

Workshop
Sustainable water treatment technologies: achievements, perspectives, constraints

10-11 December 2012, Girona, Spain

Monday 10th December 2012

9.30 – 10.00 Registration

10.00 – 10.15 Welcome and Introduction

Damià Barceló, Director of ICRA, Girona, Spain

Mira Petrovic, ICRA, Girona, Spain, coordinator of Green-Tech project

Session 3: Membrane technologies

Chair: Ludo Diels

10.15 – 10.45 Chiranjib Bhattacharjee, Jadavpur University, Kolkata, India:

Implementation of zero-effluent concept using membrane technology: A step towards environmental sustainability

10.45 – 11.15 Maria Kennedy, UNESCO-IHE Institute for Water Education, Delft, The Netherlands:

Perspectives and challenges for desalination in developing countries

11.15 – 11.40 Sudip Chakraborty, Jadavpur University, Kolkata, India:

Application of MBR in waste water, pharmaceutical and biotechnology - Recent development

11.40 – 12.10 Poster session/Coffee break

12.10 – 12.35 Ignasi Rodriguez-Roda, ICRA-Catalan Institute for Water Research, Girona, Spain:

MBR energy optimization

12.35 – 14.00 Round table discussion: Wastewater treatment today and potential needs for the future: Current implementation of the Water Framework Directive (WFD) in Europe and challenges in developing countries (*Moderator: Miquel Rigola, UdG-Lequia, Girona, Spain*)

14.00 – 15.30 Lunch

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Session 2: Renewable energy sources in water treatment

Chair: Ignasi Rodriguez-Roda

15.30 – 16.00 Sixto Malato, Plataforma Solar de Almería, Spain
Advanced Technologies Based on Solar Energy for Wastewater Treatment

16.00 – 16.30 Pilar Fernández Ibáñez, Plataforma Solar de Almería, Spain:
Solar reactors for water disinfection

16.30 – 17.00 Míriam Agulló-Barceló, Departament of Microbiology. Faculty of Biology.
Universitat de Barcelona. Barcelona.
Concentrated solar light, H₂O₂, TiO₂ and solar photo-Fenton as disinfection
processes for water reclamation purposes.

17.00 – 17.30 Poster session/Coffee break

17.30 – 18.00 Visit ICRA

Tuesday 11th December 2012

Session 3: Recycling and recovering resources from waste water

Chair: Chiranjib Bhattacharjee

10.00 – 10.30 Ludo Diels, University of Antwerp, Belgium:
The Sewage+-concept

10.30– 11.00 Mr Anshuman, TERI Institute, New Delhi, India
Combined waste water treatment and recycling: Cases for efficient
management of waste water

11.00 – 11.30 Ivet Ferrer, UPC-Universitat Politècnica de Catalunya, Barcelona, Spain:
Biogas production in wastewater treatment systems

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11.30 – 12.00 Coffee break

Session 4: Natural treatments: constructed wetlands

Chair: Sixto Malato

12.00 – 12.30 Joan García, UPC-Universitat Politècnica de Catalunya, Barcelona, Spain:
Constructed wetlands and algal cultures as a tool for sustainability in the
water sector

12.30 – 13.00 Diederik Rousseau - University College West Flanders, Kortrijk, Belgium:
Coping with space restrictions in constructed wetland application

13.00 – 13.30 Maria Teresa Alarcón Herrera - Advanced Materials Research Center
(CIMAV), Chihuahua, México:
Artificial Treatment Wetlands: An Alternative to Remove Arsenic from Water

13.30 – 13.50 Esther Llorens, ICRA-Catalan Institute for Water Research, Girona:
Modelling of constructed wetlands treating polluted waters

13.50 – 14:00 Final remarks

14.00 End of workshop