

Dear Ladies and Gentlemen, good morning!

Please, consult some MAR news for 2022 September, keeping the motion...

IAH MAR Commission Newsletter. 2022 September

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IGWC 2022. Roorkee, India, 2nd to 4th November 2022

UN-Water Summit on groundwater. Paris, 7th and 8th December 2022

AGU. Advances in managed aquifer recharge for groundwater sustainability. 12-16 December 2022

First Thailand Groundwater Symposium, 22th to 24th August 2022. Important MAR results

Recorded Webinar. Take it to The (Water) Bank: Ensuring Regional Water Supply reliability

2022 World Water Week in Stockholm, Aug 23 - Sept 1

The IWA World Water Congress & Exhibition 2022. Sep. 12nd – 15th

Peter Dillon has been named the 2022 Recipient of the NGWA M. King Hubbert Award

MAR in mining. Information request

Whatsapp group on Aquifer Recharge Management

Previous IAH-MAR Newsletters and IAH-MAR Commission on Twitter

IAH-MAR Commission's sister Web sites and Linked in groups on MAR

11st International Symposium on Managed Aquifer Recharge, ISMAR 11. MORE MATERIALS AVAILABLE FOR THE MAR COMMUNITY!

The 11ST International Symposium on Managed Aquifer Recharge (ISMAR 11), entitled ***“Managed aquifer recharge: A key to sustainability”*** has provided plenty of results. Most of them may be consulted in GRAC website and in our IAH MAR repo.

Videos and slides of the presentations (GRAC Website):

<https://www.grac.org/ismar-speaker-presentations/>

The section “ISMAR” of our website, <https://recharge.iah.org/ismar/ismar11>, congregates some materials produced by the organizers and a new abstract book, assembled by IAH-MAR co-chairs and ISMAR 11 organizers.

In addition, the collection of slides will be under the custody of IAH-MAR co-chairs for general access in the far future. In case your slides are not in the website, please send us for the future repository (dinamar@tragsa.es).

Results:

ISMAR 11 draft program <https://recharge.iah.org/files/2022/08/ISMAR-Draft-Program.pdf>

ISMAR-11-onsite-guide https://recharge.iah.org/files/2022/08/ISMAR-11-onsite-guide_c.pdf

ISMAR 11 abstract book (160 pg) <https://recharge.iah.org/files/2022/09/ISMAR11-abstracts-book.pdf>


ISMAR 11 presentations and videos (external link) <https://www.grac.org/ismar-speaker-presentations/>

P-ISMAR 11 book (external link to sister site)

<https://dinamar.tragsa.es/file.axd?file=/PDFS/P-ISMAR-11.pdf>

ISMAR-11 field trips <https://recharge.iah.org/files/2022/08/ISMAR-11-Field-Trips2.pdf>

IAH Commission on
Managing Aquifer Recharge


International Association of
Hydrogeologists

WELCOME ABOUT THE COMMISSION EVENTS WORKING GROUPS COMMUNITIES COLLABORATIONS RESOURCES ISMAR

ISMAR11

11-15 April 2022, Long Beach, California, USA

“Managed Aquifer Recharge. A key to sustainability”

ISMAR 11 included 3 pre-conference workshops, keynote speakers, two days of multi-track technical sessions, the Herman Bouwer Awards luncheon, post-conference field trips, post conference geophysics workshop, networking, socializing, and networking opportunities.

Some results:

ISMAR 11 draft program <https://recharge.iah.org/files/2022/08/ISMAR-Draft-Program.pdf>

ISMAR-11-onsite-guide https://recharge.iah.org/files/2022/08/ISMAR-11-onsite-guide_c.pdf

ISMAR 11 abstract book <https://recharge.iah.org/files/2022/09/ISMAR11-abstracts-book.pdf>

ISMAR 11 presentations and videos (external link) <https://www.grac.org/ismar-speaker-presentations/>

P-ISMAR 11 book (external link to sister site) <https://dinamar.tragsa.es/file.axd?file=/PDFS/P-ISMAR-11.pdf>

ISMAR-11 field trips <https://recharge.iah.org/files/2022/08/ISMAR-11-Field-Trips2.pdf>

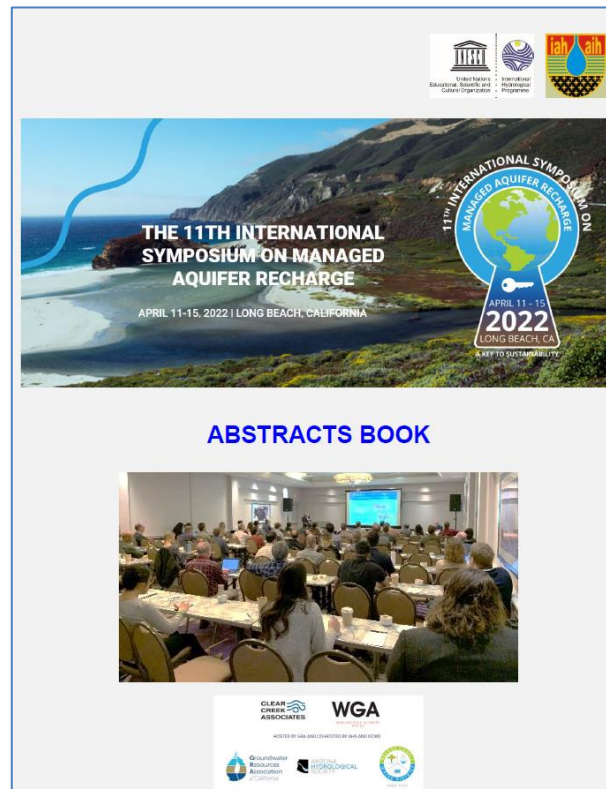
Once again, we thank ISMAR 11 organizers their effort for the MAR community.

