

DECEMBER 2021

IAH NEWS



IAH PROVIDES SUPPORT

2021 IAH Australia has supported states' initiatives, including support for over 15 online and in-person events. We've engaged with stake-holders and supported initiatives such as the Nepalese groundwater modelling initiative and The Groundwater Project.

In 2022 IAH Australia will be busy with the AGC2022 conference in Perth.

We hope to see you all in Perth from 21 to 23 November 2022.

Outgoing National President!

Our current National President Ian Brandes de Roos has announced he is not seeking re-election at the end of this year. His position will be filled at the next Annual General Meeting to be held via Teams on Thursday 20 January. Kelly Jane-Wallis (IAH QLD Chair) has nominated for 2022.

The current national committee would like to thank Ian for his drive and motivation over the past three years and cracking the whip to keep us in line to meet our deadlines.

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RE-ELECTIONS

Ian has presided over an exciting period for IAH that has also come with many challenges. One of the highlights was the Australasian Groundwater Conference in 2019 (AGC 2019) held in Brisbane in conjunction with National Centre for Groundwater Research and Technology (NCGRT) and IAH Queensland, which was a huge success with over 600 attendees.

Unfortunately, AGC 2021 could not go ahead in Perth due to covid restrictions and has been postponed until November 2022. While at the time this was a difficult decision to make and had to be made early enough to minimise financial and reputation losses, it proved to be without a doubt the right decision.

One of Ian's major achievements has been to promote better communication between the State's branches and the National Chapter, as well as co-ordinating day-to-day business, IAH communications and was a big advocate for online Tech Talks as the pandemic Impacted our social gatherings.

We thank you Ian for your efforts and energy over the past three years.



TECH TALKS

Our Tech Talks have become an integral part of IAH Australia as we continue to deal with social distancing and location restrictions. Here Is a few comments from our members who have enjoyed the value of watching our Live Events.

"The use of virtual technical presentations has provided opportunities for many more people to attend including remote workers who wouldn't usually be able to attend and others from interstate." - Michael Knight

"IAH NSW will be taking these thoughts forward into 2022. We'll continue to offer hybrid meetings. We'll be hoping to hold a great many more face-to-face meetings and we'll be pursuing opportunities to sponsor an indigenous STEM student next year." - Richard Cresswell



TIME CAPSULE RECORDING

Wolfgang being interviewed (Wolfgang centre). Take your shoes off at the front door.

Wolfgang Dreybrodt and karst hydrogeology

How did you get involved in hydrogeology? How do you want to be remembered for your contributions? The stories we tell are important and IAH's time capsule (timecapsule.iah.org) captures these insights. The latest is Wolfgang Dreybrodt (Emeritus Professor, University of Bremen).

Wolfgang had freedom as a child in East Germany, playing in abandoned quarries and exploring.

He studied solid states physics, where lectures were heavily politicised: there were rival lectures for left-wing and right-wing students. It felt oppressive. To escape he took his wife to a gypsum cave, where he became curious about karst dynamics, for which there were no adequate geochemical models.

It's an inspiring story of the pursuit of a science that was new to him. The story includes a three-month stint in hospital due to a spinal injury from a fall in a cave. He used the time in hospital to write papers.

"When we were young we were free. After the war, our parents were engaged in surviving and we had everything of freedom."

There's an Australian link too – he collaborated with Prof. Georg Kaufmann during Georg's time at Australian National University.

Wolfgang hasn't retired. Does age make him closed to new insights? Listen to him speak on science and ethics (skip forward to the 1:04 hour mark if you want) and you'll hear true insights from someone that has lived through the digital revolution.

What he says more about its impact on science and ethics is something we should all be aware of.

AROUND THE WORLD....



Orange County Water District MAR scheme

ISMAR11

Orange County California

11-15 April 2022

In 2022 the International Symposium on Managed Aquifer Recharge (ISMAR) will reach its 11th year. Visit the website (ismar11.net) to see the conference program and register.

Key speakers include David Pyne (author of Groundwater Recharge and Wells), David Kreamer (IAH President) and Australia's very own Russell Martin.

ISMAR11 will include a tour of the Orange County Water District's world-renowned MAR project.





Mark Hassam

SA MEMBER

Where do you work and what is your role?

