



WFD⁻⁴ / MDG⁻⁴

Smallwat11

3rd INTERNATIONAL CONGRESS
WASTEWATER IN SMALL COMMUNITIES
TOWARDS THE WATER FRAMEWORK DIRECTIVE (WFD)
AND THE MILLENNIUM DEVELOPMENT GOALS (MDG)

25th to 28th, April 2011. Seville (Spain)



PROGRAM

MONDAY, 25 APRIL 2011

DAY 1 PLENARY ROOM

OPENING SESSION

8:00: ACREDITATION

10:00: OPENING SESSION

Mr. José Antonio Griñán Martínez
President of Andalusian Regional Government

Mr. Alfredo Sánchez Monteseirín
Mayor of Council of Seville

Mr. José Juan Díaz Trillo
Andalusian Regional Minister of Environment

Ms. Marta Morén Abat
General Director of Water Resource. Ministry of Environment, Rural and Marine Affairs

Ms. Olivia Castillo
Board Member United Nations Secretary-General's Advisory Board on Water and Sanitation (UNSGAB)

11:00

MASTER CONFERENCE

MR. GEORGE TCHOBANOGLOUS

Professor Emeritus of University of California, Davis.
The challenge for small communities in the 21st century

11:30. COFFEE BREAK

12:00

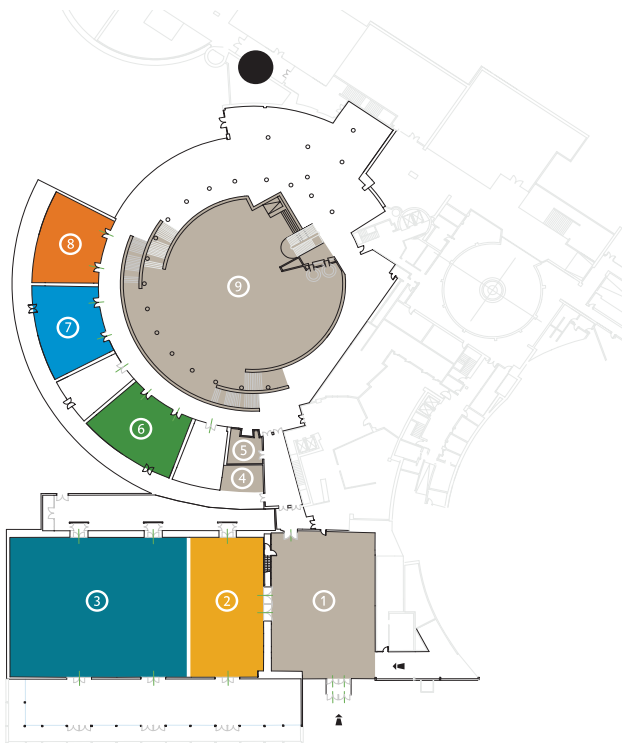
PLENARY PRESENTATIONS

Ms. Olivia Castillo, *Board Member UNSGAB - United Nations Secretary-General's Advisory Board on Water & Sanitation.*
Sustainable Sanitation and Water Scarcity: 5 years drive to 2015

Ms. Marta Moren Abat, *General Director of Water Resources, Ministry of Environment, Rural and Marine Affairs, Spain*

Mr. Adriano García-Loygorri, *Cooperation for Water and Sanitation Fund, Spanish Agency for International Development Cooperation (AECID), Spain.*
Cooperation Fund for Water and Sanitation

13:30. LUNCH



1. Posters and registration area
Área de posters y acreditaciones

2. Room A
Sala A

3. Plenary Room
Sala Plenaria

4. Scientific Secretary
Secretaría Científica

5. Technical Secretary
Secretaría Técnica

6. Room B
Sala B

7. Room C
Sala C

8. Room D
Sala D

9. Buffet Area
Área de buffet

MONDAY, 25 APRIL 2011
DAY 1 **PLENARY ROOM**

WATER FRAMEWORK DIRECTIVE

**WATER FRAMEWORK DIRECTIVE:
TOWARDS A GOOD ECOLOGICAL
STATUS**

15:00

Carlos Alberto Arias. *Specialized engineer in water treatment. Aarhus University. Department of Biological Sciences, Plant Biology, Denmark.*

Jean-Marc Berland. *Specialized adviser and project manager Office International de l'Eau - CNIDE. France*