NEW MAR PUBLICATIONS

ISMAR 11 abstract book

The book has been assembled by IAH-MAR co-chairs, on behalf of ISMAR 11 organizers and ISMAR initial institutions (IAH, UNESCO, ASCE) for the MAR Community.

After requesting missed abstracts to authors (one by one), only five were not received. Thank you to all the participants!!



ISMAR 11 abstract book (160 pg): <https://recharge.iah.org/files/2022/09/ISMAR11-abstracts-book.pdf>

Managed Aquifer Recharge. A key to sustainability. Journal Water special issue. Call to action! Deadline Nov. 15th

Selected papers on MAR, specially presented at ISMAR 11 will be published in a Special Issue of the open-access journal WATER, continuing the tradition from previous symposia, including ISMAR 8 and ISMAR 10.

EVERYONE IS INVITED TO SUBMIT! Deadline November 15th.

A new paper has been submitted during the last month, and many others are coming... https://www.mdpi.com/journal/water/special_issues/Aquifer_Recharge.

Guest editors:

Enrique Fernandez Escalante (Spain)

Catalin Stefan (Germany)

Christopher J. Brown (USA)

June Mirecki (USA)



Special Issue "Managed Aquifer Recharge: A key to Sustainability"

- Print Special Issue Flyer
- Special Issue Editors
- Special Issue Information
- Keywords
- Published Papers

A special issue of *Water* (ISSN 2073-4441). This special issue belongs to the section "Water Resources Management, Policy and Governance".

Deadline for manuscript submissions: 15 September 2022.

Share This Special Issue

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Special Issue Editors

Dr. Enrique Fernández Escalante E-Mail Website SciProfiles
Guest Editor
Tragsa R&D, UPM Lecturer, WB Consultant, Co-Chair IAH MAR Commission, Madrid, Spain
Interests: WRM, hydrogeology, technical solutions for water management; design and construction criteria. Special issues, Collections and Topics in MDPI journals

Dr. Catalin Stefan E-Mail Website SciProfiles
Guest Editor
Research Group INOVAS, Department of Hydrosiences, Technische Universität Dresden, 01069 Dresden, Germany
Interests: soil aquifer treatment (SAT), managed aquifer recharge (MAR)

Dr. Christopher J. Brown E-Mail Website
Guest Editor
School of Engineering, University of North Florida, Jacksonville, FL, USA
Interests: groundwater hydrology; surface water hydraulics; geotechnical engineering; dam safety

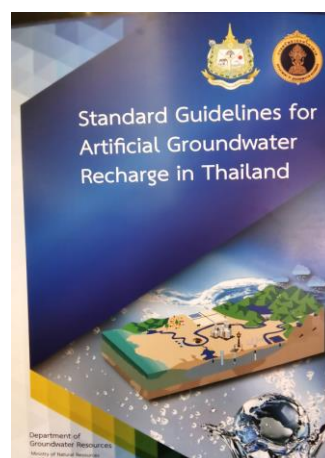
Dr. June Mirecki E-Mail Website
Guest Editor
U.S. Army Corps of Engineers-Jacksonville District, Jacksonville, FL, USA
Interests: groundwater geochemistry; geochemical modeling; groundwater quality; water-rock interactions

UPDATED CITESCORE (2021 SCOPUS DATA) OF 4.8.

Publishing cost: 50% of APCs exposed in the website.

Standard Guidelines for artificial groundwater recharge in Thailand

We have heard of this recent publication but additional information is expected from the authors. We'll appreciate more details, please.



Please, consult future newsletters for more info.

MAR-RELATED CONFERENCES AND SEMINARS

49th IAH Congress. Wuhan, China. 2022 September 18th to 23th

The IAH (International Association of Hydrogeologists) Congress bring the hydrogeological community together to share ideas, experiences and latest advancements in this field as well as supporting, training and encouraging early career colleagues.



Session 15: Managed Aquifer Recharge. Program:

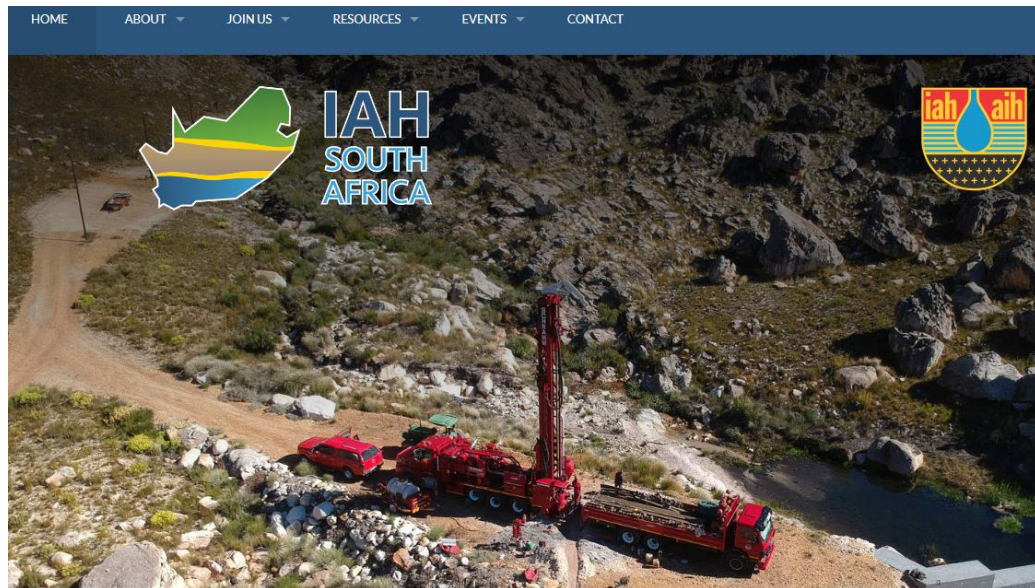
Host	Speaker	Local Time	Country	Title
Yan Zheng	Sharon Megdal	22:00-22:20	(United States)	Using MAR to advance water policy goals in semi-arid Arizona, USA: What have we learned from 30 years of experience?
	Peter Dillon	15:20-15:40	Australia	Overview of water resources management policies to harness and encourage MAR to sustain water supplies
	Yan Zheng	13:40-13:55	(China)	Managed Aquifer Recharge in North China Plain: Assessment of Groundwater Balance and Emerging Contaminant Risks
	Yasong Li	13:55-14:10	(China)	A Case Study of Evaluation and Simulation of Groundwater Recharge Suitability in the North China Plain
	Wensi Guo	14:10-14:25	(China)	Assessment of Managed Aquifer Recharge Potential in the Baoding Plain through Distributed Hydrological Modelling with Spatially Resolved Hydrostratigraphy
Catalin Stefan	Hongkai Li	14:25-14:40	(China)	Impacts of Heterogeneity on Aquifer Storage and Recovery in Saline Aquifers
	Joanne Vanderzalm	17:00-17:15	Australia	Managing water quality in MAR: when to consider a qualitative, prescriptive or risk-based approach
	Ruijuan Cui	15:15-15:30	(China)	Effect of Fe on biological clogging in porous media: implications for managed aquifer recharge
	Zsóka Szabó	9:30-9:45	(Se Hungary)	Involvement of groundwater table inclination in nature-based GDE replenishment
	Juanfen Chai	15:45-16:00	(China)	Decreased levels and ecological risks of disinfection by-product chloroform in a field-scale artificial groundwater recharge project by colloid supplement
	Jana Sallwey	10:00-10:15	(Germany)	Capacity development on urban groundwater systems in Kazakhstan through MARPro, a serious game for managed aquifer recharge
	Haritha V K	13:45-14:00	(India)	Behavior of Unsaturated Hydraulic Conductivity to Air Entrapment and Soil Ventilation During Infiltration in a Laboratory Sand Column
	Abdalkarim Gharbia	10:30-10:45	(Hungary)	Simulation of Heavy Metals Fate in Quartz Sand Bed Column

More details on the IAH 2022 website: <https://www.iah2022.com/>

Thank you Drs. Yan Zheng and Catalin Stefan + IAH 2022 organizers for the updated program.

IAH-SA virtual conference. 2022 September 13th to 15th. MAR presentations in session's day 2 and day 3

The IAH-SA is pleased to announce a 3 day Virtual Conference (Two sessions per day 9am to 10.40am and 11.10am to 12.40am) where all current and very recently completed research in the field of hydrogeology is going to be presented. All the academic institutions across Southern Africa will be represented. The objective is really to ensure there is communication across all those involved In Groundwater research and to ensure there is cross pollination of ideas and sharing of challenges and advances. It's also a critical opportunity for those in consulting; the groundwater industry and local.



Program: <https://iah.org.za/files/2022/08/PRELIMINARY-PROGRAMME-IAHSA-VIRTUAL-CONFERENCE-Sept-2022.pdf>



Thank you Dr. Matthys Dippenaar for reporting.

Rural Water and Food Security Project. Final meeting

You are kindly invited to join the (probably) last meeting of the Rural Water and Food Security project, which will close by end of 2022.

The PI RURAL meeting takes place Wednesday 14th September 11:00-12:30 CET at Bella Sky Hotel (Room 181) and will be transmitted on-line with simultaneous translation into Chinese and English.

Please register at <https://da.surveymonkey.com/r/XTBKDHN> to receive the link to the on-line meeting.

PI RURAL is part of the China Europe Water Platform co-funded by the EU Partnership Instrument and the EU and Chinese Partners.

Rural Water and Food Security (PI RURAL), Lot 2 – Practices, Policies, Achievements
Wednesday 14th September, Bella Sky Hotel, Room 181



PI RURAL has addressed the interface of sustainable groundwater management and food security in dialogue seminars and webinars, field visits, thematic studies and exchange visits to China and Europe by EU and Chinese partners.

Seminar program

- 11:00 Opening speech. **Director Jin Hai**, International Cooperation Centre, Ministry of Water Resources of China
- 11:05 PI RURAL – an EU-China co-creative partnership initiative on sustainable groundwater management, use and protection, outputs and outcomes. **PI RURAL Project Manager Bjørn Kaare Jensen**, Geological Survey of Denmark and Greenland (GEUS)
- 11:15 Groundwater overexploitation in the North China Plain: A Path to Sustainability. **Professor Wolfgang Kinzelbach**, ETH Zürich (on-line)
- 11:25 Water saving irrigation. Associate **Professor Finn Plauborg**, Aarhus University (AU), Assistant Professor Kiril Manevski, Aarhus University and Professor Li Fulin, Water Research Institute of Shandong Province.
- 11:35 Groundwater quality monitoring and data storage. **Senior Researcher Lærke Thorling**, GEUS and Dr Chen Huawei, Water Research Institute of Shandong Province (WRISD) (on-line)
- 11:45 Economic and financial gains by reallocating water from irrigated agriculture to urban and industrial supply. **Dr Yao Jingwei**, Yellow River Institute of Hydrological Research and Professor Julio Berbel, University of Cordoba, et. al.
- 11:55 Blue Control water treatment plant operating system. **Director Gert Vesterlund**, Blue Control
- 12:05 Groundwater: TEM geophysics for groundwater mapping and quantification. **Assistant Professor Denys Grombacher**, Aarhus University (on-line)
- 12:15 Policy dialogues and recommendations on sustainable groundwater management. **Project Manager Lars Skov Andersen**, China Resources Management
- 12:25 Closing remarks.

