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NEWS LETTER



MEDSAL PROJECT

Salinization of critical groundwater reserves in coastal Mediterranean areas: Identification, risk assessment and sustainable management with the use of integrated modelling and smart ICT tools.

Newsletter subjects

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- 12th International Hydrogeological Conference in Nicosia (Cyprus) - March 2022 (**pages 6-9**)
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Upcoming events

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Salinization bibliography data base

The MEDSAL Project has launched a bibliography system on groundwater salinization in the Mediterranean. The focus will be on groundwater salinization in the Mediterranean, references on the MEDSAL pilot sites Rhodope, Samos, Bouficha, Salento and Tarsus, as well as on the main methods that will be applied by the project partners to identify and model groundwater salinization and associated risk management. The access to the bibliography system can be achieved via the MEDSAL [website](#) or directly through the following [link](#).



Stakeholders workshop in Tunisia (December 2021)

The stakeholders workshop on "Groundwater management: Geochemistry and modeling" took place in Tunisia on the 22nd December 2021. It was coordinated by Prof. Fadoua Hamzaoui Azaza (Faculty of Science of Tunis, Department of Geology, University of Tunis El Manar).



Among the others, Mr. Nizar Ouertani and Ms. Mounira Zammouri discussed about groundwater sensors and groundwater modelling, respectively. Stakeholders were involved in a debate on the topic of groundwater monitoring and sustainable use of groundwater resources.



12th International Hydrogeological Conference in Nicosia (Cyprus) (March 2022)

The 12th International Hydrogeological Conference aimed in gathering and disseminating knowledge and good practices on dealing with increasing pressures and challenges on groundwater resources, protection and management, in our ever-changing environment driven by climate change. Several contributes from many partners of MEDSAL Project have been presented in hybrid way (in person and remotely).





Among the others, many MEDSAL members presented relevant scientific contributions even as keynote speakers (Prof Kuells - THL and Prof Fidelibus - POLIBA).

Research on Groundwater Recharge
in Cyprus

Lessons Learnt, Open Questions, Outlook

Prof. Dr. C. Külls





TECHNISCHE
HOCHSCHULE
LÜBECK
Laboratory for Hydrology

12th International
Hydrogeological Conference
Groundwater resources in an ever -changing environment

12^ο Διεθνές
Υδρογεωλογικό Συνέδριο
Το υπόγειο νερό σε μεταβαλλόμενο περιβάλλον

**CONCEPTUALIZING GROUNDWATER EVOLUTION OF RHODOPE
COASTAL AQUIFER (N. GREECE) WITH A COMBINED
HYDROGEOCHEMICAL MODELING APPROACH**

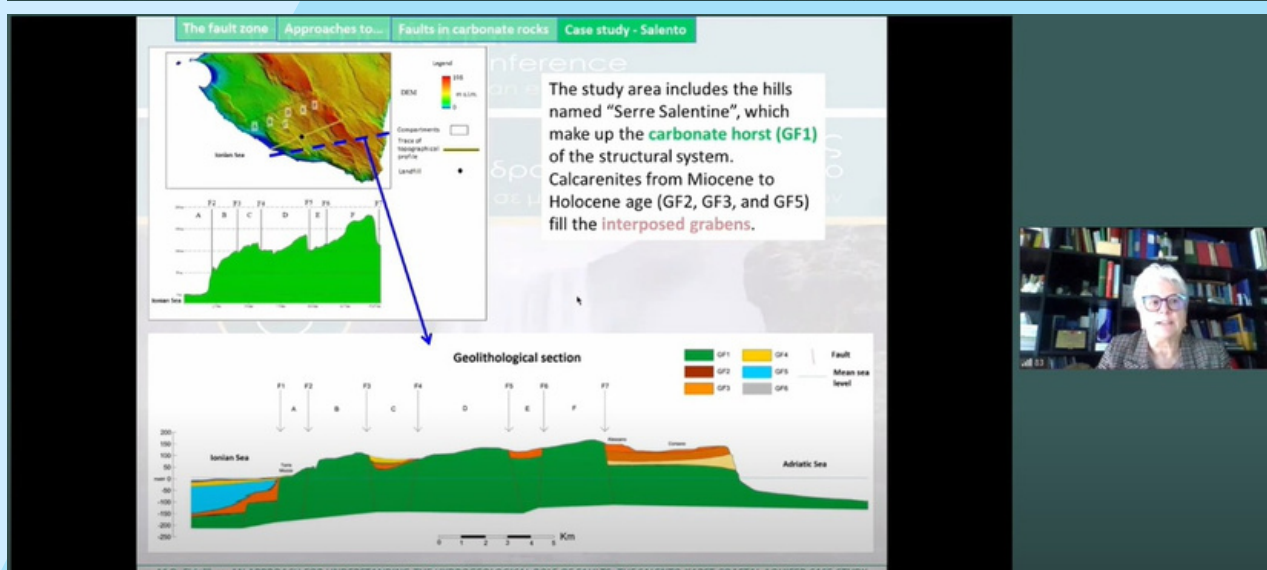
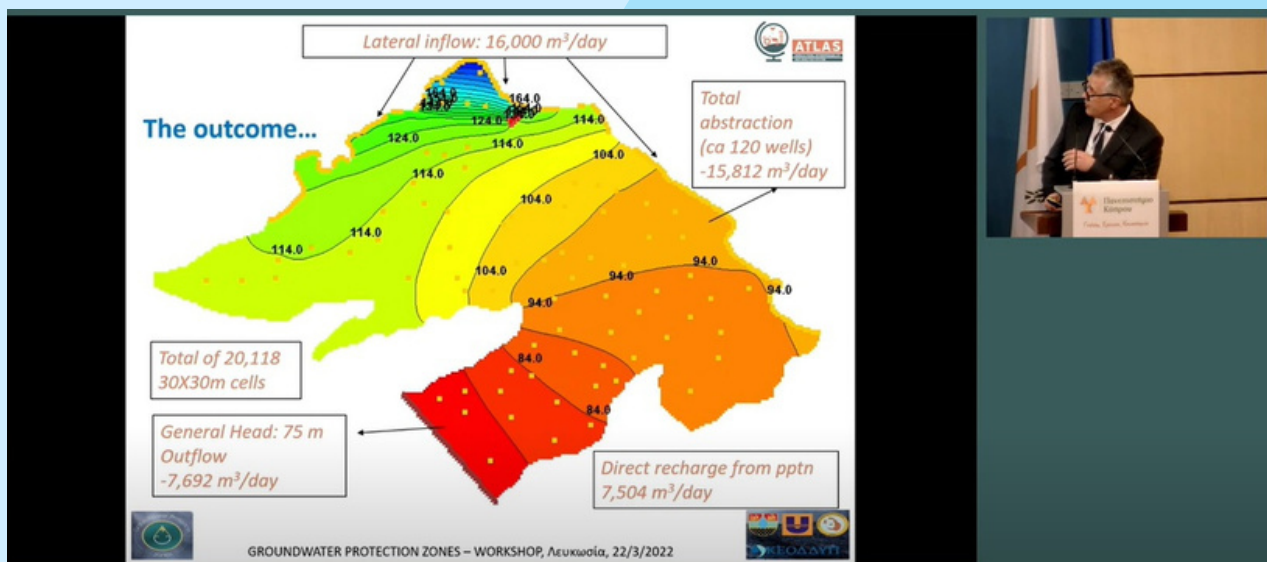
Authors: TZIRITIS E., SACHSAMANOGLOU E., ASCHONITIS V.

