

Dear Ladies and Gentlemen, dear MAR family, greetings!

Please find some news on MAR for 2021 February

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IMMINENTLY:

Advances in the UNESCO-IHP-GRIPP book: MAR. A show case for Resilience and Sustainability

IAH MAR Commission webinar series.

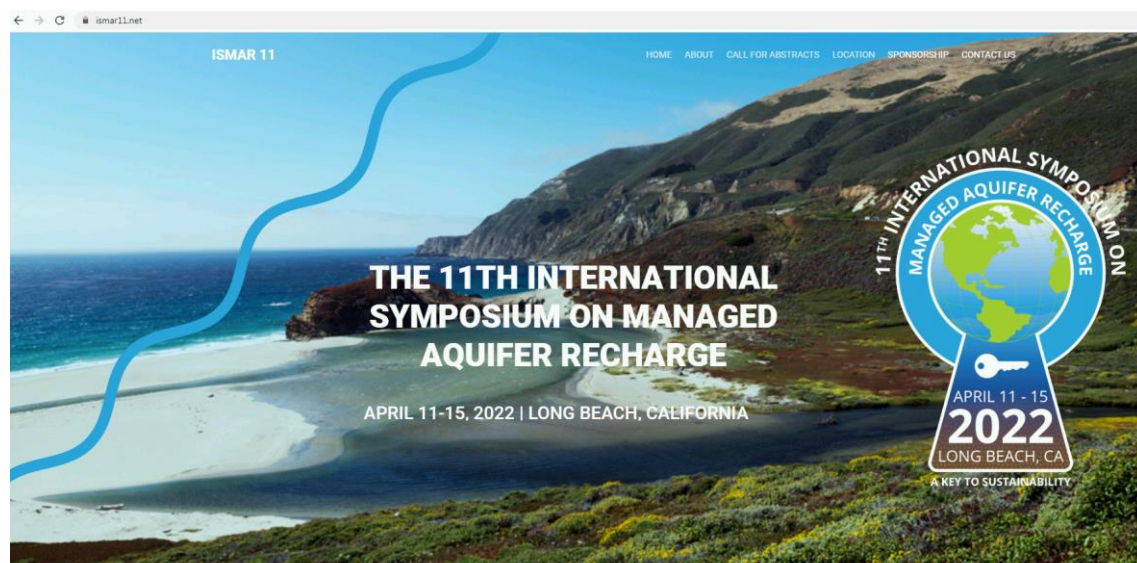
ISMAR 11 kicks off. The preliminary stage has already begun

The premier conference on MAR, ISMAR 11, has published the call for abstracts. ISMAR 11, CA, April 11-15 2022



ISMAR 11 includes a full day of pre-conference workshops, three days of technical sessions, plenary sessions, awards luncheon, field trips and great networking, socializing, and entertainment opportunities...

Stay connected by signing up for [the ISMAR11 mailing list](#) for the latest information on abstracts, registration information, etc.

