# ISMAR 10. 1<sup>st</sup> Circular

Dear Member in the IAH MAR Commission, dear MAR family;

ISMAR 10 (International Symposium on Managed Aquifer Recharge) will be held in Madrid, Spain from May 20-24<sup>th</sup> 2019.

ISMAR has been held successfully for 9 series, and this is the first time that will be held in a Mediterranean site, making ISMAR10 unique and highly relevant to MENA and Center-South American countries.

On behalf of the Organizing Committee, we cordially inform you and invite to contribute for ISMAR 10 to be a great success.

Please, find attached the set of session, almost definitive, defined by the current Scientific/Technical Committee.

Take into consideration there are many advances in the organization:

Website is about 75% developed, domains bought, contents... Committees almost finished Sessions defined (open to further minor revisions) Most of the conveners assigned... Spaces have been studied and offers received. The exact site will be decided soon. Milestones planned...

**BASIC INFORMATION:** 

Website: <u>http://ismar10.net</u> (in the meantime check <u>www.dina-mar.es</u> for posts, please). Time: May 20-24, 2019 Location: Madrid Organizers: Tragsa, Geological Survey of Spain (IGME) and International Water Resources Association (IWRA) Co-organizers: UNESCO, IAH, ASCE.

Please, check the 20 session planned and start thinking your best proposal and papers to take part in them.

# THEMES AND TOPICS

1. MAR and Integrated Water Resources Management.

MAR & rural. MAR for rural and irrigation water supplies Potential of MAR in long-term/distance water diversion schemes MAR in conjunctive use of surface water and groundwater Establishing strategic groundwater reserves

### 2. MAR as a key Climate Change adaptation measure.

Innovation in harvesting and storing flood water Detention and infiltration systems Mitigation of climate change adverse impacts by means of MAR

#### 3. New Regional/local case studies.

MAR in developing countries

# 4. MAR mapping.

Advanced methodologies for the selection of aquifers/sites MAR maps methods New MAR maps

# 5. MAR and economic aspects.

Quantification of benefits and costs of MAR Circular economy and MAR (from cradle to cradle) Financing MAR for water and food security Water footprint from MAR activities. Green and blue waters Public Procurement of MAR Innovative Solutions

#### 6. MAR to MAR-k€t.

MAR to complement groundwater demand management MAR and agroindustry MAR and Mining Industrial applications of MAR Geothermal injection, MAR to source heat pumps...

### 7. MAR and water reuse.

Water reclamation technologies for MAR Reclaimed water reuse via aquifers

# 8. Sustainable Managed aquifer Recharge Technical Solutions.

Advances in design and construction criteria of MAR systems, BIM MAR Technical Solutions (SMARTS). Methods and strategies Alternative and innovative water recharge systems Operations and maintenance of MAR

### 9. MAR and management of clogging.

#### 10. MAR & Lex.

MAR worldwide regulations Recharge policies, quality standards Institutional innovation for MAR. Water banks, groundwater user groups... Governance Decision Support Systems (DSS)

#### 11. MAR and monitoring.

Water management and MAR innovative systems IT applications Normalization, standardization and interoperability advances

#### 12. MAR and modeling.

New developments and codes Practical examples Water quality interaction codes Hydro-economic modeling

#### 13. MAR and ecosystems.

Riparian restoration Mitigating geological/geotechnical impacts using MAR, land subsidence, collapses...

#### 14. MAR in coastal areas and islands.

MAR for mitigating saltwater intrusion MAR with desalinated water

#### 15. MAR and environmental impacts/risks.

Risk and impacts assessment Specific indicator systems for MAR MAR activities impact evaluation assessment Benchmarking

#### 16. MAR water quality and related hydrogeochemistry aspects.

MAR for drinking water quality improvement Techniques to break/recycle emergent compounds

# 17. MAR Health Aspects.

Removal and fate of microorganisms and organic compounds Fate of pathogens in the aquifer and fate of pollutants of concern in MAR system

Microbial ecology of MAR aquifer storage zones

#### 18. Urban MAR.

Sustainable Urban Drainage systems (SUDS) Rainwater/stormwater harvesting

#### 19. R&D projects on MAR.

Innovation and integration in MAR Recent and ongoing R&D projects (EC perspective) Research gaps

# 20. Research and education on MAR.

Training for MAR operators Training for future water managers Dissemination strategies and examples

# **MILESTONES**

SCHEDULE	DATES
First announcement	February 2, 2018
Second announcement	June 15, 2018
Call for abstracts and papers	September 1, 2018
Deadline for abstracts submission	November 1, 2018
Registration opens	January 15, 2019
Notification of acceptance of abstracts	February 1, 2019
Submission of final manuscript	March 31, 2019

Deadline for early-bird registration	April 1, 2019
Third circular	April 15, 2019
Notification of acceptance of papers	April 20, 2019
ISMAR 10 Symposium	20-24 May 2019

We really look forward to welcoming you in Madrid in 2019 May

With kindest regards

Enrique F Escalante, on behalf of the Organizing Committee