Dr Jerzy Mikosz. *Director for Scientific Research. Institute of Water Supply and Environmental Engineering, Cracow University of Technology, Poland*

Jesús Yagüe Córdova. *Deputy Director General for Integrated Management for the Hydraulic Public Domain. Ministry of Environment, Rural and Marine Affairs. Spain*

16:30
COFFEE BREAK

17:00

Development of the quality water geo-impres model ford QOD5 and the total nitrogen in the Guadalquivir river basin district.
A. Argüelles. *Guadalquivir River Basin District.*

17:20

Aragon's wastewater treatment action plan 2008-2015.
A Cobelo. *Sociedad de Desarrollo Medioambiental de Aragón, S.A.U.*

17:40

The political context of IWRM in the euro-mediterranean area and the long-term strategy. Mobilizing non conventional water resources.
A. Hidalgo. *CSIC. Spain.*

18:00

Micropollutants in wastewater treatment plants of rural areas.
J.M. Choubert. *CEMAGREF.*

MONDAY, 25 APRIL 2011
DAY 1 **ROOM A**
MILLENNIUM DEVELOPMENT GOALS

EVENING

17:00

Water cooperation Andalusia - Morocco.
Andalusian Water Agency.

17:20

National Environmental Improvement of the rural school in Morocco.
K. Fhad Draissi. *Foundation CENTA.*

17:40

Spatial, technological and social aspects of wastewater treatment in Pondichery Region (India).
F. Fardin. *French Institute of Pondichery. University of Paris.*

18:00

Socio-economic assessment in water and sanitation: analysis of impact on poverty and valuation of benefits.
A. Montoya. *Water Resources and Aquatic Ecosystems. University of Alcalá*

18:20

Official development aid in wastewater management: quantitative and qualitative analysis, by donors and regions.
R. Castizo. *Spanish Agency for International Development Cooperation (AECID).*

18:40

Creation of a regional platform for best practice and advocacy in the Caribbean Water Sector and consolidation of the Caribbean Water Operators Partnerships (CariWOPS) alliance.
J.A. Cordovilla. *Consultant for UNHABITAT.*

19:00

Uruguay facing challenges to achieve universal coverage of sanitation.
J.L. Genta. *National Direction of Water. Uruguay.*

TUESDAY, 26 APRIL 2011
DAY 2 ROOM A
TREATMENT TECHNOLOGIES

MORNING

Chairperson: Jan Vymazal

9:00

Keynote Speaker: **Joan García**, *Technical University of Catalonia, Spain.*

CLOGGING IN SUBSURFACE-FLOW TREATMENT WETLANDS: ASSESSMENT, MANAGEMENT AND MODELING.
J. García, J. Nivala, G. Dotro, P. Knowles and S. Wallace

9:20

Comparison of a recycled glass filter and sand filter for tertiary treatment of on-site wastewater effluent.

L.W. Gill, P.L. Veale and M. Murray

9:40

Using electrical resistivity tomography (ERT) to evaluate water flow in a vertical flow constructed wetland.

J. Lillo, D. Gómez, I. de Bustamante, J.J. Salas and I. Martín

10:00

Evaluation of the relative importance of microbial reactions on cod removal in hssf cws treating wastewater rich in nitrates: cwm1-retraso simulations.

E. Llorens, M. Poch and J. García

10:20

Performance and reliability of decentralized wastewater infrastructure.

S. Wallace, D. Cooper, J. Nivala and C. Murphy

10:40

Study of the influence of substrate granulometry on the behavior of wetlands.

J.R. Pídre, J.J. Salas and J.M. Quiroga

11:00

COFFEE BREAK

11:30

Pesticide biofilm resistance study in constructed wetlands.

M.A. Ortiz, G. Agustí, M. Fittipaldi, F. Codony, B. Adrados and J. Morató

11:50

Design criteria on clogging of subsurface flow constructed wetlands: full scale experiences.

A. Pedescoll, E. Uggetti, R. Samsó, P. Knowles and J. García

12:10

Performance of constructed wetlands for wastewater treatment subject to peak mass loads.

A. Galvão, J. Mavioso and J. Matos

12:30

MASTER CONFERENCE – Plenary Room
RESOURCES ORIENTED SANITATION SYSTEM FOR THOSE AREAS WHERE ECONOMIC AND TECHNICAL LIMITATIONS.

