NEWS

AUGUST 2014

Also in this issue: From the President Media focus GEF update Congress latest Chapter news 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

REACHING OUT - SUPPORT AND ADVOCACY EFFORTS



In accordance with our mission, IAH has been offering practical and financial support to a number of conferences and meetings, such as the 5th International Students Geological Conference, pictured. We have also provided representation at a number of key meetings. *Reports pages 13-21*

IAH BOOKS



Discounted IAH book ordering has just become much easier for members - with new titles being released, this is perfect timing... *Pages 2,11*

FIND OUT MORE



HYDROGEOLOGY JOURNAL



"Open Choice" submission, Altmetrics Information and editors' meeting - work to showcase authors in our Hydrogeology Journal continues...*Page 8-9*

SOCIALISE

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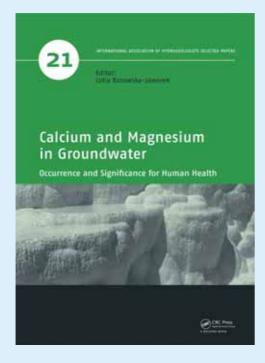


AUGUST 2014

New in the IAH Book Series Selected Papers on Hydrogeology (IAH-SP)



Series editor Nick S. Robins, British Geological Survey, Wallingford, UK



Calcium and Magnesium in Groundwater: Occurrence and Significance for Human Health

Edited by Lidia Razowska-Jaworek, Polish Geological Institute-NR, Sosnowiec, Poland

Calcium and magnesium are abundant in groundwater, but the role of groundwater as the essential source of these important nutrients is very often neglected. Hydrogeochemical studies have focused mainly on the distribution and behaviour of constituents that cause deterioration of water quality, such as: nitrate, nitrite or iron and manganese. Therefore, most recent books and papers concentrate mainly on these constituents and only a small number of papers describe the results of groundwater studies on other important water components such as calcium or magnesium. Calcium and magnesium are of great importance to human wellbeing and inadequate intake of either nutrient can impair health. The main objective of this book is to present a selection of studies on calcium and magnesium in groundwater and to highlight their importance for human health.

The chapters in this book are written by hydrogeologists and hydrochemists as well as medical doctors and include: methods of investigation of calcium and magnesium in groundwaters, distribution and behaviour of calcium and magnesium in different aquifers, calcium and magnesium in bottled mineral and spring waters, and the significance of calcium and magnesium in waters for human health.

June 2014: Hb: 236 pp: ISBN 978-1-138-00032-2: £82.00 / \$129.95 To order: www.taylorandfrancis.com/books/details/9781138000322/

Also new in the IAH Book Series



Fractured Rock Hydrogeology

Edited by John M. Sharp

May 2014: Hb: 400 pp ISBN 978-1-138-00159-6 £76.99 / \$119.95

To order:



Assessing and Managing Groundwater in Different Environments

Edited by Jude Cobbing, Shafick Adams, Ingrid Dennis and Kornelius Riemann

October 2013: Hb: 304 pp ISBN 978-1-138-00100-8 £76.99 / \$119.95

To order:

www.taylorandfrancis.com/books/details/9781138001596 www.taylorandfrancis.com/books/details/9781138001008/

About the IAH Book Series

The **International Association of Hydrogeologists** serves scientists, engineers and other professionals working in the fields of groundwater resource planning, management and protection. Books published for IAH by CRC Press/Balkema – Taylor and Francis Group currently lie within two series titles: International Contributions to Hydrogeology (blue books), and Selected Papers on Hydrogeology (green books). **IAH members receive a 60% discount: find out more at http://iah.org/members/book-discount.**

CRC Press/Balkema, Taylor & Francis Group, Leiden, The Netherlands pub.nl@taylorandfrancis.com, Ph: +31 71 524 3080 www.crcpress.com



Advocacy, support and building partnerships

As highlighted on the front cover, much of the news in this issue demonstrates the Association finding ways to meet our aims and objectives. One of the most important of these is to develop existing partnerships and build new ones. This is illustrated clearly, we hope, throughout.

Our productive partnership with Springer, publisher of the Hydrogeology Journal, shows itself in the careful approach being adopted to the growing demands for open access publishing. As one of Springer's established "society" journals, we are not being pushed along the open access path faster than we would wish. Moreover an attractive discount offer is in place for IAH members who wish to take up the open choice option.

The articles focusing on IAH's advocacy in the global water arena also involve partnerships with fellow members of UN Water and with new organisations such as the International Energy Agency. These partnerships help us to reach audiences we might not otherwise encounter. These reports also indicate that we are using expertise from within the IAH family rather than restricting ourselves to senior members of the Executive and Council.

The reports of the HWB WASH meeting and the International Student Conference illustrate how developing new partnerships also enables us to provide IAH support, which helps us meet our educational objectives and charitable

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obligations. Finally, the Kovacs Symposium is an example of collaboration with two long established partners, UNESCO and IAHS. These shouldn't be taken for granted and we will continue to work hard to maintain our existing close ties as well as looking for new opportunities. 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



Early Career Hydrogeologists set a fine example!

While our Council and Executive, supported by the Secretariat, provide much of the steer for the Association, it is the enthusiasm and energy of the Chapters, Commissions and Networks which really enable IAH to achieve its aims and objectives. In this connection, we should mention the recent

efforts of our chapter colleagues in Canada and Australia in putting on excellent congresses, in Morocco for their current hard work to bring us the 41st congress in Marrakech and in India and Italy where new and energetic committees are really building up IAH membership. Many of the Commissions and Networks are similarly active, with particular mention going to the Karst and Managed Aquifer Recharge Commissions for their regular participation in and co-convening of scientific meetings around the world. On this occasion, however, I want to highlight the efforts of one of our newer groups, the Early Career Hydrogeologists' Network (ECHN).

The formation a "young scientists" or "early career" network was initially inspired by the infectious energy displayed by young delegates attending the 37th IAH Congress/8th IAHS Scientific Assembly held in Hyderabad, India in September 2009. The value of young hydrogeologists and the potential role they could play in our Association were subsequently discussed in July 2010 at the "Forward Look" strategy meeting held in Reading UK, and the very first young/early career hydrogeologists' session was held at the 38th Congress in Krakow, Poland in September 2010. Since that time, our younger folk have gone from strength to strength, setting a fine example of what can be achieved on virtually no budget but with boundless energy, lots of initiative and excellent teamwork. Within a few weeks of participating in the Reading meeting, Sophie Vermooten had set up an Early Career Hydrogeologists' Network (ECHN) LinkedIn Group and an ECHN committee was established at the Krakow meeting.

In March 2011 when the opportunity arose with the rejuvenation of IAH's commission structure, the ECHN applied to be a formal "Network" of IAH. The application was approved by IAH Council and the ECHN officially began its work in July 2011 with Judith Flügge, Mark Cuthbert and Jay Thakur at the helm. The momentum did not let up. With a growing band of supporters, the ECHN hosted a very popular social event at the joint Ground Water Division of the Geological Society of South Africa/ International Association of Hydrogeologists meeting in Pretoria in September 2011 and followed up with very successful technical sessions and social events at IAH Congresses in Canada in 2012 and Australia in 2013.

There can be very few of us who attended those meetings who were not impressed by the immense enthusiasm and level of professionalism our younger colleagues showed. Today ECHN has a busy programme of activities under the leadership of Viviana Re (Italy), Gillian Hurding (Scotland) and Matthys Dippenaar (South Africa). This programme includes the very active LinkedIn Group (now in its 4th year with around 300 members), a well-populated Facebook site and a brand-new website. ECHN is also readying itself for the Morocco Congress this September, having been closely involved throughout the Congress preparations. During the Congress, ECHN will run its Annual General Meeting and much anticipated Social Event. It will also present the 'Coolest Paper of 2013' Award to Sebnem Arslan of the Middle East Technical University in Ankara, Turkey.

I encourage you all to show your support for the ECHN, one of IAH's most successful Networks. While formally established to serve hydrogeologists below the age of 35, together with those of any age embarking upon professional careers in hydrogeology, older, more experienced members of IAH are always welcomed at their events! To our ECHN colleagues....keep up the good work!