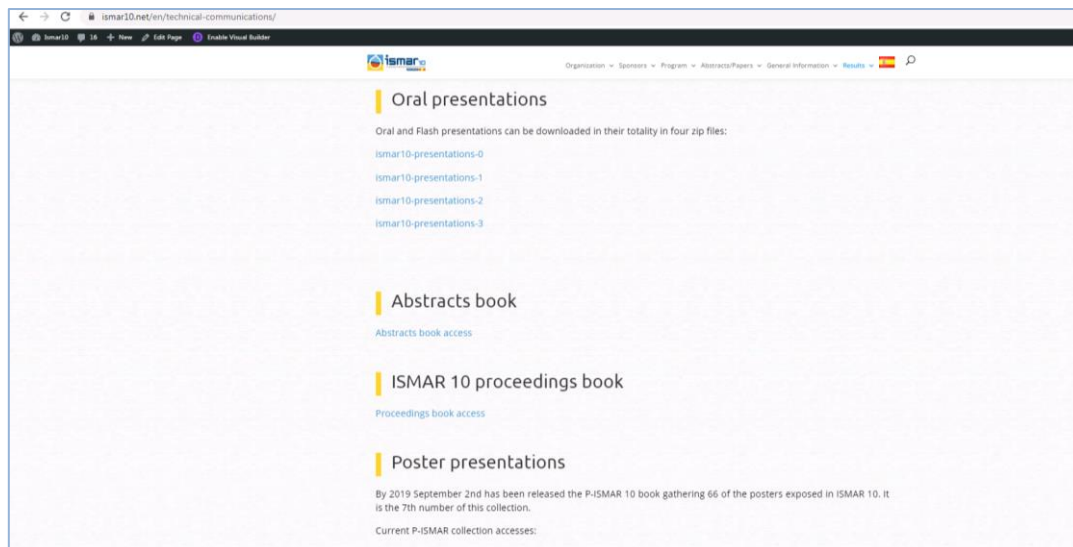


More info: <https://www.ismar11.net/#about>

ISMAR 10 Oral presentations. Whole set available (over 110 pdfs)

ISMAR 10 organizers have gotten the final permission to make public the whole set of presentations exposed in the main MAR conference.

You can download freely over 110 pdf presentations summarizing the current State-of-the-Art; at least until ISMAR 11. (USA, 2022 April).

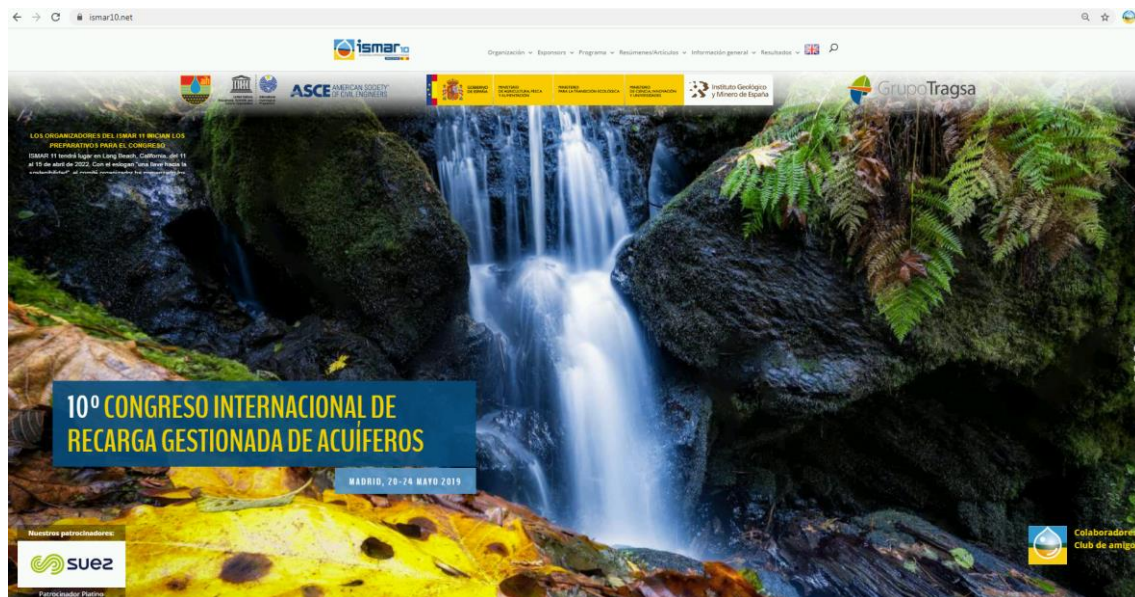


<https://www.ismar10.net/en/technical-communications/>

Oral presentations paragraph. Presentations are grouped in four zip files

ISMAR 10 website will not be updated after April

ISMAR 10 organizers have informed that, in order to avoid dividing the attention of the MAR community, their website will be turned off in April.



The most important outcomes stored in the “results section” (proceedings book, abstracts book, posters book, pdf with the whole presentations, links to the videos, field trip guide, links to the selected journal papers...) can be downloaded until mid-April. After that will still be available in recharge.iah.org, dina-mar.es and ismar11.net.