Naoyuki Funamizu, Higher School of Engineering, University of Hokkaido, Japan.

13:30

LUNCH

TUESDAY, 26 APRIL 2011
DAY 2 ROOM A
TREATMENT TECHNOLOGIES

EVENING

Chairperson: Simón González

15:00

Keynote Speaker: **Jan Vymazal**, *Prague Science University, Czech Republic.*

IRON AND MANGANESE IN SEDIMENTS OF CONSTRUCTED WETLANDS WITH HORIZONTAL SUBSURFACE FLOW TREATING MUNICIPAL SEWAGE.
J. Vymazal and J. Švehla

15:20

Improving the anaerobic biodegradability of algae biomass from high rate ponds for wastewater treatment.

I. Ferrer, F. Passos and J. García

15:40

Twenty years of sludge accumulation in Carrión de los Céspedes (Spain). Stabilization ponds system.

J.J. Salas and R. Bouza

16:00

Efficiency of different wastewater secondary treatments in the removal of 16 pharmaceutical active compounds.

D. Camacho-Muñoz, J. Martín, J.L. Santos, I. Aparicio and E. Alonso

16:30

COFFEE BREAK

17:00

The treatment of on-site wastewater using willow bed evapotranspiration systems in Ireland.

S. Curneen and L. Gill

17:20

Removal of cyanobacteria and microcystins from waste stabilization ponds by hydrogen peroxide addition.

D. J. Barrington, A. Ghadouani and G. N. Ivey

17:40

Potential of sulphate-reducing bacteria for degradation of carbon pollution - application to horizontal subsurface flow sand filters.

N. Duclos, R. Parasher, A. Wanko, R. Mosé, P. Molle, M. Fisher and A-G. Sadowski

18:00

Experimentation constructed wetlands with zeolite for wine wastewater treatment: ZEOFITO™.

J. Rochard, S. Kerner and D. Marengo

18:20

Integrated treatment of wastewater, urban runoff and sludge with constructed wetlands.

C. Avila, J.J. Salas, I. Martín, C. Aragón and J. García

18:40

Compact constructed wetland energized by a combined solar- wind power station, evolution and performances under normal charge conditions.

V. Olmedo

19:00

Development of simultaneous nitrification process via nitrite in a full-scale municipal WWTP.

P. T. Martín de la Vega, J. A. Fernández, E. Martínez de Salazar and M. A. Jaramillo

21:00

Official dinner
Abades Triana Restaurant

TUESDAY, 26 APRIL 2011
DAY 2 ROOM B
CASE STUDIES

MORNING

Chairperson: Lluís Sala

9:00

Keynote Speaker: **Enrique Ortega**, *Center for Studies and Experimentation of Public Works (CEDEX), Spain.*

GUIDELINE FOR WASTEWATER TREATMENT SYSTEMS IN SMALL COMMUNITIES.

E. Ortega, J.J. Salas, C. Aragón, Y. Ferrer and A. Real

9:20

Domestic wastewater characteristics in French rural areas: concentrations and ratios for treatment plant under 2000 population equivalent (120kg of BOD₅ a day).

L. Mercœur, P. Molle and N. Forquet

9:40

Small wastewater treatment plants in Italy: situation and case studies of upgrading.

L. Falletti, L. Conte and A. Zaggia

10:00

Small size wastewater treatment technologies adapted to solutions for rural areas in Albania.

E. Gjinali

10:20

A proposed environmentally sound wastewater management system for the West Bank.

I. Isaac, M. Alsalamiya, J. Hilal, A. Safar, E. Abu Mohour, E. Bannoura, N. Sahouri, J.J. Salas, C. Aragón and P. Flores

10:40

Decentralized approaches to rural wastewater treatment in China: situation and challenge.

H. Zhao

11:00

COFFEE BREAK

11:30

Sanitation structures for the Guani river and their contribution for improving water quality in lake Pátzcuaro, Michoacán, México.

J. Maldonado, V. Alcocer, E. Antúnez and L. R. Álvarez

11:50

Fifteen years of water sanitation in eastern Antioquia, Colombia.