Reports and presentations from PI RURAL policy events 2016-2022 will be available 01 October 2022 at: <Link follows>

The session will present a cross-section of project activities, results and recommendations on groundwater management, use and protection.

We shall deal with groundwater survey and mapping, monitoring and data storage, impacts of overexploitation as well as means and technologies to minimise impact or even replenish depleted aquifers, and a range of approaches to protect, mitigate or remediate groundwater pollution.

In the UN Year dedicated to "Groundwater: Making the invisible, visible" we are particularly proud to present the geophysical tools, which are current state-of-art making groundwater visible to the World as well as modern awareness raising games and digital displays making groundwater resources and levels visible to farmers at village level.

We may also connect with Sustainable Development Goal 6 touching on Community-managed Groundwater based Rural Water Supply as well as Nature-based Village-level Wastewater Treatment.

Thank you Dr. Lars Skov Andersen for reporting.

MAR presentation organized by Funcagua Guatemala. September 22th, 16 h Centroamérica (23:59 h CEST) (In Spanish)

La innovación en la gestión hídrica como clave del desarrollo rural. MAR y SAT-MAR en el acuífero Los Arenales, Castilla y León. España.

More info will be provided shortly at Funcagua website:

<https://funcagua.org.gt/eventos/>



PRIMA projects webinar: "Solutions and challenges for sustainable water management in the Mediterranean basin". 2022 September 29th

The use of **non-conventional water resources** and **sustainable water management** through **smart agricultura** will be among the topics that will be discussed during the



webinar entitled “Solutions and challenges for sustainable water management in the Mediterranean basin”, organised by three innovative [PRIMA](#) projects: [Fit4Reuse](#), [DSWAP](#) and [WATERMED 4.0](#).

The first two sessions of the webinar will feature a series of presentations by the partners of the three projects, while the last session will be a roundtable discussion, featuring water experts from the Institut Méditerranéen de l'Eau (IME), Irrigants d'Europe, the Food and Agriculture Organization of the United Nations (FAO), the Joint Research Centre (JRC) of the European Commission and the Arizona State University.

The webinar will be held on **Thursday 29 September 2022 (9:00-13:00 CEST)** and will be live-streamed via Zoom.

More info: <https://prima-med.org/events/webinar-solutions-and-challenges-for-sustainable-water-management-in-the-mediterranean-basin/>

Registrations: <https://lnkd.in/d2KUInKt>

  <p>PRIMA programme is supported by Horizon 2020, the European Union's Framework Programme for Research and Innovation.</p>	
AGENDA	
TIME (CEST)	
09h	Welcome and opening of the webinar Speaker: Attilio Toscano, University of Bologna - FIT4REUSE Project
09h05	Greetings by PRIMA Speaker: Marco Orlando, PRIMA Project Officer
	Projects' support to policy making and water planning Moderator: Miguel Angel Zamora, University of Murcia
09h10	DSWAP: Monitoring systems to support policy making and water planning Speaker: Célia Manaia, Catholic University of Portugal – DSWAP Project
09h25	FIT4REUSE: Exploiting the use of non-conventional water resources – the analysis of the current legislative and policy frameworks Speakers: Attilio Toscano and Matteo Vittuari, University of Bologna – FIT4REUSE Project
09h40	WATERMED 4.0: Decision support systems for efficient management of water resources in agriculture Speaker: Miguel Angel Zamora, University of Murcia – WATERMED 4.0 Project
09h55	Q&A
	Projects' contribution to sustainable water management in agriculture Moderator: Célia Manaia, Catholic University of Portugal
10h00	Technological solutions Tertiary treatment of urban wastewater by solar photo Fenton: a feasible solution for small wastewater treatment plants? Speaker: Luigi Rizzo, Salerno University – DSWAP Project Intensive solutions for municipal wastewater treatment: combination of compact technologies Speaker: Francesco Fatone, Marche Polytechnic University – FIT4REUSE Project



TIME (CEST)	
10h20	Water sustainability: assessment of impacts and benefits of the innovative systems and technologies Mitigation of antibiotic resistance in wastewater effluent storage reservoirs Speaker: Eddie Cytryn, Agricultural Research Organization (ARO) – DSWAP Project The effects of non-conventional water resources on drippers, soil and crops Speaker: Rémi Declercq, Ecofilae – FIT4REUSE Project Water reuse: benefits and barriers for the agronomic sector Speaker: Burcu Yazici, Turkish Water Institute-SUEN – WATERMED 4.0 Project Assessment of applying hydroponics/agrivoltaic systems in water scarce areas Speaker: Brendon Bingwa (Fraunhofer Institute for Solar Energy Systems) – WATERMED 4.0 Project
11h00	Sustainable water management: decision support tools Assessment of smart agriculture tools for efficient water and fertilizer use Speaker: Vicente Martinez Lopez (Spanish National Research Agency - CEBAS-CSIC) – WATERMED 4.0 Project Decision support framework to evaluate wastewater reuse in irrigation using secondary and tertiary water treatment modules Speaker: Aparna Chandrasekar, Technical University of Dresden – DSWAP Project Integration and modelling of water treatment solutions – the Simulation Platform Speaker: Özlem Karahan Özgün, Istanbul Technical University – FIT4REUSE Project
11h30	Q&A
11h35	Break (5')


TIME (CEST)	
11h40	Round Table – Barriers to sustainable water management in agriculture Moderator: Alain Meyssonnier, Institut Méditerranéen de l'Eau (IME) Participants: Adriano Battilani – Irrigants d'Europe Faycel Chenini – Food and Agriculture Organization of the United Nations (FAO) Bernd Gawlik – Joint Research Centre (JRC) of the European Commission Olçay Ünver – Arizona State University
12h40	Conclusions Attilio Toscano, University of Bologna – FIT4REUSE Project Eddie Cytryn, Agricultural Research Organization (ARO) – DSWAP Project Miguel Angel Zamora, University of Murcia – WATERMED 4.0 Project
12h55	Closure of the event

Thank you Dr. Marco Orlando for reporting.