More info: <https://www.ismar10.net/en/technical-communications/>

<https://www.ismar10.net/en/2021/02/02/ismar-11-organizers-kick-off-the-conference-preliminar-stage/>

IWRA's 2020 Online Conference "Addressing Groundwater Resilience under Climate Change" last October. Results published to be freely downloaded

IWRA's first innovative event ever hosted entirely online, organised with the generous support of the UNESCO Intergovernmental Hydrological Programme (IHP) and in collaboration both with the International Association of Hydrogeologists (IAH) and IHE Delft Institute for Water Education, has sent us a BIG THANK YOU for our efforts and help as part of the ISC to organize. They also thank to UNESCO-IHP. We also congratulate IWRA, who were able to grant free access for all registered attendees.

IWRA particularly welcomed participation by experts from Africa, low-income countries, women and youth. This support ensures open access to all conference related materials, including:

- [Recordings and Q&As](#)
- [Abstracts, presentations and posters](#)
- [Policy briefs](#)
- [Final report](#)

Figures and numbers from this event include:

- Number of abstracts received: **+130**
- Number of abstracts selected: **+70**
- Total number of participants registered: **+2650**
- Total number of attendees: **+1400**
- Percentage of attendees logged-in at some point: **53.4%**
- Number of countries represented: **131**
- Total speakers, panelists and poster authors: **+95**
- Regular sessions: **10**
- Plenary sessions (Opening & Closing Ceremonies): **2**
- High-level panels: **1**
- Poster program: **1**
- **Topic 2.8 on MAR counted with six MAR devoted speakers.**

THEME 1



GROUNDWATER NATURAL RESOURCES ASSESSMENT UNDER CLIMATE CHANGE

The intensification of precipitation in a warming world highlights the critical importance of water storage and the vital role played naturally by groundwater, the world's largest distributed store of freshwater, in sustaining ecosystems and enabling climate-resilient water supplies. This session welcomes submissions that address the direct impact of climate change on groundwater systems and indirect impacts of climate change such as increased groundwater withdrawals for public water supplies, irrigation and industry. Studies assessing conceptually and quantitatively interactions between groundwater and other components of the hydrosphere and biosphere under climate change including conjunctive use of groundwater and surface water are of particular interest.

- 1.1 Long-term groundwater monitoring and climate variability
- 1.2 Groundwater-surface water-atmosphere interactions
- 1.3 Groundwater indicators, data and reporting
- 1.4 Groundwater sustainability for different uses such as water supply, irrigation, industry...
- 1.5 Offshore and coastal aquifers, small islands

THEME 2



CLIMATE CHANGE EFFECTS ON GROUNDWATER RESILIENCE (POLLUTION AND REMEDIATION)

Impacts of climate on nature and society call for science ingenuity for better planning and management. Where climate change is expected to affect important natural fluxes into and out of the system, such as (direct and indirect) recharge, evapotranspiration and discharge into surface water bodies, these impacts will alter hydrogeochemical dynamics, groundwater quality and pollution state. Sea level rise will modify hydraulic gradients and, possibly in combination with coastal storm surges, aggravate saltwater intrusion. Theme 2 will address future trends in groundwater quality and associated health linked to climate change, with particular interest in remediation, through treatment, dilution and other methods.

- 2.1 Groundwater pollution from agriculture (nitrates, pesticides)
- 2.2 Groundwater pollution from natural disasters (floods, tsunamis, hurricanes,...)
- 2.3 Groundwater pollution and public health
- 2.4 Groundwater salinization
- 2.5 Aquifer restoration: existing and emerging methodologies
- 2.6 Bioremediation and bio-stimulation of aquifers
- 2.7 Wastewater treatment and aquifer recharge
- 2.8 Managed Aquifer Recharge (MAR)

Overall, IWRA's 2020 Online Conference provided the opportunity to promote the **sharing and exchange** of the latest scientific and policy knowledge on the links between groundwater resource resilience and climate change, focusing on the sustainable governance, use and management of these resources in all regions of the world.