I have been working in the Site Contamination Branch of the SA EPA as an adviser in hydrogeology for the past 15 years. I was a late starter in the hydrogeology field having previously worked in the finance sector.

What are your other interests and hobbies?

I am fortunate to have quite a variety of interests ranging from hiking in the Adelaide Hills to being a member of the Viking / Medieval Living history club. Until the pandemic, I enjoyed travelling the world with a special interest in visiting volcanoes. Clearly this activity is currently 'dormant', but hopefully can be resumed in the future. I'm also into reading & writing historical fiction.

What sort of problems do you like to solve?

What I find rewarding is determining whether Adelaide's watertable aquifers (which are impacted by contaminants) are likely to migrate to sensitive receiving environments.

What do you see are the emerging trends in hydrogeology?

I think there will increasing interest in groundwater as a potential reliable solution to the drying of the environment due to climate change. Also there will be increased scrutiny of emerging contaminants of concern such as micro/nano plastic & pharmaceuticals in groundwater. PFAS is another chemical of increasing concern.

How do you make a boundary between work and non-work?

I make a point of not looking at work emails or phone messages after hours.

Advice to early career hydrogeologists

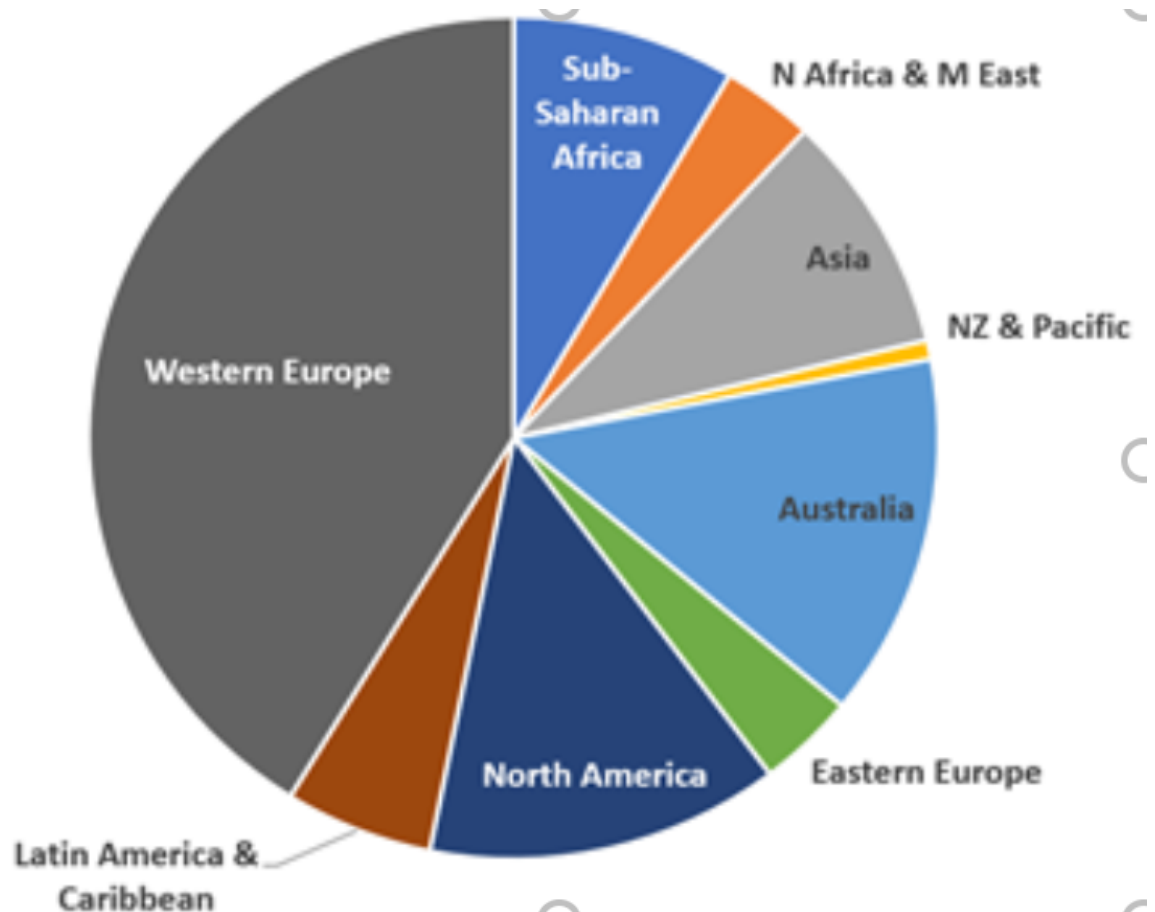
I have a few suggestions. Firstly, continue to increase your understanding and knowledge of the field. This can be done by attend conferences or specialised training courses which can also bring benefits through networking and meeting 'kindred spirits'. Secondly, I would recommend keeping up to date with the latest computer applications/packages.

If you weren't a hydrogeologist?

Without a doubt, History Professor of Medieval Studies (spending my days decoding historical manuscripts). 5

AUSTRALIA - HOME OF THE HYDRO

IAH International membership is currently about 4113. Australia makes up 0.3% of the world population but 14% of IAH International membership!



2022: The year of groundwater



The theme of the United Nations World Water Day (worldwaterday.org) in 2022 is 'Groundwater: Making the invisible visible'. It's an opportunity for Australia's hydrogeology community to celebrate and communicate groundwater's vital role in maintaining our environment and community. Let us know (secretariat@iah.org.au) how we can partner to promote sustainable groundwater management for Australia's future.

NETWORKING

NSW END OF YEAR SOCIAL EVENT



Some of the attendees listening to Bradley on the big screen at WSP in Sydney. Note Michael Knight and Don Woolley in the front row

On a pleasant summer Tuesday evening the NSW Chapter held the year's last technical talk and end of year social event at the premises of the WSP Sydney office. Despite public transport disruption caused by industrial action the event was well attended with 21 present in person and 29 virtual attendees.

Our technical talk was presented virtually by Associate Professor Bradley Moggridge from Nggunawal Country where he is completing his PhD at the University of Canberra. Brad, a proud Murri from the Kamilaroi Nation, provided a fascinating and inspirational yarn about aboriginal people and groundwater. His talk was centred around his research and recommendations about the interaction of aboriginal people and the springs of the Great Artesian Basin and broadened out to discuss the important connection aboriginal people have with groundwater, the cultural values of groundwater and the role of groundwater in their art, spirituality and oral history. Brad made the comment that the aboriginal knowledge gained and passed down over tens of thousands of years is still not used, or appreciated, in our current society and legislation.

This is slowly changing and parts of Brad's Master's thesis is now included in the Australian school curriculum in a Year 10 fire and water module and is gradually being disseminated up through universities and agencies. Brad said he was particularly proud that, at the 2019 Australasian Groundwater Conference held in Brisbane, a session on Indigenous Groundwater Values and Connections was held for the first time and produced the conference's "best paper" and is hoping that this session will be continued at the next AGC scheduled to be held in Perth next year.

Over a few beers and glasses of wine, a few comments were overheard, that we'd like to share:

Katarina David – Despite the problems posed by Covid this year the NSW Chapter still managed to meet twice in person this year, first for the presentation given by Emeritus Professor Ian Acworth in May and the latest December event presented by Associate Professor Bradley Moggridge.

Angus McFarlane – Following on from Bradley's presentation there has to be an opportunity for the IAH to provide funding for aboriginal groundwater education programs and training opportunities.

NETWORKING



QLD END OF YEAR EVENT

IAH QLD had a fantastic end of year event at the beginning of December. Congratulations to Yuanyan Teng and Valerii Quici who were recognised as outstanding students by their professors Lucy Reading and Harald Hofmann and won the "Dr Wesley Burrows Hydrogeology Student Prize".

Thank you to Claire Kent and Brent Usher for presenting the awards and to Klohn Crippen Berger for their sponsorship. As we wrap up 2021 and all that goes with it.

IAH QLD wishes you a happy and safe festive season. See you in 2022 for a great line up of events and tech talks!

LEFT: Brent Usher presenting Valerii Quici's award



CLAIRE KENT PRESENTING YUANYAN TENG'S AWARD

IAH MENTORING SCHEME

IAH Australia is utilising IAH's overarching international mentoring scheme to support IAH members. Any IAH member (mentee, mentor) may apply: (iah.org/education/professionals/mentoring).

Already a mentor or mentee? Let us know your experience (secretariat@iah.org.au) and help IAH communicate and refine the mentoring scheme.