MARSOLut Marie S-Curie project. Barcelona final workshop. Hybrid mode, October 19th and 20th. Free Access.

The Managed Aquifer Recharge ITN Project (MARSOLut) will hold the final workshop in Spain this October 19th and 20th.



MAR Con '22

Conference, 19th – 20th October 2022, hybrid event

Local organizer: UPC, Barcelona
Meeting location: Master's and Multipurpose Classroom in the A3 building on the North Campus of UPC, C. Jordi Girona, 1-3, Barcelona, Spain


Wednesday October 19th

Session 1: Sustaining Rules
Sultana, R., Werban, U. (UFZ, Germany): Development and field evaluation of a new approach for mobile and rapid measurement of bed hydraulic conductivity for advantageous assessment of surface-water-ground-water-interaction for enhanced MAR sites operation
Invited Speaker: M.C. & V. (UFZ, Germany): Understanding and predicting clogging behaviour to enhance and maintain infiltration capacity of MAR infrastructure
Invited Speaker: tbc
Summary and outlook - Spotlight on quantity (session chair)

Session 2: Improving Quality
Muñoz Vega, E. & Schütz, C. (TUD, Germany): Reactive barriers for enhanced attenuation of micropollutants
Horowitz, M. & Lehtilä, T.E. (INEC, Portugal): Assessment of the performance of different soils as a reactive layer to enhance water quality during infiltration in MAR basins
Invited Speaker: Christine (CNRS, France): of reclaimed water through enhanced soil aquifer treatment with reactive barriers
& Kurtzman, D. (ARI, Israel): Flow, transport and reactions of recharged desalinated seawater in a porous aquifer
Pérez & García-García, D. (UPC, Spain): Chaotic flow strategies to enhance contaminant degradation during managed aquifer recharge (MAR) operations
Invited Speaker: Uwe (TUM): Engineering of managed aquifer recharge systems to optimize biotransformation of trace organic chemicals
Summary and outlook - Spotlight on the chemistry (session chair)

Session 3: Proving Performance
Behke, V.R. & Sanchez-Vila, X. (UPC, Spain): Modelling the fate and transport of microbial pathogens and emerging contaminants with approaches

814066 — MARSOLut — H2020-MSCA-ITN-2018



Calgari, E.R. & Rossetto, J. (SSSA): Hydroinformatics and monitoring for investigating groundwater quality changes in managed aquifer recharge (MAR)
Vassopoulou, A. & Kallioras, A. (NTUA, Greece): Participatory modelling and deliberative monetary valuation in MAR
Invited Speaker: Negav, I. (Tel Aviv, Israel): The Experience
Summary and outlook - Spotlight on techniques and tools (session chair)

Thursday October 20th

Session 4: Optimizing Design
Henao-Casas, J.D. & Fernández Escalante, E. (Tragsa, Spain): Advanced technical solutions in managed aquifer recharge (MAR)
Dermichele, F. & Sapienza, M. (EWA, Malta): Hydrogeological and geochemical modelling of a sea-water intrusion barrier in an island/coastal groundwater body
Standen, K. & Monteiro, J.P. (UAig, Portugal): Integration of MAR solutions and modelling know-how for improvement of quantitative and qualitative status of selected water bodies identified in River Basin Management Plans
Invited Speaker: tbc
Summary and outlook - Spotlight on scenarios (session chair)

Session 5: Global applicability, bottlenecks and proactive legislation
Panel short presentations
Panel discussion
Field site visit (afternoon)

814066 — MARSOLut — H2020-MSCA-ITN-2018

More info: <https://www.marsolut-itn.eu/>



The seminar will be hybrid (presential and on line). Free assistance (requires booking) at <https://www.marsolut-itn.eu/news-events/2022-conference/>

Thank you Annette Weffer-Roehl for reporting

9th International Groundwater Conference- 2022 (IGWC). Roorkee, India, 2nd to 4th November 2022

AGGS and IAH are cooperating in India on encouraging research, investigations, and best practice and policies for groundwater.

IIT Roorkee, is organising the 9th International Groundwater Conference (IGWC-2022) at IIT Roorkee during **November 2-4, 2022**, with a focus on 'Effective Management of (sub)-surface Water Resources in Arid and Semi-Arid regions' under the aegis of Association of Global Groundwater Scientists (AGGS).

The conference includes MAR in the session 7: *Water harvesting, managed aquifer recharge (MAR) and conjunctive use/interactions of surface & groundwater*.

The organizers will accept MAR abstracts along this week by email.



Key dates

Last date for submission of Abstract	: August 15, 2022
Notification of acceptance of Abstract	: September 30, 2022
Last date for submission of full length papers	: October 15, 2022
Last date to pay registration fee (without late fee)	: October 15, 2022
Conference dates	: November 02 - 04, 2022

Sponsorship

IGWC-2022 will seek two types of sponsorship: (i) Associative sponsorship and (ii) Promotional facilities. The associative sponsorship will be towards the support of the conference while the promotional facilities will provide the scope of exhibiting the company's profile.