KEN HOWARD, IAH PRESIDENT

http://echn.iah.org/ https://www.facebook.com/ECHN.IAH http://www.linkedin.com/groups/Early-Career-Hydrogeologists-Network-ECHN-3717583/about

COMMISSIONS AND NETWORKS

As you will be aware, the activities of IAH's commissions and networks include contributing to the science of groundwater and undertaking outreach, education and training. They run sessions at IAH congresses, co-convene technical meetings and field excursions with other societies, host workshops and training courses and prepare educational and outreach publications. We welcome suggestions for new topics or activities – email ideas and comments to info@iah. org.

You do not have to be an IAH member to participate. In fact we encourage wide involvement from the groundwater community, as this will help the groups to thrive and give greater authority to their work. Do feel free to encourage your colleagues. Our website has full information regarding IAH's commissions and networks, including contact details. IAH SECRETARIAT

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http://iah.org/groups/commissionsnetworks



MEDIA FOCUS

A selection of groundwater features from around the world

California: groundwater still in demand to meet drought

Demand for groundwater from farmers in California's San Joaquin Valley has risen dramatically in the last nine months, since it became apparent that the fall 2013 rains would not arrive. The previous two years had been drier than normal throughout the state, and California was heading into drought. With little water running into the state's network of reservoirs, managers of the federal and state water projects which supply districts with a total of 25 million people and millions of acres of farmland cut deliveries to almost nothing this year. This has forced farmers to leave their land idle or turn to groundwater to make it through the drought.

In a normal year, California would get 30-40% of its total water supply from groundwater, but this year it may reach 65%. This comes on top of decades of heavy groundwater abstraction which have already taken their toll in declining water levels and land subsidence. Professional hydrogeologists have been warning for years of impending depletion of groundwater resources and, amid concern about the current drought's long-term impact, momentum is building for change. Recent Bills in the State Legislature and proposals from the California Water Foundation (also reported here in May) and the Association of California Water Districts focus on defining sustainable groundwater plans and giving local agencies more authority and better tools to implement them.

http://wrvo.org/post/drought-has-drillers-running-after-shrinking-california-water-supply

North India: major groundwater depletion continues

Scientists reveal that severe depletion of groundwater continues in the north Indian states of Rajasthan, Punjab and Haryana as well as in the capital Delhi. Further to the original studies, based on data from the Gravity Recovery and Climate Experiment (GRACE), the researchers' latest data show continuing trends.

http://www.eco-business.com/news/groundwater-levels-dip-alarmingly-north-india/

http://www.ngri.org.in/index.html http://www.csr.utexas.edu/grace/

Research: Megacities are sinking

A number of news sites have recently featured research by Gilles Erkens from the Deltares Research Institute, Netherlands, concerning how subsiding land is a bigger immediate problem for the world's coastal cities than rising sea levels. Tokyo has been cited as one example; mass groundwater extraction had caused parts of the city to sink two metres before the practice was stopped. The researchers also argue that parts of Jakarta, Ho Chi Minh City, Bangkok and numerous other coastal urban settlements are at risk of sinking below sea level unless action is taken. While such news may not come as a surprise to many groundwater colleagues, you may be interested to read more concerning the subject, and how the research has reached "headline" news.

http://www.bbc.co.uk/news/science-environment-27202192

http://www.dredgingtoday.com/2014/04/29/deltares-subsidence-in-megacities-greater-than-absolute-sea-level-rise/ http://www.deltares.nl/en/news/news-item/item/17268/subsidence-in-megacities-on-the-coast-greater-than-absolutesea-level-rise

www.facebook.com/iah.org

Yemen: groundwater depletion presents challenge

A Yemeni news agency reports the country's Agriculture and Irrigation Minister Fareed Mujawar as identifying groundwater depletion as the greatest challenge faced by agricultural development, together with excessive and indiscriminate use of pesticides in the agricultural sector. During a workshop on a draft country action plan organised by the Food and Agriculture Organization of the United Nations (FAO), Mujawar has explained that the ministry is looking to use the latest agricultural technologies in its efforts to reduce groundwater depletion and also to increase production.

http://www.sabanews.net/en/news349068.htm

Japan: Fukushima begins pumping groundwater into ocean

Tokyo Electric Power (Tepco), the operator of the Fukushima Daiichi nuclear plant in Japan, has hailed a 'major milestone' in the cleanup operation three years after the earthquake and tsunami damaged reactors at the plant. Tepco has started pumping groundwater into the Pacific ocean in an attempt to manage the large volume of contaminated water at the site. The company said it had released 560 tonnes of groundwater pumped from 12 wells located upstream from the damaged reactors. The water was stored and extensively tested before release.

The buildup of toxic water is the most urgent problem facing workers at the plant, almost two years after the environment ministry said 300 tonnes of contaminated groundwater from the plant was seeping into the sea every

day. The groundwater, which flows from hills behind the plant, mixes with contaminated water used to cool melted fuel before ending up in the sea. Officials concede that decommissioning the reactors will be impossible until the water issue has been resolved. The wells and bypass system intercept clean groundwater as it flows downhill toward the sea and reroutes it around the plant. It is expected to reduce the amount of water flowing into the reactor basements by up to 25% and relieve pressure on the storage tanks, which will soon reach their capacity.



Picture source: TEPCO

This by-pass system does not deal with the coolant water that becomes dangerously contaminated after it is pumped into the basements of the three reactors which suffered meltdown in the disaster. That water continues to be stored in tanks at the site while officials debate how to dispose of it safely.

http://www.theguardian.com/environment/2014/may/21/fukushima-groundwater-pacific-nuclear-power-plant http://www.tepco.co.jp/en/press/corp-com/release/2014/1236566_5892.html

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Hydrogeology Journal Brishgeitoff

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Open Choice Coming Soon!

Within a few months, Hydrogeology Journal authors will have the option to publish their articles with open access via Springer's Open Choice programme

As reported in the May newsletter, authors will be able to choose whether to (1) pay Springer a publication fee so that all readers have full and permanent (i.e. open) access to the article, or (2) publish the article by the usual no-fee route, in which case only journal subscribers and IAH members will have full access. With either route, the article will be handled in exactly the same way in terms of processing, scientific review, presentation, publicity and author support.

Springer's fee for Open Choice is usually €2,200/US \$3,000, but authors who are IAH members will pay a reduced fee of €1,200/US \$1,600, provided they remain a member of IAH through the review period. Hydrogeology Journal authors wishing to become IAH members to benefit from this discount will be most welcome to join. Once the manuscript receives final acceptance for publication by Springer, there can be no retrospective application for Open Choice. Where there is more than one author, both the lead author and corresponding author must be IAH members to enjoy this substantial discount.

The journal's manuscript management system, Manuscript Central, is currently being adapted to accommodate this option and detailed information for authors will be posted on the Springer Hydrogeology Journal web pages and the IAH website soon. So, if your research funder is now insisting on open access for the research results, you can be reassured that Hydrogeology Journal is the place to publish! Authors who wish to publish open access through the Open Choice programme can submit their manuscripts to the scientific review process now; it can be assumed that the administrative framework will be up and running within a few months. Queries related to Springer's Open Choice programme should be addressed to the journal's Technical Editorial Advisor, Sue Duncan (sduncan@iah.org) and applications for IAH membership should be directed to Sharon Warden (swarden@iah.org).

Hydrogeology Journal's existing Editors and Associate Editors are reminded that Editor's Messages are open access in any case. As well as providing comment on journal business, Editor's Messages can cover a wide range of discussion topics related to hydrogeology.

SUE DUNCAN, TECHNICAL EDITORIAL ADVISOR, HJ

QUESTIONS OR COMMENTS? Email info@iah.org

Follow IAH groups on LinkedIn

Altmetrics Information added to journal articles

Springer has added altmetrics information to every article available on Springerlink. Using data provided by www.altmetric.com, the number of social media shares for any given article is now displayed, showcasing the wider impact and influence of each article. The most shared articles from Hydrogeology Journal in the last year are:

 Quantifying and relating land-surface and subsurface variability in permafrost environments using LiDAR and surface geophysical datasets

http://link.springer.com/10.1007/s10040-012-0939-y

- Groundwater resources in the Upper Guadiana Basin (Spain): a regional modelling analysis http://link.springer.com/10.1007/s10040-013-0987-y
- Norias, boreholes and the role of the state during the groundwater 'silent revolution' in La Mancha, Spain http://link.springer.com/10.1007/s10040-014-1118-0



The image above shows the view of the article level - click at "Shares" to see what people did with the article...