F. Molina, R. Mejía, J. Parra, M. Gardenia Rivera and J. L. González

12:10

The effect of organic loading rate on the performance of full-scale waste stabilization ponds in temperate climate: a study in the Argentine Patagonia.

M. Faleschini, J. L. Esteves and M.A. Camargo

12:30

MASTER CONFERENCE – Plenary Room
RESOURCES ORIENTED SANITATION SYSTEM
FOR THOSE AREAS WHERE ECONOMIC AND
TECHNICAL LIMITATIONS.

*Naoyuki Funamizu, Higher School of Engineering,
University of Hokkaido, Japan.*

13:30

LUNCH

TUESDAY, 26 APRIL 2011
DAY 2 ROOM B
CASE STUDIES

EVENING

Chairperson: Juan Ramón Pidrè

15:00

Keynote Speaker: **Diego Torres**, *Andalusian Water Agency, Spain.*

ANDALUSIAN STRATEGY FOR WASTEWATER TREATMENT IN POPULATIONS WITH LESS THAN 2.000 INHABITANTS EQUIVALENT.

J. Paniagua, I. Comas, D. Torres, E. Martín and J.M. Díaz

15:20

Current situation of sanitation and wastewater treatment in small Spanish agglomerations.

J.J. Salas, E. Ortega, Y. Ferrer and C.A. Aragón

15:40

Performance of wastewater treatment plants in small communities less than 1500 p.e.

D. Torres, A. Jácome, J. Suárez, R. Arias and J. Poncet

16:00

Alto Duero sanitation.

J.J. Díaz-Caneja

16:30

COFFEE BREAK

17:00

Reduction of suspended solids in a free water surface constructed wetland treating eutrophicated waters.

M. Martín, N. Oliver, C. Hernández-Crespo and M.C. Regidor

17:20

Two years monitoring of the wastewater natural reclamation system in Santa Lucía - Gran Canaria Island.

G. Martel, L. Vera and M. Márquez

17:40

Wastewater stations based on constructed wetlands, powered by solar energy, in several villages of Lubrín, province of Almería (Spain).

V. Olmedo

18:00

Evaluation of wastewater treatment plants of the province of León. The role of GIS as a tool for efficiency improvement and territory management.

P. Arroyo, J.M. Álvarez-Martínez, J. Falagán, J. Martino, E. de Luis and G. Ansole

18:20

Local application of wastewater sludge in Granada province with the technical assistance of the Granada province council.

M^a M. López-Calahorra and F.J. García-Martínez

18:40

Sanitation of the Alto Órbigo region.

J.I. Díaz-Caneja and N. Ontañón

21:00

Official dinner
Abades Triana Restaurant

TUESDAY, 26 APRIL 2011

DAY 2 ROOM C

MORNING

DECENTRALIZED WASTEWATER COLLECTION

Chairperson: Paula Loureiro Paulo

9:00

Keynote Speaker: **Alberto Galvis**, *Water Supply, Environmental Sanitation and Water Resource Conservation Research Centre - CINARA, Colombia.*

LEARNING ALLIANCES THAT CONTRIBUTE TO SUSTAINABLE WATER MANAGEMENT IN CALI, COLOMBIA.

A. Galvis, D.P. Bernal and J.T. Visscher

9:20

Market for small wastewater treatment plants - The role of notified bodies in Europe.

M. Defrain and E. Dorgeloh

9:40

Integration of horizontal and vertical flow wetlands in a modular compact system for individual sanitation in Galicia.

M.A. Díaz, A.V. Rubido, J. Solans, J.M. Vázquez and E. Tauré

10:00

Sanitation in the Arctic-Challenges and solutions.

R. Gunnarsdóttir, P. Deinboll, J-F. Hansse, A. Villumsen, P. Erlend-Jensen, and R. Kallenborn

10:20

Characteristics of on-site wastewater effluent in Ireland and implications of new European legislation.

L.W. Gill, N. O'Lvanagh, C. O'Suilleabháin, B.D.R. Misstear and P.M. Johnston

10:40

Small sewage treatment plants for the delivering sustainable off urban gardens.

L.J. Fábregas and J. Gollonet

11:00

COFFEE BREAK

11:30

Decentralised wastewater treatment systems fed by renewable energy for small communities.

R. Ibáñez, A. M. Urriaga, A. Domínguez, M. Tahat, K. Alzboon and I. Ortiz

11:50

Centralized management of decentralized infrastructures.