Platinum sponsor fee: INR 5,00,000/- or above

- Full registration for seven delegates
- Company name and logo on conference, web page (linked to the company website) promotion material like proceedings, volume, banner/signage, stationery items etc.
- 15 minutes time slot for technical presentation in the session of your choice (except inaugural, plenary & valedictory sessions)
- Distribution of literature/brochures

Golden sponsor fee: INR 3,50,000/-

- Full registration for five delegates
- Company name and logo on conference, web page (linked to the company website) promotion material like proceedings, volume, banner/signage, stationery items etc.
- 10 minutes time slot for technical presentation in a session
- Distribution of literature/brochures

Silver sponsor fee: INR 2,50,000/-

- Full registration for three delegates
- Company name and logo on conference, web page (linked to the company website) promotion material like proceedings Volume, banner/signage stationery items etc.
- Distribution of literature/brochures

Supporter fee: INR 1,50,000/-

- Full registration for two delegates
- Company name and logo on conference proceedings volume
- Distribution of literature/brochures

Advertisement opportunities: INR 50,000/-

Limited space will be made available on a first-come-first-serve basis for the coloured advertisement to the organizations involved in the concerned field in the Conference Volume being brought out on the occasion of the Conference. Full registration for one delegate will also be available. Interested organizations may contact the Conference Secretariat at IIT Roorkee by email igwc2022@iitr.ac.in.

Contact us:

For Conference

Website: www.igwc2022.com
Email: igwc2022@iitr.ac.in
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Prof. (Retd.) D.C. Singhal, Conference Advisor, IIT Roorkee
Prof. S. Majid Hassanzadeh, Managing Director of InterPore
Dr. M. Thangarajan, Founder, AGGS, India

Conference tour

A pre-conference workshop on Applied Groundwater modeling is planned for early career researchers. A post-conference tour for AGGS members, conference delegates and accompanying persons shall be arranged to Mussoorie, Kemps Falls, Sahasrathara, Haridwar, and other spots with different hydrologic structures on the Ganga Canal, and Bhimgoda barrage on nominal charges.

Accommodation

Rooms would be available for delegates in a wide range of categories, within IIT Campus (D.C. Nigam Guesthouse, Kashi International House (KIH), Continuing Education Centre (CEC), Community Centre and other hostels) on payment basis. The hotel details shall be posted on our website: www.igwc2022.com.

Organised by:

Department of Hydrology
IIT Roorkee

International Groundwater
Conference

In association with:

InterPore
International Society
for Porous Media

Association of Global
Groundwater Scientists

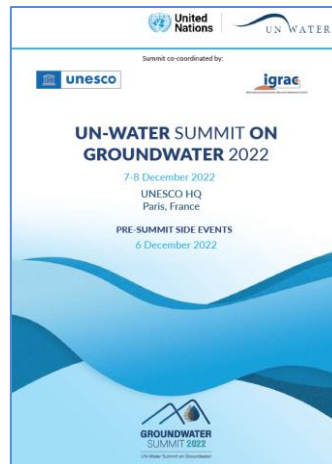
Association of Geologists
and Hydrogeologists

More info: <https://www.igwc2022.com/home>

Thank you Dr. Mottayagowda Thangarajan and Dr. Brijesh Kumar for reporting.

UN-Water Summit on groundwater. Paris, 7th and 8th December 2022

The UN-Water Summit on Groundwater will be the culminating event of the 2022 campaign "Groundwater: making the invisible visible", implemented by the dedicated UN-Water Task Force, co-coordinated by UNESCO and the International Groundwater Resources Assessment Centre (IGRAC), on behalf of UN-Water.

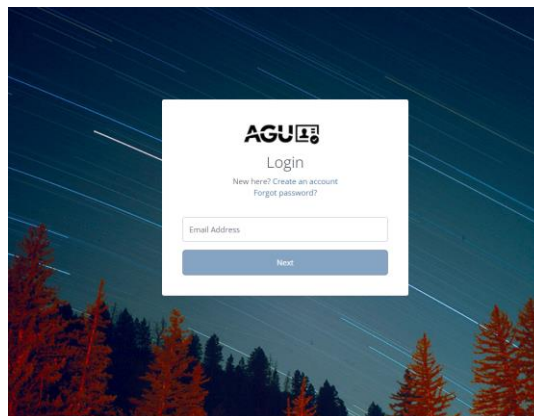


The IAH-MAR Commission had submitted an official request to host a MAR side event: ***Managing Aquifer Recharge: making the visible, invisible!!*** The organizers have received four proposals from IAH branches, and they have requested to merge all of them in a 90 minute session. Info about the final program will be provided shortly.

More information: www.groundwater-summit.org and info@groundwater-summit.org

AGU. Advances in managed aquifer recharge for groundwater sustainability. 12-16 December 2022

Advances in managed aquifer recharge for groundwater sustainability. AGU Fall Meeting (12-16 December 2022, Chicago, IL, USA). Abstract deadline is over.



Additional info: <https://agu.confex.com/agu/fm22/prelim.cgi/Session/158319>

PAST EVENTS

First Thailand Groundwater Symposium, 22th to 24th August 2022. Session 1-8 on MAR and important results

The 1st Thailand groundwater symposium: key to water security and sustainability
More info: <https://www.thaigroundwater-2022.org/>



A group of groundwater scientists with interests in MAR met after the second day of the symposium, and helped prepare a brief report on MAR at the symposium as well as some recommendations to DGR concerning its MAR Program.

