxing KUANG Mr David KYNE

HUNGARY

Ms Erika BÓDI Zoltán FEJES Laszlo KOMPAR Viktoria MIKITA Mrs Eniko Szegedine DARABOS Mr Anibal VIVANCO Dr Balazs ZAKANYI

INDIA

Mr. Prakash Chandra CHHANGANI Dr Anirban DHAR Alok Kumar DUBE Shambhu NATH Tapan Kumar PANT Mr Seetharam RAO Dr R P SINGH Dr Subhash SINGH Manoj SRIVASATAVA Mr Vijesh VIJAYAN

INDONESIA

Dr Thomas Triadi PUTRANTO

IRAN Prof Ezzat BA

Prof Ezzat RAEISI Mahshid SHEKARRIZFARD

IRELAND

Mr Pat BARRETT Mr Donal CREAN Ms Aoife DELANEY Mr Darragh REILLY

ITALY

Alessio BARBAGLI Ms Sara BRANDOLESE Dr Elena Cerino ABDIN Dr Mara DAL SANTO Dr Lucio DI MATTEO Dr Michele LANCIA Dr Daniele PITTALIS Dr Luca RANFAGNI Dr. Geol. Rimsky VALVASSORI

KOREA, REPUBLIC OF

DONG-CHAN KOH HEE SUN MOON HEEJUN SUK YONGCHEOL KIM HEESUNG YUN

KUWAIT

Dr Mohammad AL-MURAD

MEXICO

Mrs Adriana BORJA Ing Francisco Javier GAMA Dr Roger GONZALEZ-HERRERA Alessia KACHADOURIAN Dr Eric MORALES-CASIQUE Dra Carmen Julia NAVARRO Sra Monica PEREZ Zenia Maria SAAVEDRA DIAZ Dr Elisabet WEHNCKE

MONGOLIA Mr Bilguun BYAMBAJAV

MOROCCO Dr Sadik ER-ROUANE Prof Dalila LOUDYI

NETHERLANDS, THE ACACIA WATER (c)

Mr Arie BIESHEUVEL Dr Matthijs BONTE Ms Kyra HU-A-NG

NEW ZEALAND

Mr James BOTTING Ms Dusk MAINS Dr Theo SARRIS Miss Alexis SMITH

NIGERIA

Dr Irwin Anthony AKPOBORIE Pamela I BANIGO Mr Bashir Umar LERE Mr Ifeanyi UMEH

NORWAY Dr Helen K. FRENCH Mrs Anna MIRONOVA

PALESTINIAN TERRITORIES

Dr Jawad Ali HASAN SHOQEIR

PHILIPPINES Mr. Carlos MENDOZA

POLAND Ms Dominika DABROWSKA PORTUGAL Prof Ana Maria CASTILHO Mr Luís COSTA

ROMANIA Mr Dragos GAITANARU Radu C GOGU Dr Marius MOCUTA

RUSSIA

Mrs Elena KAYUKOVA Mrs Elena Aleksandrovna KUZMINA Dr Dimitry NOVIKOV

SAUDI ARABIA

Mr Abdelmula ABDALLA Mr Tobias FUEST Mr Oluseun SANUADE

SOUTH AFRICA

Miss Chazanne ALLISON Mr Pieter LABUSCHAGNE Mr Mzoxolo MAFUZA Mr Andre A VAN COLLER

SPAIN

Clara ANDRÉS ARIAS Jose Juan MOYA MUÑOZ María Almudena ORDÓÑEZ ALONSO José Manuel SÁNCHEZ BIEC Josep M SUBIRANA ASTURIAS

SRI LANKA Mr Sydney DE SILVA

SWEDEN

Ms Sara ANDERSSON Mr Martin BERGVALL Mr Magnus HJÖRNHEDE Sandra JOHANSSON Dr Georg LINDGREN Karin MAGNUSSON Lars MARKLUND Sandra MARTINSSON TYRENS AB (c)

SWITZERLAND Mr Alessandro BRUNELLI Dr Sebastian STOLL

TURKEY Dr Fatma AKSEVER Assoc.Prof. Ayşen DAVRAZ

UKRAINE Ms Oleksandra PEDCHENKO

UNITED KINGDOM

Mr Christopher BARRY Dr Samuel BISHOP Mr Robert DOW Ms Isabelle GIRARDIN Mr Paul HOWLETT Mr Tom JARMAN Mr Paul LITTLEWOOD Mr Mark LODGE Mrs Melissa SWARTZ Mr Michael THOMSON Kirsty UPTON Mr David WALKER