This conference is not the end of the discussion, as you can imagine. This year, IWRA will launch the second Online Conference!

16:45-17:25 "Contribution of Technology to Groundwater Resilience Groundwater"

Moderator:
[Neno Kukurić](#)
ISC

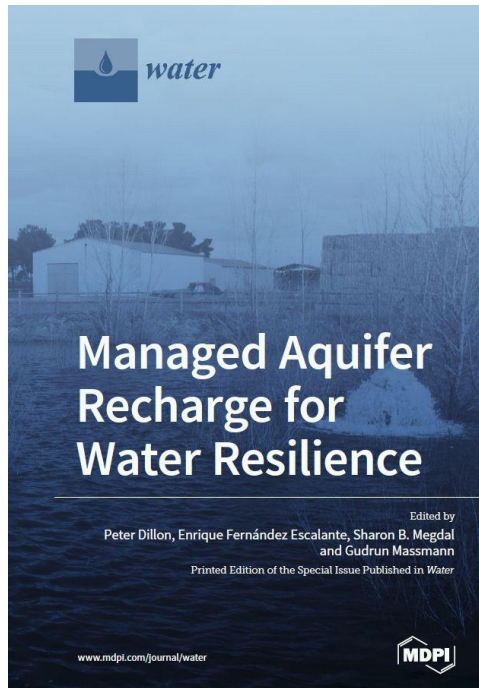
Co-moderator:
[Enrique Fernandez Escalante](#)
ISC



More info: www.iwraonlineconference.org

Water Journal special issue. 23 papers have been gathered in a book

In a few days all those papers (23) selected from ISMAR 10 conference and published open access in the Water Journal, special edition will be published in a special issue of Water (ISSN 2073-4441). This one belongs to the section "Water Resources Management, Policy and Governance".



https://www.mdpi.com/journal/water/special_issues/ISMAR10_2019

Free virtual conference organised by IAH Indian National Committee on “Resilience of Groundwater Resources for accommodating the changing climate scenarios”. 27-28 Feb 2021

Dr. C. Mayilswami (Secretary, AGGS) had forwarded on your IAH-MAR email to his email list information about their free virtual conference organised by IAH Indian National Committee on “Resilience of Groundwater Resources for accommodating the changing climate scenarios” to be held 27-28 Feb 2021. **Final deadline for abstracts is February 18th.**



Second Circular

Indian National Chapter of International Association of Hydrogeologists (INC-IAH)

Organises

Online Seminar



RESILIENCE OF GROUNDWATER
RESOURCES FOR ACCOMMODATING
CHANGING CLIMATE SCENARIOS

During February 27-28, 2021
At Virtual Platform



January 25th, 2021: Final Deadline
for abstract submission to
rgr.ccs@gmail.com



More info: email: rgr.ccs@gmail.com and www.inciah.org.
Thank you very much Dr. Mayilswami for reporting.

IAH MAR Commission renewal procedure and 2020 memory of activities. Call for action

In these days IAH-MAR co-chair are renewing the Commission to be maintained within the IAH structure. The memory for 2020 activities is also being conducted.

Participation and inputs from the MAR family will be much appreciated. Please, just email co-chairs in the contact section of recharge.iah.org.

IAH-MAR commission website will include the results from previous ISMARs shortly

By suggestion of Bob Bower and ISMAR 11 organizers, a section including the results from previous ISMAR will be developed in the coming weeks.

We'd need some help, please, to gather information and materials from previous ISMARs, ISAR4, TISAR 98..., especially for the 1, 2 and 3 editions; and from ISMAR 7, with scarce info in our repository. We'd thank organizers the pdf presentations...



Screenshot from Bob Bower's proposal for our future website update.

Previous organizers are required to provide some contribution, please. Email a co-chair. Thanks in advance...


