

Summary of Nominations for Co-Chairs of IAH Commission on MAR

Three nominations have been received for the positions of Co-chair of IAH Commission on Managing Aquifer Recharge. Those elected will have a tenure from 2019-2022 (ISMAR10 to ISMAR11).

1. **Enrique Fernández Escalante** (seconded by Luis Martínez Cortina)
2. **Catalin Stefan** (seconded by Russell Martin)
3. **Yan Zheng** (seconded by Weiping Wang)



Enrique Fernández Escalante



Catalin Stefan



Yan Zheng

All three may be elected at the IAH-MAR Plenary at ISMAR10 on 22 May 2019. The co-chairs leading up to ISMAR10 are Peter Dillon (2001-retiring 2019), Weiping Wang (2012-retiring 2019) and Enrique Fernández Escalante (since 2014), have found that having three co-chairs helps to create the connections, dialog and dynamism for IAH-MAR to be an effective entity.

Enrique, a current co-chair, has also led a MAR to MARKET working group and convened ISMAR10. Since 2015 **Catalin** Stefan has led the IAH-MAR Working Group on Global Inventory of MAR, in a close partnership with IGRAC, that produced the most read paper on MAR. Since 2013 **Yan** Zheng has led the IAH-MAR Working Group on MAR for Sustainable Development.

For those interested in leadership roles in IAH-MAR there are an unlimited number available for those who have a passion to produce something new and constructive as a collective that in consultation with co-chairs may become an IAH-MAR Working Group, or to initiate a regional community of practice to advance the contribution of MAR to sustainable development in their country, which may then be recognised as an IAH-MAR Network.

Further information on the nominees follows.

Enrique Fernández Escalante:

Email: efernan6@tragsa.es

Location: Madrid, Spain

Employment: TRAGSA (Empresa de Transformación Agraria) as R&D Subdirector Special.



Enrique is an Industrial Doctor with 29 years experience specializing in hydrogeology in and Integrated Water Resources Management, Environmental Hydrogeology, and Managed Aquifer Recharge. He has worked in cooperative projects of the WB, IAEA and ADB (11 missions to date). He has participated in R&D projects on Managed Aquifer Recharge (RECACUIF, DINA-MAR, MARSOL, MARSoluT), and reviewed six projects for the European Commission, as well as annually for Spanish National SEPI call. He was an Associated Lecturer for the Complutense University of Madrid, and currently teaches in the UPM Masters program in IWRM. He considers he has a good balance between theory and practice, academia and industry. He has extensive experience in applied projects including large international projects in more than 10 countries. His CV appears as a separate document on the IAH-MAR web site.

Aims: I apply to renew my IAM MAR Commission co-chair position, with the following motivations and commitments:

- 1- To keep disseminating the advantages of MAR technique.
- 2- To keep cooperating in capacitation activities and lending a hand to combat climate change adverse impacts from the aquifers.
- 3- Helping interested people to develop and refine activities to advance MAR
- 4- Helping in the development of ISMAR Symposia.
- 5- Ensuring that there will be refereed publications about MAR from different platforms.
- 6- Seeking to maximise international benefits of the IAH MAR Commission, taking particular account of developing countries.
- 7- Maintaining the DINA-MAR web site, sister site of IAH MAR Commission one.
- 8- Sending around occasional emails to the list with relevant news.
- 9- Convening plenary sessions of IAH-MAR at ISMARs, IAH Congresses at as many other relevant conferences as possible to widen connections and advance activities.
- 10- Writing letters of support to those who request it for MAR-related research proposals (offering IAH-MAR communication channels to disseminate outcomes to a very relevant international audience).
- 11- Contacting networks of the commission and keeping them engaged.
- 12- Liaising with organisations to maximise the achievement of objectives of the IAH MAR Commission.
- 13- Preparing or helping to prepare annual reports on IAH-MAR activities and newsletters.
- 14- Think about new ways to enhance MAR techniques to enhance its implantation in current IWRM schemes at International level, and especially within Europe and South America.

Catalin Stefan

Email: catalin.stefan@tu-dresden.de

Location: Dresden, Germany

Employment: Faculty of Environmental Science of Technische Universität Dresden (TUD) Germany as a research associate, and leader of the INOWAS group



Catalin's professional background is in Civil Engineering and he holds a PhD from TUD in Environmental Sciences since 2007. Since 2014 he has led the international group 'INOWAS' that includes early-career researchers, mostly PhD and postgraduate students (in total 29 employed researchers and scholarship holders). His research with the INOWAS group aims at two goals: a) understanding the temporal and spatial variability of processes occurring during MAR, and b) developing simulation tools for planning and optimization of MAR schemes (more info here: <https://tu-dresden.de/uw/inowas>).

Aims: If elected as co-chair of the IAH Commission on MAR I intend to dedicate all my efforts to the further promotion of MAR along the following lines of action:

- a) supporting the urban water utilities towards digitalization and the construction of 'digital tweens' of their systems;
- b) encouraging and coordinating the transfer of best-practices in MAR for agriculture (especially in Latin America and Asia) using the existing network of international cooperation agencies;
- c) exploring the development of emerging MAR technologies, i.e. subsurface storage of desalinated water or adequately treated wastewater (for example in MENA region);
- d) establishing and leading a dynamic international network of motivated early-career researchers on MAR; and last but not least:
- e) coordinating and contributing to academic and research activities on MAR, including training and capacity development.

Yan Zheng

Email: yan.zheng@sustech.edu.cn

Location: Shenzhen, China

Employment: Chair Professor in the School of Environmental Science and Engineering, Southern University of Science and Technology (SUSTech) since 2016, and the Associate Director, Office of Research since 2017.



Before joining SUSTech, Dr. Yan Zheng held tenured faculty appointments at the City University of New York as a Professor in Earth and Environmental Sciences, in Chemistry and in Public Health. She obtained her PhD from Columbia University in 1999. She was the Director of School of Earth and Environmental Sciences, Queens College, City University of New York between 2007 and 2009. She was a water and sanitation specialist with UNICEF Bangladesh between December 2009 and 2011. In 2014 she was appointed a Chair Professor at the College of Engineering, Peking University. She was the President of the International Association for Advancement of Chinese Earth Sciences. Currently, she serves as an Associate Editor for Water Resources Research and leads the IAH-MAR Commission's sustainability working group.

Professor Zheng is recognized for her multi-disciplinary research that contributed to the reduction of exposure to arsenic in private well waters in Bangladesh, China and USA. She has published more than 100 peer reviewed journal articles (Google Scholar citation > 7000, h-index 43) in areas including geochemistry, hydrogeology, chemical oceanography, environmental health and policy.

Professor Zheng was elected a fellow of the Geological Society of America in 2010. Her CV and more details on her intended contribution as a co-chair appear as separate documents on the IAH-MAR web site.

Goal: To facilitate an increase in the percentage of MAR of current global groundwater use from its current 2.4% to 5% by 2030.

Approach:

- 1) Help interested people to develop and refine activities to advance MAR based on my own growth experience as a working group leader.
- 2) Apply my considerable editorial experience to ensure refereed publications emerging from ISMARs, where possible with open access, and help select editors and journals as required.
- 3) Apply my considerable experience in authoring and producing United Nation's publications to explore non-traditional yet credible publication channels including IAH-MAR website.
- 4) Promote MAR among hydrogeologists, hydrologists and water professionals by organizing and chairing sessions in ISMAR, IAH, AGU etc conferences
- 5) Apply my considerable mentoring experience to promote human capacity building among young professionals especially from developing countries, with UNESCO support.
- 6) Explore new ways to promote MAR by engaging a wider range of stakeholders.