NICOSIA 2022 / ΛΕΥΚΩΣΙΑ 2022



Various topics related to groundwater studies have been addressed (Managed Aquifer Recharge, groundwater quality, isotopes, karst aquifer and hydraulic role of faults, applied hydrogeology). Most of contributions of MEDSAL partners have been related to the current MEDSAL research activities and they have been carried out through the scientific exchange among all partners.



If you missed our speeches, watch them on the YouTube channel of Open Hydrogeology!

Fidelibus M.D. (Keynote lecture) - [An approach for understanding the hydrogeological role of faults: the Salento karst coastal aquifer case-study](#)

Külls C. (Keynote lecture) - [Hydrogeological research in Cyprus](#)

Panagiotou C.F., Glass J., Papanastasiou P., Stefan C. - [Setup, calibration and validation of a numerical groundwater flow model to assess MAR efficiency at Ezousa, Cyprus using a web-based approach](#)

Panagiotou C.F., Kyriakidis P., Tziritis E. - [Assessment of Groundwater chemistry in the Rhodope Coastal plain \(Macedonia, Greece\) using Multivariate Statistics and Geostatistics](#)

Panagopoulos A., Doulgeris Ch., Pisinaras V., Hermann F., Vargemezis G., Tsourlos P., Chatzi A., Tziritis E., Hatzigiannakis E., Wendland F. - [Data-Driven groundwater flow modelling at Agia Basin, Central Greece](#)

Parisi A., Balacco G., Külls C., Fidelibus M.D. - [Monitoring of a karst coastal aquifer in the long-term by electrical conductivity profiles \(Salento, Southern Italy\)](#)

Sachsamanoglou E.M., Tziritis E., Külls C. - [Environmental Isotopic signature of the Rhodope Coastal area, Norther Greece](#)

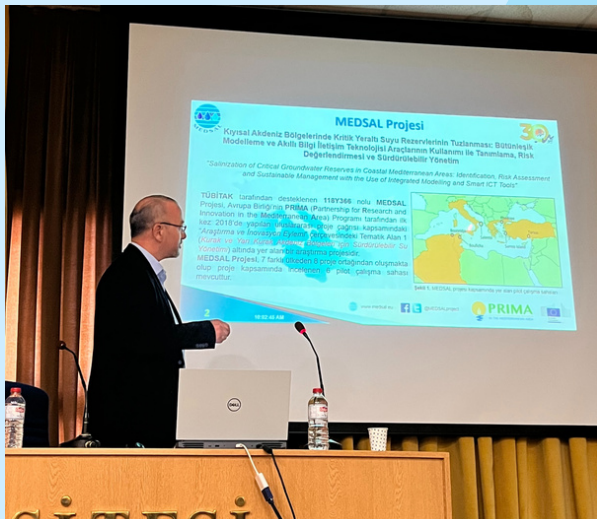
Tziritis E., Sachsamanoglou E., Aschonitis V. - [Conceptualizing groundwater evolution of Rhodope Coastal Aquifer \(N. Greece\) with a combined hydrogeochemical modeling approach](#)

Open Info Day at the Mersin University (Turkey) (May 2022)

An 'Open Info Day' event was held on 12 May 2022 within the frame of the MEDSAL project at the Mersin University (Turkey).



In addition to the representatives of various institutions such as General Directorate of State Hydraulic Works (DSİ) and Mersin Water and Sewerage Administration General Directorate (MESKİ), academicians and students showed a great interest in this event, in which the studies carried out within the scope of the MEDSAL project during the past 3 years in the Tarsus Coastal Aquifer (Mersin, Turkey) were presented by the project's principal investigator Prof. Dr. Cüneyt GÜLER. A total of 57 people attended to this 2 hour promotional event.





Upcoming events

EGU Conference in Vienna (Austria) 23-27 May 2022

During the upcoming EGU General Assembly 2022 that will be held in Vienna (Austria) on 23-27 May 2022, we are going to present the Hydrological Science session HS8.2.10 “**Dynamics of Groundwater Salinization**”.

The session aims to explore the dynamics of groundwater salinization addressing temporal variations at all time scales and spatial or even combined spatial-temporal dynamics. The session is coordinated by Prof Christoph Külls (THL). Co-conveners are Dr Evangelos Tziritis (SWRI), MEDSAL coordinator, Prof Fadoua Hamzaoui (FST), Prof Maria Dolores Fidelibus and Prof Gabriella Balacco (POLIBA).

The presentations are scheduled on 24 May, 15:55–18:12 (CEST) in Room 2.44.

For further information, scan here!





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Upcoming events

MEDSAL's Summer School in Bari (Italy) 27-30 June 2022

The MEDSAL's Summer School is a 4-day hybrid workshop to be held from 27th to 30th June 2022, hosted by the Polytechnic University of Bari (Bari - Italy). Scientific subjects will focus on innovative tools and methods developed in the framework of the MEDSAL project. Lessons are structured in modules, each one comprising a theoretical and a practical session.



MEDSAL's Summer School

**An induction workshop for young scientists
on advanced coastal aquifer salinization
study and assessment tools**

Organized by **MEDSAL partners**



SWRI
Soil and Water Resources Institute



Hosted by **Politecnico di Bari**



CERTH
CENTRE FOR
RESEARCH & TECHNOLOGY
HELLAS



This workshop is conducted in the context of MEDSAL Project © (www.medsal.eu), which is part of the PRIMA Programme supported by the European Union's Horizon 2020 Research and Innovation Programme and funded by the national funding agencies of GSRT (grant number 2018-7), BMBF, RPF, MIUR (grant number 1421), MHESR (grant number 2018-12), and TÜBİTAK (grant number 118Y366).



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www.medsal.eu



50 participants (29 females and 21 males) of 13 nationalities and from 15 countries from Africa, America, Asia and Europe will attend the workshop either in person or remotely.

If you are either a **stakeholder** or **any scientist** interested in coastal aquifer salinization study and assessment tools, and **you wish to attend remotely just the theoretical morning sessions**, please fill-in the present [form](#).

For further information, scan here!





Upcoming events

7th IAHR Europe Congress Special Session in Athens (Greece) 7-9 September 2022

Water resources management and water governance, in the Mediterranean (MED) coastal zones is an important and urgent challenge. The development of large and mega-cities increases the pressure on water resources quality and quantity, due to rising population and increase of economic activities, in the MED coastal zones. This situation is being further intensified by the climate change pressures and vulnerability of the MED coastal regions. Climate changes could significantly affect MED coastal aquifers with e.g. seawater intrusion and increased salt concentration in groundwater. The MED coast-lands are experiencing several increasing anthropogenic disturbances and new species production, which is threatening biodiversity compared to other coastal seas.

The aim of the Special Session is to present the research results of three PRIMA projects (Sustain-COAST, InTheMED & MEDSAL) which have as their main objective the innovative groundwater management in a changing climate in the MED region.

For further information, scan here!



Upcoming events

Common (Sustain-COAST and MEDSAL, PRIMA Projects) International Conference in Chania 27-30 September 2022

The Sustain-COAST and MEDSAL, PRIMA Projects are glad to release the 1st Announcement and the Call for Abstracts of the Common International Conference taking place in Chania (Greece) from 27th to 30th September 2022 - Abstract Submission Deadline 30th May 2022

Themes & Topics

- Tools and methods for groundwater monitoring at coastal aquifers
- Tools and methods for groundwater salinization and/or overall quality assessment
- Pollution migration in dependent ecosystems
- Assessment and modelling of coastal aquifer susceptibility to salinization and/or other pollution
- Numerical flow and transport modelling for groundwater assessment and sustainable management of coastal aquifers
- Best practices and innovative technologies for sustainable water management
- Water governance, conflicts and stakeholder analysis

For further information, scan here!