J.J. Tomico

12:10

Gramas network: the starting point for a more sustainable water management in the province of Granada.

M^a. M. López, M^a A., Pereira and D. Fernández

12:30

MASTER CONFERENCE – Plenary Room
RESOURCES ORIENTED SANITATION SYSTEM FOR THOSE AREAS WHERE ECONOMIC AND TECHNICAL LIMITATIONS.

Naoyuki Funamizu, Higher School of Engineering, University of Hokkaido, Japan.

13:30

LUNCH

TUESDAY, 26 APRIL 2011

DAY 2 ROOM C

EVENING

DECENTRALIZED WASTEWATER COLLECTION

Chairperson: Juan José Salas

15:00

Keynote Speaker: **Benedit Mutua**, *Faculty of Engineering and Technology, Kenya.*

IMPLEMENTING ECOLOGICAL SANITATION AS A MEANS TOWARDS DECENTRALIZED WASTEWATER TREATMENT, THE CASE OF PERI-URBAN AREAS IN NAKURU MUNICIPAL COUNCIL, KENYA.

B.M. Mutua and R. M. Gacheiya

15:20

Use of respirometry to assess the economic and environmental impact produced by the intrusions of uncontrolled clear water in wastewater treatment facilities of small populations.

J.M. Luque, J. Lara and J. Vargas

15:40

Adaptation of existing participatory planning tools for the peri-urban and rural areas in western Africa.

R. Casielles, M. Hanel, A. Lorenzo and L. Barreto

16:00

Long term operation of on-site volume reduction system to evaluate water evaporation efficiency of the gauze sheet.

M.M. Pahore, R. Ito and N. Funamizu

16:30

COFFEE BREAK

17:00

The impact of on-site wastewater treatment for small community developments on groundwater quality.

P. J. Morrissey, L.W. Gill and P.M. Johnston

17:20

The remote control system for the management of sewage treatment facilities in small towns.

A. Peña

17:40

Auto-constructible canal sanitation. ACS.

L. Pozo, D. Garvi, M. Franco, C. Morón, E. Ramírez, M. García and J. Ibratro

18:00

Black and grey water treatment and reuse experience in the Palestinian rural areas.

A. Abu-Rahma and A. Rabi

18:20

Technical feasibility of hybrid membrane BioReactor application for decentralized treatment and reuse.

L. Rodríguez, M. Viar, C. Álvarez, L. De Florio and I. Tejero

18:40

The performance of decentralized treatment (SBR, sequence batch reactor) and purified water reuse in irrigation: case of the huber mini-step établissements berenger in Casablanca / Morocco.

A. Rassam, B. Bourkhis, A. Chaouch and M. Ghannami

21:00

Official dinner
Abades Triana Restaurant

TUESDAY, 26 APRIL 2011
DAY 2 ROOM D
WATER REUSE

MORNING

Chairperson: Isabel Martín

9:00

Keynote Speaker: **Andreas Angelakis**, National Agricultural Research Foundation, Greece.

WATER RECYCLING AND REUSE IN EU: NECESSITY AND PERSPECTIVES FOR ESTABLISHING EU LEGISLATION.

A.N. Angelakis

9:20

Influence of saline reclaimed water and regulated deficit irrigation on young grapefruits.

F. Pedrero, J.J. Alarcón, E. Nicolás and O. Mounzer

9:40

Wastewater reuse for irrigation and sea water intrusion: evaluation of salinity effects on soils.

N. Kathijotes and Ch. Panayiotou

10:00

Applications of high efficient vertical flow constructed wetland for the treatment and reuse of domestic sewage in residential community.

J. Liu, J. Lu, Z. Lei and L. Peng

10:20

Appraisal of technical options for grey water treatment processes.

A. Baban, S. Murat Horcaoglu, E. Atasoy and M. Regelsberger

10:40

Graywater treatment by slanted soil system.

K. Ushijima, K. Ito, R. Ito and N. Funamizu

11:00

COFFEE BREAK

11:30

Land application systems as environmentally friendly wastewater and reuse systems.

A. de Miguel, J. Sanz, I. de Bustamante, A. de Tomás and J.L. Goy

11:50

Should we invest in small systems of reclamation and reuse wastewater? Some tools for wastewater projects analysis.

L. S. Amórtegu y and O. Alfranca

12:10

Land application systems and its assessment on financial and economic criteria: the experience of CENTA in southern Spain.

A. del Villar, I. de Bustamante, C. M. Gómez and A. de Miguel

12:30

MASTER CONFERENCE – Plenary Room
RESOURCES ORIENTED SANITATION SYSTEM FOR THOSE AREAS WHERE ECONOMIC AND TECHNICAL LIMITATIONS.

Naoyuki Funamizu, Higher School of Engineering, University of Hokkaido, Japan.

13:30

LUNCH

TUESDAY, 26 APRIL 2011
DAY 2 ROOM D
WATER REUSE

EVENING

Chairperson: Laila Mandi

15:00

Keynote Speaker: **Isabel Martín**, Foundation CENTA
EFFECTIVENESS OF DIFFERENT WASTEWATER TREATMENTS FOR WATER RECLAMATION IN SMALL COMMUNITIES.

I. Martín, C. Ariza and J. Toja

15:20

Feasibility of wastewater irrigation for small-scale bio-diesel production.

A. de Miguel, M. Moyano, I. de Bustamante, J. Lillo, M. Leal, R. García, J.J. Salas and I. Martín

15:40

Domestic wastewater a resource that creates life in the desert.

C. Huanacuni

16:00

Site selection for aquifer recharge with treated wastewater using GIS-based multi-criteria analysis.

E. Pedrero, A. Albuquerque, H. Marecos do Monte, V. Cavaleiro and J.J. Alarcón

16:30

COFFEE BREAK

17:00

Filterability tests for the characterization of the wastewater influent to a MBR process.

B. Veces, J.A. Mendoza, F.J. Martínez and C. Ferrer

17:20

Wastewater regeneration for reuse using membrane bioreactors (MBR). Comparative study of flat sheet and hollow fibre membranes.

C. Santasmasas, F. Clarens and M. Rovira

17:40

Particle removal efficiency by several filtration systems applied to tertiary treatment of wastewater.

P. Simon, C. Lardín, M. Abellán, M. Fariñas, J. Sánchez-Arévalo, MR. López and A. Rancáño

18:00

Wastewater treatment and regeneration by hidrolution FMF system (Floating Macrophytes Filter).

D. Rey Quintana and V. Torres

18:20

Wastewater reclamation by unconventional technologies.

M. E. López, J.J. Salas, J. R. Pádre and J. M. Quiroga

18:40

Helminth ova removal using usb reactors at 4°C.

R.E. Yaya Beas, G. Zeeman and J.B. van Lier

21:00

Official dinner
Abades Triana Restaurant

WEDNESDAY, 27 APRIL 2011

DAY 3 ROOM A

TREATMENT TECHNOLOGIES

MORNING

Chairperson: **Joan García**

9:00

Keynote Speaker: **Simón González**, *Institute of Engineering of the Autonomous University of Mexico.*

SMOOTH AND POROUS BIOFILM CARRIERS FOR THE TREATMENT OF LANDFILL LEACHATE.

S. González-Martínez, O. González-Barceló and P. Castrejón-Taboada

9:20

IWPM - Integrated wastewater purification management.

K.-U. Rudolph

9:40

Implementation of activated biogardens for sustainable wastewater management in Tacna, Peru.

C. Huanacuni

10:00

New technologies for municipal wastewater treatment.

B. Ribeiro, C. Moreira, D. Pontes, A. Grasmick and J. Cardoso

10:20

Criteria for selecting the best treatment solutions in small communities.

J.J. Salas, E. Ortega, Y. Ferrer, A. Real and C.A. Aragón

10:40

Technical and economic analysis of the combination peat filters + trickling filters.

J.J. Salas

11:00

COFFEE BREAK

11:30

Sampling method effects of wastewater treatment system on removing rate calculation: influence of sample type.

J.J. Salas and R. Bouza

11:50

Influence of transient hydraulic loading rate on the performance of horizontal subsurface flow constructed wetlands.

A. Albuquerque, L. Amado, P. Rodrigues and R. Craveiro

12:10

Asymmetric Capacitive Deionization (CDI), an emerging technology for water treatment in small communities.

J. J. Lado, J. Wouters, M.I. Tejedor and M. A. Anderson

12:30

Effect of *Phragmites australis* growth on the performance of horizontal subsurface flow constructed wetlands during the start-up phase.