UNITED STATES OF AMERICA

Chuck ABOLT Ms Jessica ADAMS Mr Joe BALDWIN Taylor BALL Erik CADARET Miss Chun-mei CHIU Mr Jim CICHON Alexis CLARK Lilly CORENTHAL Paula CUTILLO Matthew GAMACHE Jennifer GEORGEK Dr Daniel GOODE Dr Weon Shik HAN Mrs Candice HOPKINS Dr Joseph HUGHES Ms Carrie KOCH Mr Michael MACCARTHY Mr Robert MARLEY Dr. Jonathan O'DONNELL Jeffery PAUL Mr Roger PAULSON **Dr Richard SCHUHMANN** Dr Michelle WALVOORD **Daniel WEBER** Mr James WITCHER

VIETNAM

Dr Quy Nhan PHAM Dr Prof Doan VAN CANH

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IAH CONGRESS UPDATE

Morocco, 2014 host

Vice President for Science and Programme António Chambel and Executive Manager John Chilton visited Marrakech from 2 to 5 March. They were very impressed with what they saw, visiting the congress venue itself and the congress banquet location. Six months before congress is the time at which preparations are really going ahead on several fronts and there is plenty to do; thus the visit also involved long planning discussions with the organising committee.

Congress venue

The congress will be held at the Ryad Mogador Agdal, a new 5 star hotel and conference centre in a large development of tourist hotels just outside the city, from which the beautiful mountains of the High Atlas are clearly visible. It is clear that the excellent conference facilities will fully meet our requirements for plenaries, exhibition, posters, parallel sessions, training courses and side meetings, lunches and coffee breaks.

We would like to point out to IAH members that the organising committee has negotiated very good discount rates for single, double and twin rooms at the conference hotel. There is also a sister 4 star hotel nearby with slightly cheaper rooms. A very welcome feature of the agreement is that the room discount for congress participants will extend to the week before and week after the congress.

Those wishing to stay in the centre of the city will need to take a 20 minute taxi ride.

Registration and abstracts

Recent congress experience that most of the abstracts come in very close to the deadline proved to be the case again. Due to sudden and overwhelming late interest, the submission deadline was extended from 15 to 29 March. At the time of writing the 610 abstracts received are being reviewed and sorted into themes, topics and sessions. A full programme is, therefore, assured.

Keynote presentations

Following the general success in 2012 and 2013 of featuring invited keynote speakers in plenary sessions spread throughout the week, the 2014 organising

committee intends to do something similar. The opening ceremony will be followed by strong "local" keynotes, giving the Marrakech region, Morocco national and Maghreb regional pictures of groundwater resource management, presented to illustrate the "challenges" of the congress title. Other invited speakers will take up some of the regional and global groundwater challenges during congress week. At the time of writing, confirmations have been received from Waleed Kkalil Al-Zubari from Bahrain, Richard Taylor from the UK, and Avner Vengosh and Jack Sharp from the US. Supported by the NGWA, the schedule will also include Carlos Molano from Colombia, the 2014 McEllhiney Lecturer. Keep an eye on the congress website for further details.

Technical programme

It is definitely shaping up to be a full week. Sessions proposed for the programme so far include several on regional flow systems convened by IAH's Regional Groundwater Flow Commission, climate change, groundwater governance, a session on mineral waters in memory of Bernard Blavoux convened by BRGM and a session to present the findings of the UK-funded UPGro programme on groundwater in Africa. The African Groundwater Network will be holding its annual meeting during the congress week. We are also working with the organsing committee to accommodate an attractive range of short courses, meetings of commissions and networks, the ECHN programme and many others, including the Association's AGM and Council meeting. Watch the website as details of the programme are firmed up.

Excursions and field visits

Plans are in hand for five whole day mid-congress visits on the Wednesday and four post congress visits, details of which are already on the congress website. There is already interest in the post-congress trips, and it seems there could be greater take up of post-congress trips than at recent congresses. The organisers will establish minimum viable numbers for each trip and a careful and timely procedure for combining or cancelling trips and informing delegates will be put in place.



All in all, preparations are going well and work is accelerating towards providing an excellent congress experience for our first congress visit to the region. Morocco as a whole and the Marrakech region in particular has plenty to offer visitors, and you might like to take an extra few days, even if you don't take one of the congress trips. We certainly look forward to welcoming you to Marrakech!

JOHN CHILTON AND THE 2014 CONGRESS ORGANISING COMMITTEE

(i)

Congress website - http://www.iah2014.org

Rome, 2015 host

Meanwhile, the Italian Chapter is now very active with preparations for the 42nd International Congress of IAH. As our readers may already know the Congress entitled AQUA2015, with references to ancient Imperial Rome, will be held in the city from 13-18 September 2015. Under the title "Back to the future" seven main topics have been identified and the Scientific Committee is now developing a complete list of technical sessions. An historic Congress Venue has been chosen in the heart of the city, the Angelicum Congress Centre, a 16th century building a few minutes' walk from the main monuments of the Eternal City. In November 2013 IAH executive member Bruce Misstear met the National Chapter and visited the Angelicum with them and confirms that we will have an attractive and unusual venue for our 42nd congress.

