



MARSOL Lavrion Workshop
Athens, 16 – 18 March 2016



MARSOL

Demonstrating Managed Aquifer Recharge as a Solution to Water Scarcity and Drought

Workshop on Investigation and Monitoring Techniques in MAR, March 16 – 18, Athens, Greece

Local organizer: Institute of Communications and Computer Systems (ICCS)
EPEM S.A. Environmental Planning & Management

Meeting location: Lavrio Technological and Cultural Park (LTCP)
French Mining Company Complex
Athens - Lavrion Avenue
GR 195 00, Lavrion, GREECE
Tel.: +30 22920 25316, Fax: +30 22920 25749
Website: <http://www.ltp.ntua.gr/>

TUESDAY March 15

Arrival of participants: Throughout the day

Steering Group: 19:30 - 21:00 Steering Group meeting

WEDNESDAY March 16

MARSOL Project: Investigation and Monitoring Techniques

Introduction Session

- | | |
|---------------|---|
| 09:30 - 09:50 | Coordinator's Welcome |
| | Welcome address by Assimakis Chadoumelis (Site Manager LTCP) |
| 09:50 - 10:00 | Overview of MARSOL project status
<i>Christoph Schüth, TUDa (MARSOL Coordinator)</i> |



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MARSOL Technologies – Presentations (chair: Christoph Schüth, Andreas Kallioras)

- 10:00 - 10:20 Time Domain Reflectometry (TDR) technologies
Andreas Kallioras, Petros Kofakis (ICCS)
- 10:20 - 10:40 Frequency Domain (FD) Measurement Technologies
Jan Bumberger, Felix Schmidt (UFZ)
- 10:40 - 11:20 *Coffee Break*
- 11:20 - 11:40 Continuous Wave & Pulse Radar Systems
Nikolaos Uzunoglou (ICCS)
- 11:40 - 12:00 Wireless Sensor Networks and Applications
Jan Bumberger, Paul Remmler (UFZ)

MARSOL Technologies – Demonstration

- 12:00 - 13:30 Demo site visit 1: MARSOL Developed Technologies**
- 13:30 - 15:00 *Lunch Break*

MARSOL Demo Sites – Presentations (chair: Yossi Guttman, João-Paulo Lobo-Ferreira)

- 15:00 - 15:20 *DEMO Site 2: Algarve and Alentejo, South Portugal*
Tiago Carvalho (TARH)
- 15:20 - 15:40 *DEMO Site 3: Los Arenales Aquifer, Castile and León, Spain*
Enrique Fernández Escalante (Tragsa)
- 15:40 - 16:00 *DEMO Site 4: Llobregat River Infiltration Basins, Sant Vicenç dels Horts, Catalonia, Spain*
Albert Folch (UPC)
- 16:00 - 16:20 *DEMO Site 5: River Brenta Catchment, Vicenza, Italy*
Francesco Furlanis (SGI)
- 16:20 - 17:00 *Coffee Break*
- 17:00 - 17:20 *DEMO Site 6: Serchio River Well Field, Tuscany, Italy*
Rudy Rossetto (SSSA)
- 17:20 - 17:40 *DEMO Site 7: Menashe Infiltration Basin, Hadera, Israel*
Yonatan Ganot (ARO)



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17:40 - 18:00 *DEMO Site 8: South Malta Coastal Aquifer, Malta*
Michael Schembri (SEWCU)

End of 1st Day (MARSOL MONITORING TECHNOLOGIES)

Departure to Athens

Workshop Dinner

21:00 Athens (Kerameikos Area)

THURSDAY March 17

Workshop Day: Monitoring & Investigation Technologies

Introduction Session

09:30 - 09:45 Coordinator's Welcome, Short Introduction of Workshop Concept
Andreas Kallioras (NTUA/ICCS)

Workshop Session Part I: Monitoring & Investigation Technologies

(chair: Christoph Schüth, Andreas Kallioras, Rudy Rossetto)

09:45 - 10:10 Life-Cycle of groundwater observation wells
Peter Dietrich (UFZ)

10:10 - 10:35 Telemetric Radar Sensing Applications for Environmental Monitoring
Georgios Stratakos (ICCS)

10:35 - 11:00 Organic contaminants in reclaimed water: From early warning to determination
Dimitris Iossifidis (GtG S.A.)

11:00 - 11:25 Modern subsurface investigation techniques
Thomas Vienken (UFZ)

11:30 - 12:00 *Coffee Break*

12:00 - 13:00 Open Discussion

13:00 - 14:00 *Lunch Break*

MARSOL Technologies – Demonstration

14:00 - 15:30 Demo site visit: Direct Push Technologies



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Workshop Session Part II: Monitoring & Investigation Technologies

(chair: Enrique Fernández Escalante, Peter Dietrich)

- 15:30 - 15:50 Data Management, Fusion and Analytics over Heterogeneous Environmental Data
Anastasios Zafeiropoulos (UBITECH S.A.)
- 15:50 - 16:10 Radar Telemetric Monitoring Stations for Water Management in Greece
Dimitris Kouvas (ScientAct S.A.)
- 16:00 - 16:30 Workshop Summary & Concluding Remarks
Christoph Schüth, Andreas Kallioras

FRIDAY March 18

Field Trip EYDAP – Athens

- 08:00 Field visit to Athens Wastewater Treatment Plant/EYDAP, Psyttaleia.
- 13:00 Lunch at local restaurant

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