SUE DUNCAN, TECHNICAL EDITORIAL ADVISOR, HJ

Journal Editors Meet in Copenhagen

In June, the editorial team of Hydrogeology Journal had a twoday meeting in Copenhagen, hosted by the Geological Survey of Denmark and Greenland (GEUS). Cliff Voss, Jimmy Jiao, Vincent Post, Maria-Teresia Schafmeister, Susanne Schemann and Sue Duncan welcomed in person for the first time Liz Screaton, the newest member of the team (see photo). As usual, there were discussions about citation statistics, instructions for authors, Editors' Choice, the role of social media, Springer initiatives for marketing and promotion, etc., plus plans to encourage authors to submit manuscripts that will enthuse and inform readers, such as reviews, pedagogic articles, groups of papers and theme issues. The mechanics of administering the eagerly awaited Open Choice were finalised too. Before and after the meeting sessions, there was plenty to see in the city. Fantastic photo opportunities were everywhere, provided the photographer wasn't accidentally standing in a bicycle lane or at the top of the Church of Our Saviour during a thunderstorm!

SUE DUNCAN, TECHNICAL EDITORIAL ADVISOR, HJ



Left to right: Jimmy Jiao, Suzanne Schemann, Vincent Post, Maria Schafmeister, Sue Duncan, Liz Screaton and Cliff Voss



EXECUTIVE MEETS IN DUBLIN



John Chilton, Ken Howard, Bruce Misstear and Shammy Puri. Photo taken by Antonio Chambel, who chose to stay out of camera focus... thanks to being a victim of three day "lost baggage" scenario...

The IAH Executive met at the end of June in Dublin, hosted by Bruce Misstear on the wonderful city centre campus of Trinity College. In addition to the many routine items which come up for discussion each time, the Executive and Secretariat are working hard on two specific issues. The first of these is a review of the Articles and Rules of the Association.

The Articles provide the formal basis by which IAH is governed and can only be changed by a vote of the full membership, which is obviously not something we would wish to undertake unless it were really necessary. The Rules support the Articles, and provide a more detailed framework for the management of the Association. As IAH's programme of activities develops and as the means of operating and communicating change, actual practice may diverge from what is envisaged by the Rules. This is happening particularly with regard to changes to the way we structure and operate our Commissions and Networks, with the operation of National Chapters, and with the way we communicate throughout IAH in the digital age. The results of a first review by Bruce Misstear and John Chilton were presented and discussed at length, and some suggestions for necessary changes will be presented to Council.

The Executive is also looking critically at the existing sources of income to IAH and the potential for increasing and diversifying our income. Although this is often a topic at Executive meetings, it has not received the attention it deserves, and Secretary General Shammy Puri is leading a more formal review process starting

with a careful look at recent trends in our existing income, and seeing how these are likely to develop in future. As would be expected for a professional association such as ours, this is derived mainly from membership fees and scientific publishing. We are also looking at the experience of some of our sister societies, and will begin to look at the feasibility of developing other sources of income. Progress will be reported to Council in Marrakech.

JOHN CHILTON, SECRETARIAT

IAH AND EDUCATION – HAVE YOUR SAY

The on-line Education Survey questionnaire was open on Survey Monkey from 25th April until 31st May. Reminder emails were sent to members asking them to participate and an article in the May Newsletter also advised readers about the survey. There were 63 responses in total which are currently being analysed. A large number of useful suggestions and recommendations have been made.

One important and frequent suggestion was that the IAH website should contain information about the availability of courses in hydrogeology and related disciplines. While

this cannot be exhaustive, and IAH would not be in a position to endorse or approve specific courses, some kind of listing would be helpful to members, potential members and other visitors to our website. In the near future we will be examining how we could establish and manage such a listing, and will be calling for submissions.

BRUCE MISSTEAR AND JOHN CHILTON

Questions or comments? Email info@iah.org



WORKING FOR YOU - NEW AND SIMPLE ORDERING SYSTEM FOR IAH BOOKS

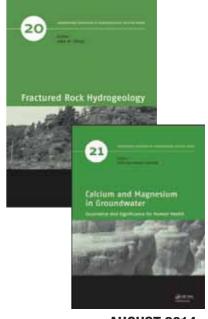
We are pleased to announce a new and simple system for ordering IAH books online, direct via our publisher. All members now need do is enter a short code at the shopping cart to receive a generous 60% on IAH book titles. See our Book Discount web page for the code (Members' Area) – and offers from other publishers too.

We have a wide range of publications in our two IAH book series. Latest titles include Calcium and Magnesium in Groundwater (SP21); Fractured Rock Hydrogeology (SP20) and History of Hydrogeology (ICH28).

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Find out more

- http://iah.org/members/book-discount
- International Contributions in Hydrogeology (Taylor and Francis) http://www.taylorandfrancis.com/books/series/TFIAHICH/
- Selected Papers in Hydrogeology (Taylor and Francis) http://www.taylorandfrancis.com/books/series/TFIAHSEPAHY/



AUGUST 2014

KEEPING IN TOUCH...

Not receiving your IAH email messages and alerts?

We are delighted that the great majority of IAH members (almost 100%) have set their "Members Area" to receive IAH's alerts and updates, including the online Hydrogeology Journal. We also have some 6000 other IAH supporters signed up to receive occasional messages from our Association.

This is good news for everyone, because it means we are able to keep in contact with you quickly through touches of buttons, using low cost means.

It is clear, however, that quite a number of our members and supporters are not receiving their messages from us. We are referring to messages that "bounce" owing to rejection by email systems and firewalls, rather than the more straightforward "out of office" responses. We note, for example, that those working for large organisations, in Universities and other research organisations seem to be having such difficulty. Likewise many in the USA....

Could this be you? If so, please adjust your email settings, firewalls, etc. to accept messages from http:// createsend.com - better known as the highly reputable email provider "Campaign Monitor". The provider is based in Australia and used by many very large organisations including Facebook, ebay, Apple, HP, WWF, just to name a few. As our privacy and cookies policy states, we take your data very seriously and this includes our methods of contact.

IAH SECRETARIAT

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International Association of Hydrogeologists the World-wide Groundwater Organisation

IAH Online Member Alert - June 2014

Here is your latest alert from the online service of the International Association of Hydrogeologists (IAH), sending news and updates straight to your inbox.

Links

2014 congress – keynote speakers announced Research questionnaire: the role of social sciences and humanities in hydrology New resources from the IAH Commission on Managed Aquifer Recharge EU: Guidance for groundwater and soil protection measures published Events listing

Hydrogeology Journal Issue 22:4

This issue is now online. You have full access to all the articles by following this link and entering your email address and IAH password. If you do not have this information then advice is available on the link. Once connected to the journa's website you will find this issue in the list presented.

Contents of this Issue

Mega-scale groundwater quality challenges and the need for an inter-disciplinary approach Essay Matthew Currell Pages: 745-748

Quantifying the loss of available groundwater resource associated with point-source contamination in unused aquifers Paper T. W. Barllett, J. W. N. Smith, P. E. Hardisty Pages: 749-759

Connectivity and single/dual domain transport models: tests on a point-bar Paper Diana Dell'Arciprete, Chiara Vassena, Fulvia Baratelli, Mauro Giudici, Riccardo Bersezio, Fabrizio Felletti Pages: 761-778

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FURTHER INFORMATION

info@iah.org http://iah.org/members http://iah.org/privacy-and-cookies-policy Report by Timea Havril, Early Career Hydrogeologists' Network and Regional Groundwater Flow Commission

FIFTH INTERNATIONAL STUDENTS GEOLOGICAL CONFERENCE

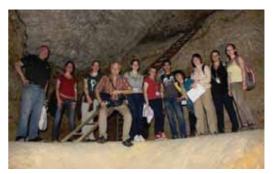
After four successful conferences in Krakow (Poland), Ratnieki (Latvia), Lviv (Ukraine) and Brno (Czech Republic), the 5th International Students Geological Conference (ISGC) was held at the Faculty of Science, Eötvös Loránd University, Budapest (Hungary) between 24-27 April, 2014. The aim of the ISGC conferences is to create a forum for students from any field of earth sciences in which they can represent and discuss their results. Participants present their work as oral or poster presentations.