Rapid Progress, Challenges and Opportunities in Managed Aquifer Recharge in Thailand. A summary of MAR aspects of the First Thailand Groundwater Symposium August 2022. Peter Dillon, Kriengsak Srisuk, Phayom Saraphirom, Banjong Promchan, Kwankwai Daranond and Jarinya Chimpalee

In the meantime organizers provide an official site to download it, we have stored it in our IAH-MAR site (temporarily) so that the MAR community may access it.



Download the document (IAH MAR Commission site, **provisionally**):
<https://recharge.iah.org/files/2022/09/MAR-in-Thailand-Thailand-GW-Symp-22-24-Aug-2022.pdf>

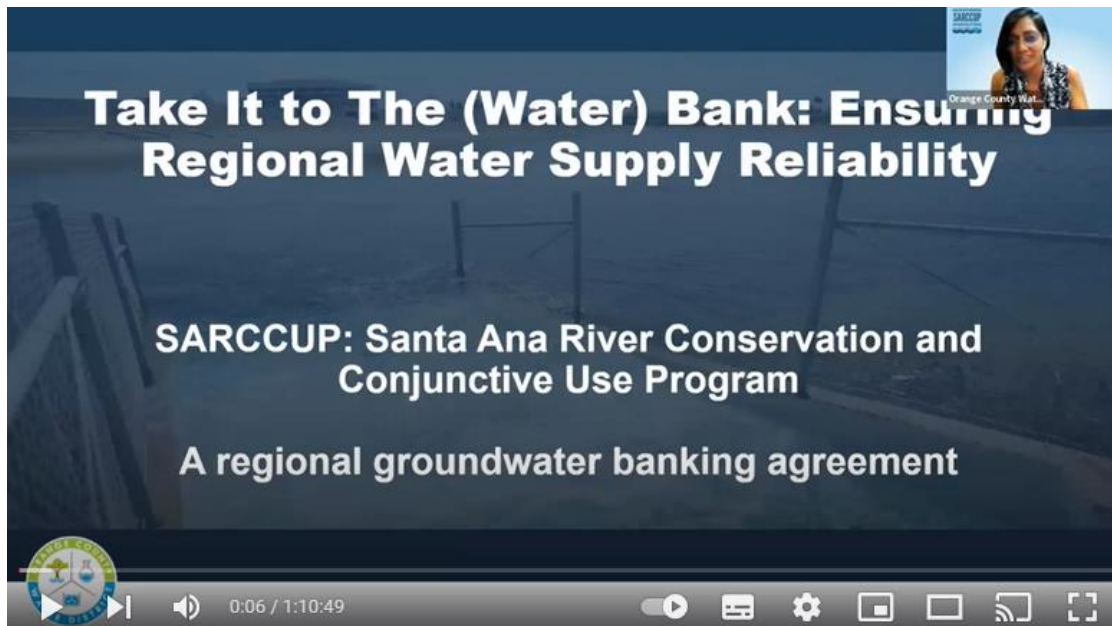
Thank you Dr. Peter Dillon for reporting

Recorded Webinar. Take it to The (Water) Bank: Ensuring Regional Water Supply reliability

Webinar hosted by SARCUPP Santa Ana River conservation and conjunctive use program. A regional groundwater banking agreement.

Duration 1 h 10 min. You Tube Access:

<https://m.youtube.com/watch?v=Qwy35NWGoXk&feature=youtu.be>



Thank you Adam Hutchinson for reporting

2022 World Water Week in Stockholm, Aug 23 - Sept 1. Presentations on MAR

At least, six presentations on MAR were exposed by members of our community:

Sessions:

Valuing wastewater and new solutions (1/3)

<https://worldwaterweek2022.us2.pathable.com/meetings/virtual/dAuoMS5DjRL77AudE>

Achieving the SDGs through accelerating inclusion and participation

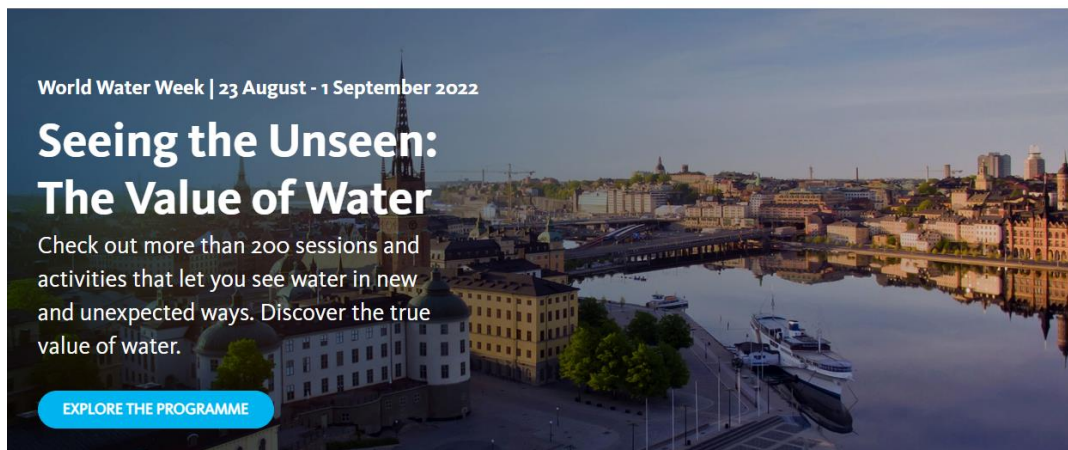
<https://worldwaterweek2022.us2.pathable.com/meetings/virtual/6cxLxEhHuaCkeEtLY>

SIWI Seminar: Valuing Groundwater (2/3)