Committee chair Marco Petitta advises us that a list of exciting social events and a wonderful accompanying persons' programme is being set up. As usual, pre-congress short-courses and workshops, midweek field-trips and around-Italy post-congress tours will complete the programme. Within this framework, the IAH Italian Chapter has already requested the support of the ECHN in the organization of the event. The UNESCO International Hydrological Programme (IHP) and the Rome-based United Nations' Food and Agriculture Organization (FAO), principal agencies in the challenge to ensure water and food availability, will be the main scientific partners of the Congress.

In addition, the Organizing Committee highlights that, for the first time in IAH history, the poster sessions will be enhanced through the introduction of an electronic format. This e-poster innovative technology based on digital interactive viewing will increase the visibility and appeal of the poster sessions, and will allow presenters to show more information than the traditional paper-based posters.

Furthers details will be revealed to attendees at the 2014 Congress in Marrakech, where the official presentation of AQUA2015 will take place. All IAH members are invited to visit the congress website at www.iah2015.org, from which the first circular containing deadlines can be downloaded. We suggest that you complete the pre-registration form to ensure you will be updated step-by-step with Congress news. For "social network" people, the Twitter account @ AQUA2015_IAH and the hashtag #AQUA2015 have been activated: follow us to be continuously updated! MARCO PETITTA



Congress website - http://www.iah2015.org

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13 May 2014 - Stockholm, SWEDEN

IAH Sweden annual meeting, with invited guest Ola Landin. Ola works with the Ministry of Transportation and will tell us about Förbifarten, one of the largest infrastructure projects in Sweden. All are welcome! http://www.iahsverige.se niklas.blomquist@sbk.goteborg.se

3-10 June 2014 - Trebinje, BOSNIA AND HERZEGOVINA

International Course and Field Seminar: Characterization and Engineering of Karst Aquifers, organised by The Centre for Karst Hydrogeology of the University of Belgrade.

zstev_2000@yahoo.co.uk

11-15 June 2014 – Trebinje, BOSNIA & HERZEGOVINA and Dubrovnik, CROATIA Karst Without Boundaries - International conference and field seminar, organised under the framework of the DIKTAS project. http://www.karstwithoutboundaries2014.org

18-20 June 2014 – Viterbo, ITALY Flowpath 2014 - National Meeting on Hydrogeology, organised by IAH Italian Chapter. http://www.flowpath_2014.unitus.it flowpath_2014@unitus.it

25-27 June 2014 - Sosnowiec-Belchatow, POLAND

International Field Workshop for Young Hydrogeologists on Intensive Groundwater Drainage. Organised by University of Silesia (Department of Hydrogeology and Engineering Geology and Students Scientific Association of Hydrogeologists "AQUA"), Polish National Chapter of IAH, Polish Association of Hydrogeologists. http://khgi.wnoz.us.edu.pl/warsztaty.html ddabrowska@us.edu.pl

31 July - 1 August 2014 – Orange, USA BSMAR14 -14th Biennial Symposium on Managed Aquifer Recharge.Organised by Groundwater Resources Association of California and the Arizona Hydrological Society. http://www.grac.org/BSMAR14-abstracts

31 August - 5 September 2014 – Stockholm, SWEDEN 2014 World Water Week; theme: Energy and Water. Organised by Stockholm International Water Institute (SIWI). http://www.worldwaterweek.org siwi@siwi.org

8-10 September 2014 - Valencia, SPAIN

Second Iberian Groundwater Conference. The conference invites presentations on several themes: groundwater and minerals, hydraulic fracturing and deep injection, climate change, contamination and restoration of aquifers and groundwater in hydrological planning. Organised by The Spanish National Chapter of the International Association of Hydrogeologists and the Polytecnic University of València.

http://cias2014.upv.es gerencia@fcihs.org

8-11 Sep 2014 - Karlovy Vary, CZECH REPUBLIC

MinWat2014 – International Multidisciplinary Conference on MINERAL WATERS: Genesis, Exploitation, Protection and Valorisation. Organised by IAH Commission on Mineral and Thermal Waters; IAH National Chapter of Czech Republic; Faculty of Science, Charles University (Univerzita Karlova); and T.G. Masaryk Water Research Institute (VÚV). http://minwat2014.vuv.cz/ Zbynek_Hrkal@vuv.cz

10-12 Sep 2014 – Tomar, PORTUGAL EcoHCC'14 – 3rd International Conference on Ecohydrology, Soil and Climate Change http://www.ecohcc.ipt.pt

15-19 Sep 2014 – Marrakech, MOROCCO IAH 41st Congress: Groundwater: Challenges and Strategies http://www.iah2014.org/



http://iah.org/events For a fuller list of conferences, events and meetings and to submit an event