The conference included a wide range of scientific sessions, 6 plenary lectures on the application of novel methods and current results in geosciences, 4 workshops connected to the main sessions and 5 field trips representing different disciplines of the earth sciences. Internationally recognized researchers were invited to take part in the scientific committee of the conference.

As an innovation, this year a Hydrogeology and Environmental Geology Session was also organized. We would like to pay more attention to hydrogeology – as groundwater is a geologic agent – while it needs to be taken into consideration in many disciplines of geology. Therefore students who are interested in hydrogeology and related fields were addressed specifically. The Hydrogeology and Environmental Geology Session and the coffee breaks between the sessions were supported by IAH with €950 from our Education and Development Fund. The professional status of the session was ensured by the Regional Groundwater Flow Commission of the IAH and the ECHN. A promotional IAH-ECHN desk was set up in the coffee breaks on the second day which were sponsored by IAH.

230 students and young researchers from three continents and 20 countries participated in the conference, of whom 140 presented their research. 13 students and young researchers made presentations in the Hydrogeology and Environmental Geology Session and the audience filled the auditorium. The members of the jury for the session awarded the best oral presentation and best poster prizes supported by IAH. That for oral presentation went to Dejan Nešković from the University of Belgrade, Serbia, who presented the topic 'Autonomous local water supply systems for remote settlements – Municipality of Ruma (Serbia)', and that for a poster went to Ádám Tóth (Eötvös Loránd University, Budapest), with his poster titled 'The importance of electromagnetic methods to build a numerical groundwater flow model for an area with complex geology: the case of the Tihany Peninsula, Hungary'. The winners received one year membership of IAH and a mug with an IAH and conference logo.

A field trip entitled "Jump from the Triassic into the Eocene" was also organised, partly connected to the hydrogeology session, and took in the Budapest thermal karst system, which is one of Europe's largest. During this field trip the participants visited outcrops of carbonate aquifers and the hypogenic caves and springs, as shown in the photo.



On behalf of the organising committee of the conference, we would like to thank IAH very much for their support, which has helped to provide access to this unique event for students and young researchers. TIMEA HAVRIL

HYDROGEOLOGY AND WASH

Joint meeting held in London

We are happy that we have more to report from our growing links with Hydrogeologists Without Borders (HWB-UK). In June, HWB-UK convened a one day meeting on the subject of "Hydrogeology and WASH: What can hydrogeologists contribute to safe water supply and poverty reduction?" Increasing access to safe drinking water has been a key target of the Millennium Development Goals and will continue to be for the new Sustainable Development Goals. It is also often a critical part of the emergency response to humanitarian disasters. We know that groundwater plays a key role in the provision of a sustainable water supply in many regions. However, exploitation of groundwater as a safe and reliable resource requires detailed hydrogeological understanding to ensure that effective water management and protection strategies are implemented and that boreholes are designed, sited, drilled and completed appropriately. It is also important that data of sufficient quantity and quality are collected and made available to help evaluate projects and to inform future work.

The meeting aimed to provide a forum for discussion and knowledge exchange between funding agencies and NGOs actively involved in WASH projects and experts from the groundwater community. Invited keynote speakers highlighted the short and long-term benefits of properly incorporating groundwater science and knowledge into humanitarian projects, with examples of the specific challenges associated with applying this science in an aid and development context. In an innovative and informal meeting format, these were supported by a poster session, by short case study presentations, by a series of short parallel discussion workshops and finally by a concluding panel discussion. These provided participants with opportunities to establish what lessons could be learnt from past examples. Some 90 participants fully contributed to the discussions and the one day conference certainly helped to achieve better understanding between the groundwater and NGO communities and identified ways in which the two sectors could work together more effectively to ensure that future projects are environmentally and socially sustainable and also cost-effective.

This was a good example of the type of national collaboration we are very interested to encourage. The idea and initiative for the meeting (and most of the hard work in preparation) came from HWB-UK. The IAH Executive immediately agreed to support the meeting and the Secretariat promoted and advertised the meeting and assisted in setting up the programme, the IAH British National Chapter also agreed to promote the meeting and supported it financially from its own funds, and the Hydrogeological Group of the Geological Society of London promoted the meeting and provided the venue at Burlington House. Material from the meeting will soon be available to download; keep an eye on the HWB website.

JOHN CHILTON





KARST WITHOUT BOUNDARIES

The international conference "Karst Without Boundaries" organised in the framework of the DIKTAS regional project took place on 11-15 June 2014 in the heart of the Dinaric Karst Region. The conference was sponsored by the DIKTAS partners with special support provided by IAH, UNESCO-IHP and IGRAC, with the University of Belgrade and Hydropower System Trebišnjica as regional co-organisers.



The main conference event was held in Trebinje, Bosnia & Herzegovina including a one and a half day mid-

The Boka Kotorska Bay

conference field trip in Bosnia & Herzegovina and Dubrovnik, Croatia. Most of the conference participants attended the post-conference field excursion to the famous Boka Kotorska Bay, Montenegro. The conference was preceded by a summer school course and a field seminar entitled "Characterization and Engineering of Karst Aquifers". While the main purpose of the DIKTAS project is to improve understanding and management of transboundary groundwater resources of the Dinaric Karst region, the conference was open to all research related to karst hydrogeology, with or without any transboundary consequences. More than 100 papers and abstracts were submitted and presented.

IAH was fully involved in the organization of the conference through its Karst Commission and also chairing many of the sessions. A Karst Commission meeting was held during the conference, discussing upcoming karst meetings, publications and activities. Marco Petitta, president of the Italian National Chapter of IAH, gave a short summary about the 2015 IAH Rome Congress, emphasizing the relevance of karst water for water supply and groundwater use in and around Rome. The IAH Karst Commission was invited to organize a session at that congress, and details will be discussed very soon with the organizers.

Representatives of six of IAH's European Chapters (Croatia, Hungary, Italy, Romania, Serbia and Slovakia) together with a representative from China held a chapter meeting at which they summarised their activities over the last year and discussed the next Central European Groundwater (CEG) Conference. A proposal by the Romanian National Chapter to organise the next such conference in Romania was supported by all national representatives. Iulian Popa, secretary of the Romanian Chapter, presented their proposal to host the conference in the Black Sea region on 14-16 October 2015, with the topic 'Groundwater risk assessments in urban areas'. A first circular for the upcoming CEG conference is planned to be presented at the IAH Congress in Marrakech.

The conference was well organized, with good and interesting presentations from participants drawn from all around the world, and included excellent field trips. The participants were able to see one of the most spectacular and interesting karstic regions in Europe, and greatly enjoyed the hospitality of the local organizers.

TEODÓRA SZŐCS

GLOBAL ADVOCACY

IAH efforts include representation (within limited means) at international events which have water as their primary agenda. We are, after all, the World-wide Groundwater Association working for you...

UNESCO, PARIS: 11TH KOVACS COLLOQUIUM

The 11th Kovacs Colloquium was held at UNESCO Headquarters in Paris on 16 and 17 June. It honors George Kovacs, an eminent hydrologist who was Chairman of the Intergovernmental Panel of the International Hydrological Programme (IHP) and Secretary General and President of the International Association of Hydrological Sciences (IAHS). The Colloquium was dedicated to the theme "Hydrologic Sciences and Water Security: Past, Present and Future".