A. Albuquerque, M.C. Mesquita, L. Amaral, R. Nogueira

12:50

Biogas production from anaerobic waste stabilization pond in the soudano-sahelian climate of Burkina Faso.

Y. Konate, A.H. Maiga, J. Wethe, C. Casellas and B. Picot

13:10

Symbiotic regenerates of domestic wastewater. Do it you same.

L.J. Fábregas and J. Gollonet

13:30

LUNCH

WEDNESDAY, 27 APRIL 2011

DAY 3 ROOM A

TREATMENT TECHNOLOGIES

EVENING

Chairperson: **Ramón Bouza**

15:00

EOX-Bioped project: first application of electrochemical and biological technologies integrated for the urban wastewater treatment.

M^o. F. Olmo, R.C. Medina, S. Martínez and A. Villén.

15:20

Production of slow-released nitrogen fertilizer from urine.

R. Ito, E. Takahashi and N. Funamizu

15:40

Wastewater tertiary treatment and carbon dioxide removal using the microalga *Botryococcus braunii*.

R. Orpez, S. Sánchez, M^o. E. Martínez, G. Hodajifa, F. El Youfi and N. Jbari

16:00

Solar photocatalytic water disinfection. Case study of *Fusarium* Spores.

M. I. Polo, P. Fernández and I. García

16:30

COFFEE BREAK

NEXOS HÍDRICOS

Encounter between Central American and Spanish Operators. Workshop.

Location: Room Andalucía 5, Barceló Renacimiento Hotel.

Schedule: 9:00 a 13:30 – 15:00 a 17:00

Detailed program aside.

Website: <http://alianzaporelagua.org/encuentro-operadores-agua/index.htm>

17:00

MASTER CONFERENCE – Plenary Room
CARRIÓN DE LOS CÉSPEDES
EXPERIMENTAL PLANT: 20 YEARS
WORKING FROM EXPERIENCE TO
EXCELLENCE.

Juan José Salas, Foundation CENTA, Spain.

18:00

CONGRESS CLOSING. Plenary Room

WEDNESDAY, 27 APRIL 2011

DAY 3 ROOM B

MORNING

CASE STUDIES / ECOLOGICAL SANITATION

CASE STUDIES

Chairperson: Alberto Galvis

9:00

Keynote Speaker: **M. Saladin**, *Swiss Federal Institute of Aquatic Science and Technology Affiliation*.

COMPENDIUM OF SANITATION SYSTEMS AND TECHNOLOGIES: CONCEPTS AND FIRST EXPERIENCES OF ITS DIFFUSION.

M. Saladin, C. Lüthi and E. Tilley

9:20

Appropriate technology for integrated water management in rural and indigenous communities in Mexico. *A. Córdoba, S. Vázquez, A. Andrade, R. Bautista and E. Espinola*

9:40

Improvement of water quality in an inland water body through low cost technology – a case study from India. *K. Shadananan*

10:00

A multistage constructed wetland for wastewater treatment of small rural agglomeration in Tunisia. *A. Ghribi and L. Boussemmi*

10:20

The wastewater management in Algiers. When the rural becomes encrusted in the urban. Al-Harrash municipality case studied. *N. Aroua and E. Berezowska-Azzag*

10:40

Water and poverty in small rural communities of the province of Cordoba, Argentina. *I. del Valle Asís and M. Flavio Facchin*

11:00

COFFEE BREAK

11:30

Helminth eggs and *Protozoa* cysts in stabilization ponds sludge in the soudano-sahelian climate of Burkina Faso.

Y. Konate, A.H. Maiga, J. Wethe, D. Basset, C. Casellas, B. Piroit

11:50

Transformation of wastewater treatment area into nature park. *D. Chakraborty*

ECOLOGICAL SANITATION

Chairperson: Benedict Mutua

12:10

Keynote Speaker: **Paula Loureiro Paulo**, *Federal University of Mato Grosso do Sul, Brazil*.

ECOLOGICAL SANITATION (ECOSAN) FOR FOOD AND WATER SECURITY.

P.L. Paulo

12:30

A preliminary survey of the public acceptance of the use of human urine as fertilizer in Turkey.

B. Beler Baykal, A.D. Allar and E.D. