

MELIA Project 2nd Workshop on 'Technological Perspectives for Rational Use of Water Resources in the Mediterranean Region'

Hotel Riad Mogador Menara – Marrakech

October 28th - November 2nd 2008.

<http://www.ztours-events.com/melia/>

PRELIMINARY PROGRAMME

Tuesday 28 October **Arrival of participants-registration**

Wednesday 29 October **Morning**

8h00-9h00 Registration
9h00-10h00 Opening ceremony
10h00-10h30 Posters Session-Morning Break

Topic 1: Strategies for basin management: Water resources balance and constraints to socio-economic development.

Chairpersons: M. Sernequet (REMOC, Spain); I. Martín (CENTA, Spain)

10h30-11h00 **Plenary lecture:** The Evolution of Water Management, **Juan López Martos (GRBC, Spain).**

11h00-11h15 Rational Water Use in Egypt, **A. E. Abdin ; I. Gaafar (Egypt).**

11h15-11h30 The possible effects of irrigation schemes and irrigation methods on water budget and economy in Atatürk Dam of southeast Anatolia region of Turkey , **H. Dem ; R. A. Erkan (Turkey).**

11h30-11h45 Sustainable management of reservoirs and preserving water, **S. Tigrek ; O. Gobelez ; T. Aras ; B. Imaz (Turkey).**

11h45-12h00 Water resources management in Greece from the Minoan era to present, **A. Angelakis (Greece).**

12h00-12h15 Reduction of gully erosion hazards in mountainous and semi-arid Mediterranean country, **M. Arabi (Algeria).**

12h15-12h30 Strategic interest of the hydrous resources on the durable development in the basin of Timgad Eastern northern Algeria, **F. Djaiz (Algeria).**

- 12h30-12h45 Impacts des activités anthropiques sur la qualité des eaux de l'oued Seybouse, **S. Khaled-Khodja** (Algeria).
- 12h45-13h00 Etude en vue d'une utilisation durable et efficace des ressources en eau, **B. Mouhouche** (Algeria).
- 13h00-14h00 **Lunch Break**

Wednesday 29 October Afternoon

Topic 2: Assessment of the technical, economic, social and environmental aspects for saving water.

Chairpersons: M. Shatanawi (UOJ, Jordan); M. EL Moujabber (CIHEAM-BARI, Italie)

- 14h30-15h00 **Plenary lecture:** Quantifying economic affordability of drinking water and efficiency in tariff, **Pr. Henri Smets (Water Academy, France)**.
- 15h00-15h10 The potential use, benefits and possible constraints of the new and water saving irrigation technology HYDRIP, **M. Staudinger** ; **D. Schnepf (Austria)**.
- 15h10-15h20 An operational direct model to accurately determine crop evapotranspiration of crops cultivated in Mediterranean region, **G. Rana** ; **N. Katerji** ; **R.M. Ferrara (Italy)**.
- 15h20-15h30 Estimating and monitoring seasonal water consumption of olive orchards in a semi-arid region (Morocco) using the eddy-covariance system, **J. Ezzahar** ; **A.Chehbouni** ; **S. Er-Raki** ; **S. Khabba** ; **L. Hanich (Morocco)**.
- 15h30-15h40 Water pricing as a mean to ensure water conservation: case study from Palestine, **A. Rabi** (Palestine).
- 15h40-15h50 Possible water saving opportunities in Turkey, **M. Ümlü** (Turkey).
- 15h50-16h00 Water value for olive irrigation under WFD implementation, **M.A. Mesa-Jurado**, **J. Berbel** ; (Spain).
- 16h00-16h10 Rational use of water resources in Cyprus, **D. Chimonidou** ; **P. Polycarpou** ; **L. Vassiliou (Cyprus)**.
- 16h10-16h20 Water saving irrigation technology HYDRIP, **D. Schnepf** ; **M. Staudinger (Austria)**.
- 16h30-17h00 **Posters Session-Afternoon Break**
- 17H00-17h10 Economie d'eau d'irrigation dans la région du Souss Massa, **A. Baroud**; **H. Bellouch (Morocco)**.
- 17h10-17h20 Les options de gestion de l'eau dans les zones d'influence des mines de phosphate de Khouribga, **J.Briuni** ; **J. Naja** ; **R. M'hamdi (Morocco)**.

- 17h20-17h30 Gestion efficace des ressources en eau en zone semi-aride: apport du modèle FAO pour le pilotage de l'irrigation, **M.H. Kharrou** ; **A. Chehbouni** ; **B. Duchemin** ; **S. Er-raki** ; **V. Simonneaux (Morocco)**.
- 17h30-19h00 **Round table (Topic 1, Topic2) and recommendations**

Thursday 30 October

Morning

Topic 3: Sustainable technological solutions for water treatment, recycling and reuse.

Chairpersons: **A. Rabi (PHG, Palestine)**; **L. Mandi (UCAM, Morocco)**

- 8h30-9h00 **Plenary lecture I:** Municipal and industrial wastewater recycling, **Pr. Dr. Ing. Sven-Uwe Geissen (TUB, Germany)**.
- 9h00-9h30 **Plenary lecture II:** Treating emerging contaminants (pharmaceuticals) in wastewater and drinking water treatment plants, **Pr. Damià Barceló Cullerés (CSIC, Spain)**.
- 9h30-9h45 Nanotechnologies and membrane engineering at the core of water and related questions in the Mediterranean and Middle-East countries, **G. M. Rios (France)**.
- 9h45-10h00 Planning and implementation of integrated methods for restoration of the catchments in Val Sellustra (Italy), **E. Trevisiol** ; **G. Conte** ; **B. Boz**; **B. Gumiero** ; **S. Bettini** ; **A. Borghi (Italy)**.
- 10h00-10h15 Autonomous desalination units for fresh water supplies in remote rural areas, **A. Outzourhit** ; **N. Elharrak** ; **M. Aboufirass** ; **A. Mokhlisse (Morocco)**.
- 10h15-10h30 Experimental plant of Carrion de Los Cespedes (Seville): model of technological transfer in international cooperation about sustainable solutions for wastewater treatment, **I. Martín** ; **J.J. Salas** ; **K. Fahd** ; **J.R. Pidre (Spain)**.
- 10h30-11h00 **Posters Session-Morning Break**
- 11h00-11h15 Biomarkers as an indicator for water pollution with metals in Rivers, seas and oceans, **M.N. Rashed**; **M.E. Soltan (Egypt)**.
- 11h15-11h30 Treated wastewater reuse for a seawater intrusion hydraulic barrier implementation in the Llobregat delta aquifer (Barcelona, Spain). **L. Candela** ; **G. Teijón** ; **K. Tamoh (Spain)**.
- 11h30-11h45 Low cost bio-sorbent for the removal of phenolic compounds from olive mill wastewater, **M. Achak** ; **A. Hafidi** ; **N. Ouazzani** ; **L. Mandi (Morocco)**.
- 11h45-12h00 Valorization of a mining effluent by selective recovery of Zn using solvent extraction, **M. Avila** ; **G. Perez** ; **M. Valiente (Spain)**

12h00-12h15	Environmentally balanced industrial complex for sustainability, <u>A. Dasgupta</u> (USA).
12h15-13h15	Round table and recommendations
13h15-14h15	Lunch Break

Thursday 30 October Afternoon

Topic 4: Efficiency and equity in water policies.

Chairpersons: Rafael Rodríguez (Melia Coordinator, CSIC, Spain); A. Abdin (MWRI, Egypt)

14h30-15h00	Plenary lecture: Mainstreaming agricultural and water policies for social equity and economical efficiency, Pr. Muhamad Shatanawi (UOJ, Jordan).
15h00-15h15	AQUATOOL-DMA: Decision support system shell for integrated water resources planning and management under the european water framework directive, A. Solera, J. Paredes, and J. Andreu (Spain)
15h15-15h30	Water framework directive and water policies in France: Evolutions and tools for a water resources rational use, G. Nion (France).
15h30-15h45	Comparative analysis of the policies for water saving in agriculture: pricing versus quota, G. Giannoccaro ; J. M. Pistón ; J. Berbel (Spain).
15h45-16h00	Modernization of irrigation systems: measures to reduce pressure on water demand in Lebanon, F. Karam ; K. Karaa ; N. Tarabey (Lebanon).
16h00-16h15	Water resources and their development procedures in Syria, A. Kaisi (Syria).
16h15-16h30	Ecohydrology and groundwater resources management under global changes: a pilot study in pre-Saharan basins of southern Morocco, M. Messouli ; M. Yacoubi-Khebiza ; B. Ghallabi ; S. Rochdane ; A. Ben Salem ; FZ. Hammadi (Morocco).
16h30-17h00	Posters Session-Afternoon Break
17h00-18h00	Round table and recommendations
20h00	Gala Diner

Friday 31 October Morning

Topic 5: Tools for water quality-quantity monitoring and modelling: telemetry, satellite image processing for management of water resources.

Chairpersons: J. Berbel (UCO, Spain); F. Karam (LARI, Lebanon)

- 08h30-09h00 **Plenary lecture:** Remote sensing techniques in support of water resources management, **Dr. Nick van de Giesen (Netherlands).**
- 09h00-09h15 Technical perspectives of irrigation efficiency improvement in the oasis systems-cases of southern Tunisia, **N. Omrani ; M. Ouessar (Tunisia).**
- 09h15-09h30 SAMIR, a tool for irrigation monitoring using remote sensing for evapotranspiration estimate, **V. Simonneaux ; M. Lepage ; S. Thomas; H. Kharrou et al. (Morocco).**
- 09h30-09h45 On-line satellite-assisted tools for participative irrigation water management, **A. Osann ; A. Calera (Spain).**
- 09h45-10h00 Technical efficiency of water use in the irrigated private perimeters in Smear watershed, south-eastern Tunisia, **M. Naceur ; S. Mongi ; M.S. Bachta (Tunisia).**
- 10h00-10h15 Water rationalization in Egypt from the perspective of the virtual water concept, **A. Gad ; R. R. Ali (Egypt).**
- 10h15-10h30 SIG and PMWIN coupled modelling in the Lower Soummam Valley, **F. Kessasra (Algeria).**
- 10h30-11h00 **Posters Session-Morning Break**
- 11h00-12h30 **Round table and recommendations**
- 13h00-14h00 **Lunch Break**

Friday 31 October Afternoon

Final recommendations

15h00-17h00 Closing ceremony

17h00-17h30 **Afternoon Break**

17h30-19h30 Management Board and Steering Committee Meeting

Saturday 1 November Technical and Touristic visits (1 day)

Sunday 2 November Departure of participants

POSTERS

Water erosion assessment for the management of natural resources in the Rheraya catchments (High Atlas, Morocco), A. Cheggour ; V. Simonneaux ; A. Zaakour ; N. Limam ; E. Roose ; N. Saber (Morocco).

Modelling of groundwater recharge: Case study of the Bouteldja unconfined aquifer of massive dune in Bordj Ali Bey area (Annaba, Algeria), S. Chaab ; S. Bachir ; J. Mudry (Algeria).

L'écosystème de l'Oueds Seybouse (N.E.Algérien) face aux aménagements hydrauliques et des changements climatiques, L. Djabri ; A. Hani ; A. Belhamra ; L. Ghreib ; B. Aoun Sebaiti (Algeria).

Impact of anthropogenic activities on groundwater quality for a semi-arid region in Algeria, F. Baali ; A. Rouabhia ; A. Hani ; L. Djabri (Algeria).

Monitoring of a small autonomous desalination system of membrane distillation based on solar energy, installed in a rural area of El Kelâa Sraghna (Morocco), M. Elmokhtar ; Y.Fakir ; M. Aboufirassi ; M. Rommel ; M. Wieghaus ; J. Koschikowski (Morocco).

Spatial assessment of reference evapotranspiration estimation methods in a semi-arid region, S. Er-Raki ; A. Chehbouni ; J. Ezzahar ; N. Guemouria ; S. Khabba ; V. Simonneaux ; A. Ouldbba ; L. Hanich (Morocco).

Caractérisation de la qualité physico-chimique des eaux de l'aquifère turonien de Tadla (Maroc), N. Gamrani ; A. Fekri (Morocco).

Etude écologique de la distribution des hôtes intermédiaires de *Schistosoma haematobium* et des espèces qui les accompagnent dans les eaux continentales de la région de Souss Massa Draa, B. Yacoubi ; A. Zekhnini ; D. Rondelaud ; A. Moukrim (Morocco).

Use of remote sensing data to simulate daily snowmelt in the Moroccan high Atlas, A. Boudhar ; L. Hanich ; G. Boulet ; A. Chehbouni ; M. Chtioui (Morocco).

DSP dans les eaux de Oued Laou et l'eau de mer, R. Fadel ; F. B. Benabdelouahab ; F. El Guemmout ; R. Chioua ; D. Serrar ; S. El Amrani ; M. Marhraoui ; M. Montagu ; Y. F. Pouchus ; J. F. Verbis (Morocco).

Water quality and ecological assessment of High Atlas Mountain streams (Morocco), M. Loudiki ; E. Aouane ; Kh. Mouhri (Morocco).

Toxicological assessment of Cyanobacteria (Blue green algae) in some Moroccan reservoirs, M. Loudiki ; M. Douma ; B. Sabour ; Y. Ouahid ; F. F. Del Campo ; Kh. Mouhri ; B. Oudra ; V. Vasconcelos (Morocco).

Combined influence of environmental factors on *Cryptosporidium* during simulated solar disinfection of drinking water, H. Gómez-Couso ; J. Fernández-Alonso ; M. Fontán-Sainz ; E. Ares-Mazás ; K.G. McGuigan (Spain).

Preliminary studies on the presence of *Cryptosporidium* and *Giardia* in treated wastewaters and their implications for reuse, H. Gómez-Couso ; I. Martín ; C. Ariza ; M. de Rojas ; C. Cutillas ; D. Guevara; E. Ares-Mazás ; J.M. Úbeda ; J.J. Salas (Spain).

Dark Repair after Ultraviolet Disinfection in a Municipal Wastewater Treatment Plant, J. J. Vélez-Colmenares ; A. Acevedo1 ; J. M. Quiroga1 ; J. A. Andrades ; E. Nebot (Spain).

Effect of vegetation cover modification by grazing on soil particle composition on a semi-arid rangeland, H. Hellali (Tunisia).

Caractérisation géochimique des eaux du bassin de Gafsa nord, N. Saad (Tunisia)

Sustainable management of reservoirs and preserving water quality, O. Gobelez (Turkey).

Experimental study of freeze-melting process used for treating high saline brines, M. Ahmad; P. Williams ; H. Al-Jabli (United kingdom).

Transforming storm water runoff from waste to resource in arid climates, L. Prickett ; S. Planne (USA).

Depuration of tannery effluents by phytoremediation and infiltration percolation under arid climate, S. Tiglyene ; A. Jaouad ; L. Mandi ; (Morocco).

Treatment of domestic wastewater by high rate algal ponds (HRAP) under arid climate, S. Nacir ; N. Ouazzani ; J.L. Vassel ; L. Mandi (Morocco).

Biomarkers as an indicator for water pollution with metals in rivers, seas and oceans, M.N. Rashed ; M.E. Soltana (Egypt).

Contribution to the valorization of a sustainable material for the treatment of Saharan brackish water, A. Ramdani ; S. Taleb ; A. Benghalem (Algeria).

VENUE AND ACCOMODATION

HOTEL RIAD MOGADOR MENARA 5*

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