Representing IAH, Antonio Chambel (Portugal), IAH's Vice President for Science and Programme Coordination was invited by the organizers, IAHS and UNESCO. He had the opportunity to participate in the final round table dedicated to the theme of the symposium with the Director of the Division of Water Sciences and Secretary of the IHP, Blanca Jiménez-Cisneros, Ania Grobicki of the Global Water Partnership, and Alberto Montanari of IAHS. The conference served as an introduction to the 21st session of the Intergovernmental Panel of the IHP which was held on 18 to 20 June.

The Colloquium included presentations by Blanca Jiménez-Cisneros, talking about responses to the challenges of water security (the eight phase of the IHP), Hubert Savenije, President of IAHS, Howard Wheater, from the Global Institute of Water Security in Canada, Frans Berkhout from Future Earth, France, Zbignew Kundzewicz and Piotr Matczac from the Institute for Agricultural and Forest Environment of the Polish Academy of Sciences in Poznan, and the Potsdam Institute for Climate Impact Research, in Germany, respectively, Grigory Barenboim from the Institute of Water Problems of the Russian Academy of Sciences, José Galizia Tundisi, President of the International Institute of Ecology of Brazil, Pradeep Mujumdar, from the Indian Institute of Science in Bangalore, Yan Huang from the Water Resources Commission of China, Bruce Stewart from Climate and Water, WMO, Switzerland, Vazken Andréassian from the National Research Institute of Science and Technology for Environment and Agriculture, France, Michaela Milleto from the World Water Assessment Programme in Italy, and Heribert Nacken, UNESCO Chair in Hydrological Change, from the RWTH University in Germany.

The Kovacs Colloquium had around 140 participants and addressed issues related to water and environment, as well as interesting issues related to education in the field of Earth and environmental sciences, a perspective of the past, present and future in a rapidly changing world where knowledge also evolves at an extremely fast pace. There were many references to controversial projects such as the more than 100 dams planned for the Andean slopes in the Amazon basin, adding to the nearly 100 planned for Brazil in the same basin, which will impact decisively on all sediment and water dynamics in the Amazon Basin and hence the ecology of the region. Other strong issues were related to the interrelationship waterenergy-environment and the future consequences of the exploitation of water (surface and groundwater) and its contamination, both for future human generations and for ecosystems dependent on these waters.

During the Colloquium there were opportunities to talk with IAHS about the possibility of IAH and IAHS participating together in the 40th Anniversary of the IHP (50th anniversary if we account for the IHDecade) which coincides with the 70th Anniversary of UNESCO. The IHP Bureau decided to set up a working group in which IAH will be involved. This proposal is dependent on the definition by UNESCO of the dates of their anniversary, in which the IHP anniversary could be a particular event.



ANTÓNIO CHAMBEL

Secretary General Shammy Puri (UK) also reports briefly on recent global or regional water policy meetings that IAH has been involved in...

HO CHI MINH CITY, VIETNAM: 2ND MEKONG RIVER COMMISSION SUMMIT

At the 2nd Mekong River Commission Summit in Ho Chi Minh City in April 2014, "Cooperation for water, energy and food security in transboundary basins under changing climate", IAH was represented by Gabriel de los Cobos, Head of Hydrology, State of Geneva and responsible for the operation of the Genovese transboundary aquifer scheme. [Travel and all expenses covered by the World Water Council.] In his report of the meeting Gabriel notes:

"The discussion focused on a major statement that groundwater is a "hidden treasure". The extension of aquifers is determined by geology and hydrogeology and not by national boundaries; hence it is only natural that transboundary aquifers are an important component of groundwater systems among countries. However, the law and institutions are oriented mainly towards surface water use and management. It is necessary to recall that groundwater constitutes the most important and dependable fresh water source in many parts of the world. Due to increasing climate variability, growing domestic and industrial water demand, land use change and targeting food security, the demand for groundwater is amplified as a generally reliable resource with a significant inter-seasonal storage capacity."

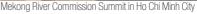
EUROPEAN MEETINGS - 2013 (PREVIOUSLY UNREPORTED)

IAH was represented by Shammy Puri at the High Level International Conference on Water Cooperation in Tajikistan in August 2013, the Budapest Water Summit in October 2013, a Council of Europe meeting on Cooperating Beyond Borders – transboundary water management in December 2013 and a meeting on International Water Cooperation and Transboundary Aquifers at the University of Strathclyde, Glasgow, also in December 2013.

[continued over...]



AUGUST 2014





CALGARY, CANADA: 2ND UNCONVENTIONAL GAS FORUM OF THE INTERNATIONAL ENERGY AGENCY

At the 2nd Unconventional Gas Forum of the International Energy Agency in Calgary in March, IAH was represented by Grant Ferguson, Chair of the Canadian IAH National Chapter and Associate Professor at the University of Saskatchewan. More than 100 officials from public and private sectors gathered to share best practices for minimising water use and to protect water resources from the risk of contamination during unconventional gas production. There was also a site visit to see the hydraulic fracturing for gas recovery in Canada's Montney Shale formation.

In his conference report Grant notes that:

"There seems to be consensus on many of the main issues associated with unconventional oil and gas. There was not much talk about the composition of so-called "frack fluids" and few people brought up fracture propagation from deep shales to shallow aquifers as an issue. Much of the discussion focused on ideas such as wastewater management with injection wells, well integrity and baseline groundwater quality surveys." And he adds that "The scientific understanding (of potential contamination) is critical in convincing the public and in translating the experience from areas with decades of oil and gas development (e.g Alberta, Texas) to emerging areas (e.g. the Marcellus Shale)."

Related to the above, and at their request, Shammy Puri made a briefing to the International Energy Agency (IEA) staff about IAH in April at their Paris HQ. Following the presentation, Shammy met Mr Fatih Birol, Chief Economist and Bartosz Jurga, in the Directorate of Global Energy Economics. IEA will call on IAH from time to time to participate in their regional energy-related activities.

SHAMMY PURI

EUROPEAN UNION GUIDANCE FOR GROUNDWATER AND SOIL PROTECTION MEASURES

Adopted in 2010, the European Union Industrial Emissions Directive ("IED", 2010/75/EU) introduced stringent measures for the protection of soil and groundwater. Further to this, the EC has recently published a guidance document to support this process and to provide a more consistent understanding of the Directive's provisions throughout the EU. The Directive concerns more than 50,000 installations throughout Europe which carry out activities such as the combustion of fuels, iron and steel, paper and pulp, the tanning of hides and skins, waste treatment, food production, or chemicals processing. These are known collectively as IPPC activities. The Directive requires that every installation subject to its scope is only operated with a permit providing for the application of the best available techniques (BAT) to prevent and/or control pollution of the environment. The IED has strengthened groundwater and soil protection instruments contained in its predecessor, the IPPC Directive (96/61/ EC, codified as 2008/1/EC) by requiring the establishment of a so called "baseline report" and periodic measurements of groundwater and soil status.

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:0J.C_.2014.136.01.0003.01.ENG

GEF GROUNDWATER GOVERNANCE PROJECT

Final project outputs being prepared

IAH's involvement in the GEF Groundwater Governance project continues. At present, a drafting team of Jac van der Gun, Stephen Foster, Stefano Burchi and Andrea Merla with the support of Frank van Steenbergen is working on the main outputs of the project, the Global Diagnostic, the Vision and the Framework for Action. The group has met several times since the middle of last year, and John Chilton attended a meeting of the drafting team and representatives of the project steering committee at IHE in Delft on 12 and 13 June. The team aims to have its drafting work completed in the next three months.

The first of these, the Diagnostic, draws together the findings of the earlier phases of the project, from the synthesis, the thematic papers and the regional consultations. This is intended to provide a sound basis of knowledge of the present state of the governance of groundwater and aquifers and to highlight examples where efforts to improve groundwater governance might be useful pointers to the future. The draft Vision is a very short document which draws on the Diagnostic to set out the main features which distinguish the governance of groundwater from broader water governance, and the most important underlying guiding principles for improved governance of groundwater. This is easier to write here than to do; setting out these principles succinctly so that they are specific to groundwater but still broad enough to embrace the global range of physical, economic and social settings is proving a tough task. Finally, the Framework for Action draws on both documents to provide a structured outline of the actions needed to achieve the Vision.