<https://worldwaterweek2022.us2.pathable.com/meetings/virtual/CRhqtF4Kr2AD9MXZA>

SIWI Seminar: Valuing Groundwater (3/3)

<https://worldwaterweek2022.us2.pathable.com/meetings/virtual/ycTjMvwqDpXg8r8uw>



More info: <https://www.worldwaterweek.org/>

Thank you Drs. Sharon Megdal and López-Gunn for reporting. The Professor Sharon Megdal has shared her vision of the WWW in the document: *Reflections-Connecting-Globally-Stockholm WWW*, accesible at: <https://wrrc.arizona.edu/reflections-connecting-globally-stockholm-world-water-week>

The IWA World Water Congress & Exhibition 2022. Sep. 12nd – 15th

The **IWA World Water Congress & Exhibition** is the global event for water professionals covering the full water cycle. As the Congress rotates through cities and countries each event has an extra emphasis on issues of specific interest to the region. Read more: <https://worldwatercongress.org/programme/>



MAR in session 3.2. *Alleviating water scarcity using groundwater: the role of knowledge exchange through international cooperation.*

NEW MAR OR MAR-RELATED ACTIVITIES

Peter Dillon has been named the 2022 Recipient of the NGWA M. King Hubbert Award

The IAH-MAR Commission former co-chair and, according to my own words, the “soul” of the IAH-MAR Commission, has recently been awarded with the International recognition NGWA M. King Hubbert Award.

Each year, the National Ground Water Association presents the NGWA M. King Hubbert Award to members who have contributed a special service in the furtherance of the groundwater industry, or to NGWA.

The presentation of awards will occur during the 2022 NGWA Groundwater Week taking place in Las Vegas, Nevada, December 6-8, 2022. Additional details will be provided.

More info (WGA): <https://wga.com.au/news/2022/08/26/2022-m.-king-hubbert-award-winner/>

Congratulations Peter!!

MAR in mining. Information request

Shannon Sloan, a Flinders PhD student, is looking into MAR and aquifer re-injection for mine water management. She kindly asks contacts in North or South America that would possibly know of mine sites implementing MAR or re-injection in their operations.



If you are willing to contact her in these regards, she has provided an email: [shannon.sloan \(a\) flinders.edu.au](mailto:shannon.sloan@flinders.edu.au)

MORE ACTIONS

Whatsapp group on Aquifer Recharge Management

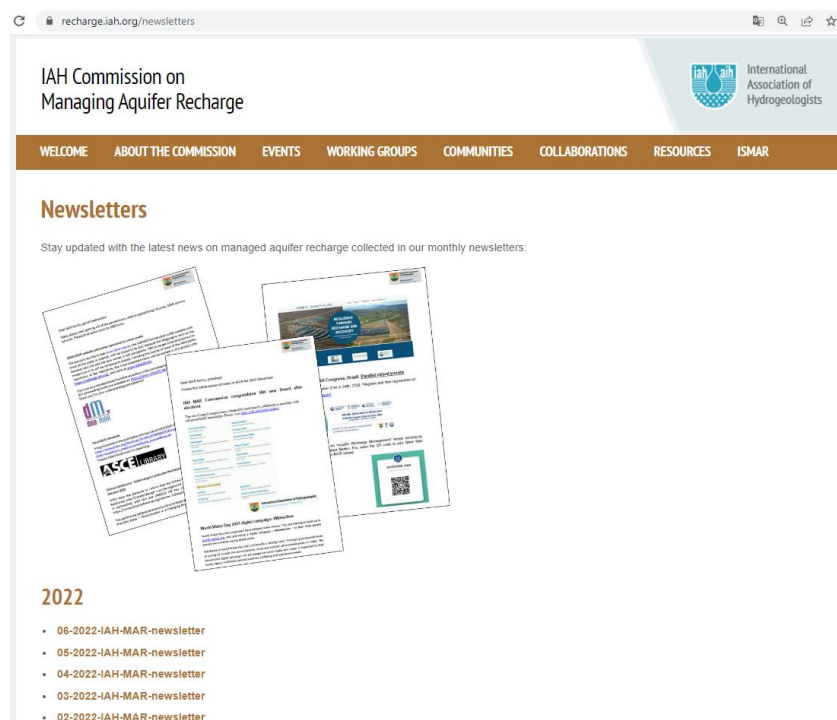
This is the new link to join the group, with about 150 participants:

<https://chat.whatsapp.com/CGANGEdciw4V4zqc1I09r>

Previous IAH-MAR Newsletters

Please, remember that you can access the previous newsletters in our website:

<https://recharge.iah.org/newsletters>



That's all by now... **please, keep reporting (dinamar@tragsa.es)**. Special interest about MAR news from India, we are receiving very scarce. Thank you in advance...

...and thank you very much for your kind attention
All the very best...

Dr. Enrique Fernández Escalante, on behalf of the IAH MAR Commission co-chairs,
Catalin Stefan and Yan Zheng too.

2022 September 16th

IAH-MAR Commission on Twitter



@IAHMARCom

<https://twitter.com/IAHMARCom>

IAH-MAR Commission's sister Web sites

<http://china-mar.ujn.edu.cn/>



<https://dinamar.traqsa.es/>



@4dina_mar

Linked-in groups on MAR

Managed Aquifer Recharge, DINA-MAR

<https://www.linkedin.com/groups/4690290/>

Aquifer Storage and Recovery (ASR)

<https://www.linkedin.com/groups/2183513/>

MARSoluT - MAR Solutions Training Network

<https://www.linkedin.com/groups/7453856/>

IAH MAR Commission Forum

Please, remember you can book freely in the IAH MAR Commission Forum:

<https://lists.flinders.edu.au/mailman/listinfo/iah-mar.listcgs>