48th IAH Congress, Brussels, Belgium. 6-10 September 2021. MAR in topic 8

Managed aquifer recharge or MAR in all its forms (i.e. infiltration ponds, injection with wells, river bank infiltration, etc.) covers the purposeful recharge of water to aquifers and its recovery when needed. The technique is applied for purposes as optimizing the use of groundwater reserves, increasing groundwater storage, preserving water demand in times of stress such as drought, improving the water quality or for environmental benefit. For this session we solicit contributions on different aspects of managed aquifer recharge such as the applicability of MAR to manage groundwater reserves, design considerations and tests, water quality issues, field studies, the interaction with existing groundwater systems, long-term effects and clogging issues, and economics of MAR.

We have contacted organizers to be allowed to host an **IAH-MAR Commission plenary** during the conference.

[The submission of abstracts is already open.](#)

iah2021belgium.org/programme/sessions-topics/



48th IAH Congress
BRUSSELS BELGIUM 2021
Inspiring Groundwater

PROGRAM

8. Managed aquifer recharge – co-organized by the IAH MAR Commission
Session chairs: Enrique Fernandez Escalante, Catalin Stefan and Yan Zheng

Managed aquifer recharge or MAR in all its forms (i.e. infiltration ponds, injection with wells, river bank infiltration, etc.) covers the purposeful recharge of water to aquifers and its recovery when needed. The technique is applied for purposes as optimizing the use of groundwater reserves, increasing groundwater storage, preserving water demand in times of stress such as drought, improving the water quality or for environmental benefit. For this session we solicit contributions on different aspects of managed aquifer recharge such as the applicability of MAR to manage groundwater reserves, design considerations and tests, water quality issues, field studies, the interaction with existing groundwater systems, long-term effects and clogging issues, and economics of MAR.

9. Mineral and thermal waters

Mineral and thermal waters have a specific chemical composition, origin, and (high) temperature. Each occurrence has its own characteristics, but often it is the result of very interesting and unique hydrogeological conditions. To explore, investigate, understand, and protect each groundwater system producing mineral and thermal waters, hydrogeologists are using a wide range of methods. Geochemical and isotopic studies are particularly useful because mineral and thermal waters are often the result of deep hydrogeological processes, taking place during periods ranging from a few years to thousands of years, allowing extensive water rock-interactions.

- (1) Investigation methods.
- (2) Approaches for ensuring sustainable use, protection and integrated environmental management.
- (3) Specific case-studies



More info: <https://iah2021belgium.org/programme/sessions-topics/>

47th IAH Congress, Brazil. Parallel virtual events. WhatsApp group on “Aquifer Recharge Management”

The WhatsApp group on “Aquifer Recharge Management” keeps advancing well, with more than 150 participants.

Pls, scan the QR code to join.



Old publications on MAR (another drop of nostalgia...)

The selected drop has been:

Managed Aquifer Recharge as a component of sustainable water strategies

Chapter 8

Managed Aquifer Recharge as a component of sustainable water strategies

Thomas Wintgens, Rita Hochstrat, Christian Kazner, Paul Jeffrey, Bruce Jefferson, Thomas Melin

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Direct download:

https://circabc.europa.eu/sd/a/049c2aba-fe3e-481a-95f3-d956be4e52e4/RECLAIM_WATER_Policy_Brief_Final.pdf

GOOD NEWS. IMMINENT RELEASE

-Advances in the UNESCO-IHP-GRIPP book. MAR. A show case for Resilience and Sustainability on 28 international MAR case-studies will be released by the end of March (it is currently in proof reading process).

Nicely and shortly on line...

-IAH MAR Commission webinar series

IAH-MAR co-chairs are planning a series of webinar by thematic issues and time zones.

Please, stay alert for further communications. Once again, we'll precise your collaboration

The plan is to broadcast the first one by the end of March.

And that's all by now... please, keep reporting... (efernan6(a)tragsa.es)

Thank you very much for your kind attention

Best regards

Enrique Fernández Escalante of behalf of IAH MAR Commission co-chairs.



<http://www.iah.org/recharge/>

Sister sites:

<http://dina-mar.es> (again operative by March)

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