Thus, the Framework first provides guidance on what actions might be needed to improve understanding of the local or regional context within which governance of groundwater presently occurs and could be improved. This is followed by a section which sets out what is required to create a strong basis for governance, which make the essential connections to other sectors including agriculture, land use planning, uses of the subsurface space for storage and waste disposal, and with surface water. Further sections describe actions which could be needed to develop effective institutions and financing arrangements and ways in which priorities could be established for improving governance.

Finally, the Framework will set out some of the actions that the project partners themselves foresee in their own efforts to improve the governance of groundwater. As an IAH contribution, a session devoted to governance will take place at the Marrakech Congress, where it is planned to issue a Declaration or a Statement linking science with policy. As a follow up to the GEF project, a governance session is also planned for the IAH Rome Congress next year and, as reported elsewhere in this newsletter, the IAH Chapter in India is holding a national meeting on governance in August (http://iah.org/events/national-workshop-groundwater-governance-regulation). We will bring you further news of the project outputs and these events in due course.

JOHN CHILTON AND SHAMMY PURI

For more information, including free resources: http://www.groundwatergovernance.org

HYDROGEOLOGISTS WITHOUT BORDERS

You will have seen the report of the conference collaboration between IAH and Hydrogeologists Without Borders on page 14. Hydrogeologists Without Borders UK (HWB-UK) is an organisation of hydrogeologists and groundwater experts who provide pro bono support to humanitarian organisations, including ECHO, OFDA, UNICEF, Oxfam, CRS, EWB, MSF and Concern. HWB rely on volunteers donating their experience and time to complete the groundwater-related requests that arrive. Where possible, HWB encourages the use of local hydrogeological expertise; advising aid workers on what hydrogeological work should be carried out; linking aid workers with local hydrogeological expertise; drafting contracts; and evaluating local contractors work to determine whether the work carried out is of a professional standard. A link has been established with IAH to use our member network to find local, in-country hydrogeological expertise to undertake assignments for HWB-UK. Thanks to Tim Van Diik and Helen Culshaw, we are able to provide summaries of two recent assignments.

FIELD INVESTIGATIONS IN RAKHINE STATE, MYANMAR

In January 2014 Tim, a hydrogeologist at Matrix Solutions had the opportunity to travel to Rakhine State in Myanmar to conduct a hydrogeological field programme on behalf of HWB-UK and Oxfam GB. The site of concern was a camp for internally displaced persons housing approximately 1500 muslims who had fled from areas of ethnic tension. Work began with a desktop study to provide recommendations for the camp water supply, which comes from drilled boreholes, hand-dug wells and springs. Concerns included saltwater intrusion and ensuring sustainable water supplies during the lengthy dry season. After receiving the recommendations, Oxfam requested further help from HWB-UK in executing the field programme, which Tim was able to do at relatively short notice. Several days in Yangon preparing and meeting with Oxfam representatives were followed by ten days fieldwork with Oxfam staff and camp technicians at the coastal town of Kyauk Phyu where the camp is located. The programme comprised surveying, monitoring groundwater levels and water quality, drilling new boreholes, well development and borehole maintenance, as shown in the accompanying photos. The support provided by Oxfam staff and camp residents made the experience both productive and enjoyable, and a lot was achieved in a short time.

After the trip was complete, a summary report was prepared for Oxfam. The saline plume was found to be migrating from a paddy field previously used for salt production, rather than from the coastline. This knowledge was used to provide recommendations for locating new boreholes and for a pumping strategy. With the continued monitoring which was one of the recommendations, Tim certainly hopes the work will have a long-term positive impact.

DESK STUDY OF LUBANG ISLAND PUMPING TESTS

An email came from HWB-UK requesting help analyzing pumping test data. Having had some experience and with a bit of spare time on her hands, Helen, an IAH member and hydrogeologist at Golder Associates (UK) Ltd, decided this was something she could help with. HWB set up a small team and data arrived from Engineers without Borders (EWB) who were working with a Philippine-based NGO to provide an improved water supply from a well fed by a spring.

While another hydrogeologist John Wozniewicz undertook the analysis of the constant rate and recovery test results supplied by EWB, Helen started some desk study research and pulling together a short report. The well was located on Lubang Island in the Philippines, and so her first port



of call was the new Geological Society of London "Geofacets" platform to see if there were any geological maps of the island. Then in the absence of any holdings on this location, an internet search provided the next step.

Discovering a little bit about the likely geology of the island (Palaeozoic and Mesozoic metamorphic rocks), Helen was able to add to the basic information that EWB had provided about the well. The report was completed by providing a brief synopsis of the tests undertaken, a non technical summary of the analysis undertaken (the deconvolution method was used, which is less well known in the wider engineering world compared with analytical methods) and some discussion of the outcomes of the test in relation to the sustainability of the yield. Since the information available was limited to the pumping test undertaken we recommended monitoring performance to observe seasonal effects, pump efficiency and well operation. Water quality testing was recommended if the source was to be used for drinking water due to the location of the well next to paddy fields.

Having regularly volunteered outside of her main career (including as a Games Maker at the London 2012 Olympics), this was a chance to put Helen's hydrogeological skills to work in a project supporting sustainable development where it was most needed. Helen says that working remotely but as a team served the project very well once they had identified who should do which tasks and she would not hesitate to get involved in another similar activity for HWB.

CALL FOR SUPPORT

If you are a hydrogeological contractor or consultant working in a country where humanitarian organisations are developing groundwater resources, please send your details to HWB-UK so that we can add your company details to our register. If you are a groundwater expert who is able to donate time to supporting humanitarian projects then please join HWB-UK's growing membership.





Borehole and suction pump. Water is directed through a plastic pipe to tap stands in the camp, shown in the background.



Logging drilling samples during borehole drilling at the main borehole area, located near the camp entrance with military guard post in the background.



Drilling a new borehole by the sludging method in the main camp near a tapstand with water container queue.

India Newsletter and Conference

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A year ago we reported on the election of a new committee for the Indian National Chapter. Since then, the committee has been very active. Following the establishment of the national chapter website at www.iahindia.org reported in the last newsletter, the committee has now set up an electronic newsletter for members, and the January and April issues can be seen on the website. The one day conference on "Groundwater Governance and Regulation" will now take place on 23rd August at the India International Centre, and will be followed by the Annual General Meeting of the chapter. It is anticipated that Secretary General Shammy Puri will represent IAH Council at the conference. We are pleased to report that the committee is also making good progress in building up IAH membership in India (see page 24). **SECRETARIAT**

IAH India: http://www.iahindia.org



The December 2012 newsletter reported on the excellent IAH congress hosted by the Canadian National Chapter in Niagara Falls. We can now report that the congress made a healthy operating surplus which the national committee decided to share equally between their own funds and IAH centrally. As a result, 51,000 Canadian dollars (€35,000) were transferred in early 2014. This more than repaid the loan of €15,000 provided to support congress preparations, and we are very grateful to Grant Ferguson and his colleagues on the committee for this. The funds will help us to support future congresses by providing "start-up" loans in the same way (as we have since done for Marrakech) and by contributing to the cost of participation for IAH members. **SECRETARIAT**

IAH Canada: http://www.iah.ca/

Mexico New Committee Elected

We are happy to announce that the Mexican Chapter of IAH has a new committee. The new President of the Chapter is Miguel Rangel Medina of the Universidad de Sonora, the new Secretary is Elisabet Wehncke of the Universidad Autónoma del Estado de Morelos and the Treasurer is Maria Vicenta Estreller of the Universidad Autónoma del Estado de México.

Following the online election in May, the enthusiastic new committee took office from 16th June and is already planning its first meeting. The IAH Executive and Secretariat will continue to support the new committee as it takes up the challenge of building up the IAH membership in Mexico and establishing a programme of activities for the chapter. SECRETARIAT

IAH National Chapter Information: http://iah.org/groups/national-chapters

www.facebook.com/iah.org



Questions, comments or chapter news items? Email info@iah.org

Germany New Committee Elected

The German Chapter of IAH held its general meeting at the end of May during the 2014 conference of the German Association for Hydrogeology in Bayreuth. At this meeting a new chapter committee was elected:

- President: Professor Johannes Barth, GeoZentrum Nordbayern, Friedrich-Alexander-Universität Erlangen-Nürnberg, johannes.barth@fau.de
- Secretary and Vice-President: Dr. Judith Flügge, Gesellschaft für Anlagen und Reaktorsicherheit (GRS) mbH, Braunschweig, judith.fluegge@grs.de
- Treasurer: Dr. Christoph Neukum, Rheinisch-Westfaelische Technische Hochschule Aachen, neukum@lih. rwth-aachen.de

The Chapter (and the IAH Secretariat) would like to thank the former president, Thomas Himmelsbach of BGR Hannover for his long commitment and hard work running the German Chapter and for his support for the new steering committee. We would also like to thank the former treasurer Professor Roland Barthel (University of Gothenburg) for his involvement and dedication. The new committee is looking forward to its new duties and challenges and to fruitful cooperation with IAH Council and Executive.

DR. JUDITH FLÜGGE (GERMANY) AND IAH SECRETARIAT



Meeting of the German Chapter of IAH (from left to right): Will Struckmeier (Past President of IAH), Judith Flügge (new secretary of the German Chapter), Johannes Barth (new president of the German Chapter), Thomas Himmelsbach (former president of the German Chapter), Christoph Neukum (past secretary und new treasurer of the German Chapter)

IAH Germany: http://www.fh-dgg.de/iah.html

YOUR FLAG HERE!

No chapter for your country or region?

IAH is always keen to establish more chapters and it may be that we have other interested individuals in your country or region hoping to establish one. Recent country additions include Sweden and Russia, with more under discussion.

IAH provides full information and support to help guide you in the process. Chapters retain 10% of the IAH membership fee to help support their own activities, which include technical meetings, field visits and social events, and many even collect fees in local currency for the convenience of their members. National chapter committees are run on a voluntary basis by members and we are very grateful for their efforts. **SECRETARIAT**



Questions or comments? Email info@iah.org



NEW MEMBERS

A welcome to the following new members who joined our Association in the period 1 April - 30 June 2014:

ARGENTINA

Ms Maria Fernanda DECIMA Lic. Noelia SILEO

AUSTRALIA

Mick BETTANIN Joshua HOWELLS Dawit BERHANE Mr Clem HILL Lucy DU Cally SIBLEY Mr David WATSON Kane CHURCH Mr Bishnu R GAUTAM Mr Andrew HARRISON Mr Michael POLYCHRONOPOULOS Luiza K ROMANE Miss Terri ROTHNIE Behzad FATAHI Rebecca FRASER Mr Nik KONTOS Christine MCKNIGHT Toby GENILLARD Natalie O'ROURKE Mark ANDERSON Miss Claire KENT

BELGIUM

Yves MEYUS

BOTSWANA

Chakalisa CHILUME DEBSWANA DIAMOND COMPANY (c) Meipa KOOBOKILE Koketso RAKGOMO Kefentse KEIPEILE Lesego KGOTLHANG Obone MABOTE Thato MPHINYANE Dzikamiso CHIYAPO Kangangwani PHATSHWANE

BURUNDI Charles BAKUNDUKIZE CANADA Mr. Harry SAMBY GuoXiang LIU Jeff MELCHIN Helene PIFRARD Martin STAPINSKY Martin SUCHY Laura WEAVER Beiyan ZHANG Mr Jure (Georges) E. SIMUNDIC Ms. Jo-Ann ALDRIDGE Kelly ALI Thomas BAER Claude BERARD Marc-André BOURGAULT Michael BOWRON German CAJIGAS Gordon CHECK Jason CHEN Sheila CHERNYS Ihssan DAW00D Jean-Marc DEBATS John DRAGE **Mike FAIRBANKS Olivier FERLAND** Samuel FOUCHER Tom GRIMMINCK Jalil HASSAOUI Eric HODGINS Cate HYDFMAN Hamid KARIMIAM Keith LESARGE Abdelkabir MAQSOUD

Abdelkabir MAQSOUD Angelika MASOTTI Anja MORITZ Diane MYRAND Nevenka NAKEVSKA Craig NICHOL Mathieu NUTH Michel OUELLET Gregory PADUSENKO Silvain RAFINI Melanie RAYNAULD Hazen RUSSELL Ali SABIR Stephan SEJOURNE Mahsa SHAYAN Amandeep SINGH Gayle Soo CHAN Arnaud STERCKX Peter John THOMPSON Matt VANDERKOOY Hardwin ZHEN Nelson BERNAL Brendan CHRISTENSEN Daniel ARNOTT Ryan BJORNSEN Barry BROUWERS Paul CHIN Patrick LANDINE Michael LEMON MATRIX SOLUTIONS INC (BRESLAU) (c) John MCKEE Akin OWOJORI Steve SHIKAZE William ORR Mr Jonathan SOTTAS CHILF Mrs Elisabeth LICTEVOUT Mr Fernando LARA-GUERRERO Ivonne Silvana SALAS ROJAS

EGYPT Dr Raafat A A ABDELDAYEM

ETHIOPIA Gashaw SEMENEH

GERMANY

Dr. Birgit FRITZ-TAUTE Dr Stanislav KONCEBOVSKI Mr Bernard B AYUMU Dr. Catalin STEFAN

HUNGARY

Mr Marton PAPP

INDIA

Tapan CHAKRABORTY Sunita DEVI **B K GUPTA** Dr R C JAIN Arun KUMAR **Biswarup MAHAPATRA** Anoop NAGAR K C NAIK Dr Kshetra Mohan NAYAK Kavita SHEKHAR A K SINHA Mahesh SONKUSARE T VENKATAGIRI **R K VERMA** Sudam Charan BEHERA Mr Anirvan CHOUDHURY Mr.B. Jaya KUMAR Pradyumna Kumar MOHAPATRA Durga Pada PATI Mr Rahul BAKARE Dr D C JHARIYA

IRAN

Dr Mehrdad TAGHIAN Dr Heidar ZAREI

COTE D'IVOIRE Samuel KOUAKOU

Dr Sónia AMARO

Yadong JI

Jianjun ZHOU

Mr José Gómez BOMBARELLI

CHINA, PEOPLE'S REPUBLIC OF

IRAQ Prof. Emad Mohammed SALAH

IRELAND

Mr Nicholas WALL Mr Patrick MCREDMOND Ms Christina GERAGHTY

ISRAEL

Dr. Avihu BURG

ITALY

Dr Roberto PEDRON Mr Stefano CHIARUGI Carlo ALGHISI Cesare BAGOLINI Simone BARBIERI Luca BASSO Maurizio BERETTA Andrea BRAMBATI Andrea BRFDY Francesco CALZOLARO Alessandro CANTELLI Massimo CASTIGLIONI Massimo COMPAGNONI Filippo CONCONI SABBADINI Gaetano CONFORTO Nadia DE PIAZZA **Giuliano DONAERA** Federica FASSERA Simone FIUSSELLO Stefano FORTI Paolo GELCI Matteo GISOLO Mauro GUIDI Massimiliano KOVACS Carla LAURELLI Mr Oronzo A. LONGO Filippo LUCINI Mario LUNGHI Davide LUPI Alessandro MAGGI

Maurizio MARELLI Laura Maria MARIANI **Rosita MARICONTE** Marco MASSONE Massimo MEZZANZANICA Viola V OGGIONI Raffaele PIVA Marco PROVERBIO Luca RIGATO Dr. Angelica SASSI Simone SCARABELLI Angelo SCOTTI Stefano SESANA Daniele SILLA Gennaro A STEFANIA Angelo TUIA Bruno VACCARI Alberto VENEGONI Federico VERRI **Giancarlo VILLANI** Marcello ZAMPIERI Dr Giovanni PORTO Dr Adolfo MOTTOLA Mrs Lavinia COLASANTI Dr Alisia RUSSO Dr Matia MENICHINI Dr Giuseppe ONORATI Dr Vittorio PAOLUCCI

Matteo MALACALZA

JAPAN

Ms Midori MATSUNAGA

KENYA Salome Atieno LUANGA

KOREA, REPUBLIC OF Sung-Sik PARK Dr. Eunhee LEE

LEBANON Dr. Joanna DOUMMAR

MEXICO

Mr Martin ARGUETA HERNANDEZ Mrs Gloria ESPIRITU TLATEMPA Mario Alberto HERNÁNDEZ

MOZAMBIQUE Reinaldo DOMINGOS

NETHERLANDS, THE

Nienke ANSEMS Geert-Jan NIJSTEN IGRAC, International Groundwater Resources Assessment Centre (c) Friedemann SCHEIBLER Mr Hendrik MEUWESE Leon VAN HAMERSVELD

NIGERIA

Oluwaseun OLABODE Idowu Nurain AKANNI Cyril C MBACHU

NORWAY

Maj Gøril BÆVERFJORD Magne WOLD

RUSSIA Mr Yuri Gerasimovich BOGOMOLOV

SAUDI ARABIA Mr Heiko DIRKS

SOUTH AFRICA

Mr Albertus W C (Alkie) MARAIS Dr Jane TANNER

SPAIN

Joaquim SOLER SAGARRA Luis Andres GONZALEZ ROMERO Merce BOY ROURA María del Mar GARCÍA ALCARAZ Domitila V. VELASCO MANSILLA

SWITZERLAND

Guillaume GIANNI Jaouher KERROU Roger MEGROZ Adrain ROTH Dr Christian MOECK Dr Annukka LIPPONEN

UGANDA Mr. Titus DRALEKE

UNITED ARAB EMIRATES Mr Stephen FADEYI

UNITED KINGDOM Mr Kamran FAZAL

Mr Federico TROMBONI Mr Nicholas TYMKO Dr Stephen BUSS Mr Jimesh MISTRY Geoff BEALE

UNITED STATES OF AMERICA

Mr G. Thomas LAVANCHY John WALL Mr Joe LOVENITTI Joseph MANN A Elizabeth PERRY Mr Hussain ALFAIFI Mr. Steven HAMMETT Jeremy DOWLING

NB: Those marked (c) are new IAH corporate members.

IAH CONGRESS UPDATES

Morocco, 2014 host

Registration still open

Preparations are really moving ahead on several fronts and there is plenty still to do, with work focussed on the detailed setting out of the scientific programme and the planning of the mid- and post-congress field visits. At the time of writing, the Early Registration date has just passed, and registrations are still coming in. If you have not yet registered, you are urged to do so in order to take advantage of the good discount rates IAH has obtained from the Ryad Mogador Agdal Hotel on single, double and twin rooms.

Key presentations fixed

Following the general success in 2012 and 2013 of featuring invited keynote speakers in plenary sessions spread throughout the week, the 2014 organisers are doing something similar. Thus, the opening ceremony will be followed by strong "local" keynotes, giving the Marrakech region, Morocco national and broader Maghreb pictures of groundwater resource management, presented to illustrate the "challenges" of the congress title. These will be given respectively by Dr Naimi of the Agence du Bassin Hydraulique de Tensift (ABHT), the agency responsible for water in the Marrakech region, Dr Mohamed Ben Omar of the Direction de la Recherche et de la Planification de l'Eau (DRPE) of the Moroccan Ministry of Energy, Mines, Water and Environment and Dr Chehbouni of the Institut de Recherche et développement, (IRD), France.

Other invited speakers will take up other regional and global groundwater challenges during congress week. These are Professor Waleed Kkalil Al-Zubari from the Arabian Gulf University, Bahrain, Professor Richard Taylor of University College, London, Professor Jack Sharp from the University of Texas, Austin, Professor Ian Acworth of the University of New South Wales, Professor Richard Carter of Cranfield University, Dr Shafick Adams of the Water Research Commission of South Africa and Professor Marnik Vanclooster of the Catholic University of Louvain, Belgium. Supported by the NGWA, the schedule will also include Carlos Molano from Colombia, the 2014 McEllhiney Lecturer.

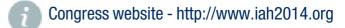


Congress programme

At the time of writing, the organising committee is working to finalise the programme for the week to accommodate the Association's AGM and Council meeting, an attractive range of short courses, meetings of commissions and networks, the ECHN programme and many others. Technical sessions will 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. Keep an eye on the congress website www.iah2014.org/ for further details of the programme as they appear.

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. 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



DATE FIXED FOR IAH ANNUAL GENERAL MEETING, 2014



Notice is given that the 2014 Annual General Meeting of the International Association of Hydrogeologists will be held in the Conference Centre of the Royal Hotel Mogador Agdal, Marrakech, Morocco on Tuesday 16th September from 18.15 to 19.30.

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

IAH EXECUTIVE



Italy, 2015 host

Our colleagues in the Italian National Chapter report excellent progress with preparations for the 42nd Congress of IAH in Rome in September 2015. The overall theme of "Hydrogeology: Back to the Future" will offer opportunities to build synergies between the worlds of research, international and local business, government institutions and international agencies involved in groundwater. The spirit of the congress title will combine previous experience with future tools and needs. We are pleased to report early confirmation of scientific support for the congress from UNESCO-IHP and the UN's Food and Agriculture Organisation (FAO). Having the latter's support in particular will provide a special focus on groundwater resources, food production and sustainable development. Under this overall theme, eight topics and issues have been established, for which a call for abstracts will open in October.

The organising committee already have a preliminary outline of the week's programme, which will include plenary and parallel sessions, a programme of precongress short courses, mid- and post-congress field visits, social events and a partner programme and the customary IAH events. An exciting innovation for Rome will be the introduction of e-poster sessions. The committee have already obtained substantial patronage from national institutions, and the IAH Executive and Secretariat will be helping them to seek international support and sponsorship.

At the time of writing, the second circular for the congress is being prepared and will be available by the time you receive this newsletter. You should put 13 to 18 September 2015 in your diaries now, and check the congress website at www.iah2015.org for further details of the topics, the programme, the key dates, the registration fees and much additional information. If you pre-register via this website, you will receive regular email updates about the congress. The congress committee will also have a very active presence at Marrakech to promote AQUA2015. We look forward to seeing you in Rome!

JOHN CHILTON AND THE 2015 CONGRESS ORGANISING COMMITTEE



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

2014

23 August- New Delhi, India

National Workshop on Groundwater Governance and Regulation Organised by The Indian National Committee of the International Association of Hydrogeologists. http://www.iahindia.org_____shekhar1023@yahoo.com

27-28 August– Lima, Peru

3rd Latin American Minewater Conference organised by Fleming Gulf. http://energy.fleminggulf.com/latam-mine-water-conference sonika.mendjoge@fleminggulf.com

31 August - 5 September – 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 – València, Spain

Il Congreso Ibérico de las Aguas Subterráneas Organised by Spanish Chapter of AIH, in collaboration with Portuguese Chapter, and Universitat Politècnica de 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 September 2014 – Tomar, Portugal

3rd International Conference on Ecohydrology, Soil and Climate Change, EcoHCC'14 Organised by Polytcehnic Institute of Tomar, University of Trás-os-Montes and Alto Douro, Lusófona University. http://www.ecohcc.ipt.pt ecohcc@ipt.pt

15-19 September 2014 – Marrakech, Morocco

Groundwater: Challenges and Strategies - IAH 41st Congress http://www.iah2014.org/

21-26 September 2014 – Lisbon, Portugal IWA World Water Congress & Exhibition 2014 - Shaping our water future http://www.iwa2014lisbon.org/

8-10 October 2014 – Thessaloniki, Greece

10th International Hydrogeological Congress with emphasis on Groundwater depended ecosystems http://www.hydrogeologycongress.gr/

15-16 October 2014 – California, USA

23rd Annual Conference and Meeting, Groundwater Resources Association of California http://www.grac.org/ skline@grac.org

10-13 November 2014 - Porto Alegre, Brazil

First International Conference on Fractured Rock Hydrogeology of Central and South America Sponsored by International Association of Hydrogeologists (IAH), IAH Commission on Fractured Rocks Hydrogeology, Hydraulic Research Institute, Federal University of Rio Grande do Sul and ALHSUD - Associación Lationoamericana de Hidrologia Subterránea para el Desarrollo. Abstracts invited. http://frhgconference2014.org/



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