



# **INNOVA-MED**

**Innovative processes and practices for wastewater treatment and re-use in  
the Mediterranean region**

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## Participants

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# Objectives

- to exploit complementarities in research objectives, methodologies and data analysis of ongoing as well recently completed EU and national projects on wastewater treatment and re-use in the EU and MPC in line with the Integrated Water Resources and Allocation Management (IWRAM) priorities indicated in the recommendations of the recent Critical Review of EU-INCO water research projects from FP4 to FP6 (Brussels, EUR 22017, Brussels, 2006)
- to facilitate efficient dissemination/exploitation of information and to improve the effectiveness in the transfer and sharing of an integrated and comprehensive knowledge on wastewater treatment and re-use technologies between EU and MPC
- allow access to easy to use information on wastewater treatment and re-use in the Mediterranean region based on effectively share and transfer of the rational extraction of knowledge built and organized during the project
- to counteract fragmentation of the research and to improve dissemination of the RTD results, as well as public awareness on the sustainability of water by connecting research with local knowledge, policy institutions and implementing bodies in the Mediterranean region

# INNOVA MED basic principle

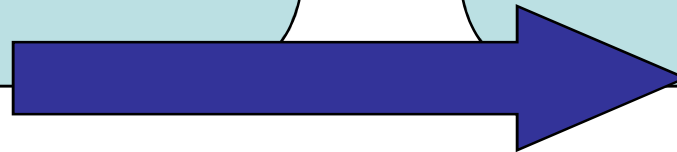
## 5 Thematic Expert groups

Overview of knowledge, experience, methodologies, technologies...

Horizontally linking the complementary research of different projects coordinated by INNOVA-MED

## 5 INNOVA MED courses

The training program for young scientist, practitioners, end-users and other interested parties in MPC



dissemination of the knowledge and information

# Expert groups

No	Expert group domain
1	<p><b>Contaminants in the water cycle</b>            Dealing with fate and analysis of xenobiotics in wastewater treatment processes; development, optimization and validation of analytical tools for measuring and monitoring of contaminants in wastewaters            Lead: participant 13 (EFF, Germany)</p>
2	<p><b>Advanced technologies for wastewater and sludge treatment</b>            Dealing with engineering aspects of water treatment technologies; development and application; scaling up of technologies from laboratory scale to pilot, demonstrative scale and full scale.            Lead: participant 10 ( CIEMAT, Spain)</p>
3	<p><b>Re-use of reclaimed water and treated sewage sludge</b>            Dealing with re-use of treated effluents for irrigation practices, indirect potable re-use and sludge use in agriculture            Lead: participant 2 (INRGREF, Tunisia)</p>
4	<p><b>Constraints of application of advance treatments and re-use of reclaimed water and sludge</b>            Dealing with socio-economic, legal/regulatory, technical, and environmental barriers of the re-use of reclaimed water and sludge and of the application of innovative treatments            Lead: participant 12 (Ecologic, Germany)</p>
5	<p><b>Integrated management of wastewaters in the Mediterranean area</b>            Dealing with different aspects of wastewater management and water resources management. This will be done through assessing the technical, financial, socio-economic, institutional, and regulatory influences on integrated wastewater management.            Lead: participant 4 (BZU, West Bank)</p>

## **Main activities of expert groups will include:**

- establishment of an common forum for the exchange of information and expertise between the INNOVA-MED core and associated projects
- preparation of a critical overview of the state-of-the-art in the area (data collected will be made available through the INNOVA-MED web page, and will be presented at the respective INNOVA-MED Conference)
- establishment of an information exchange platform in order to provide an overall perspective of the topic within the clustered projects and the expertise outside of INNOVA-MED
- organization of joint meetings of related work packages of INNOVA-MED projects
- elaboration of a set of recommendations for the application of scientific and technological achievements supporting the perspectives for integrated wastewater management in MPC

# INNOVA MED Courses

## **(1) Scientific/technical training on the different thematic areas involving the analysis of wastewaters and their treatment and re-use with the specific topic as follows:**

- Advanced chemical methods for the analysis of microcontaminants in urban and industrial wastewaters and sludges
- Biological assessment of wastewaters and sludges (acute toxicity, immunotoxicity, genotoxicity, estrogenicity)
- Monitoring tools (in situ, on line)
- Health aspects of the presence of xenobiotics and pathogens in relation to re-use of reclaimed water
  - Innovative technologies for WW treatment (membrane technology (MBR, nanofiltration, ultrafiltration, reverse osmosis); advanced oxidation or reduction technologies; advanced bioactive technologies (aerobic or anaerobic)
  - Technological innovations for alternative water supplies, including municipal and industrial wastes, drainage and brackish waters
- Strategies and technologies for reducing excess sludge production in biological wastewater treatment processes
- Technologies for post-treatment of sludge

## **(2) Thematic training on global issues with the following specific topics:**

- Legal, regulatory, socio-economic, financial, environmental and technical constraints of application of advanced treatment technologies
- Legal, regulatory, socio-economic, financial, environmental and technical constraints of re-use of reclaimed water and sewage sludge
- Decentralized management of wastewater treatment and re-use for small communities
- Recycling of water in industry

## INNOVA MED Courses

8-11 October 2007, Ankara, Turkey

3-6 December 2007, Tunis, Tunisia

April 2008, Morocco

December 2008, Egypt

June 2009, Palestine

October, 2009 Final INNOVA-MED Conference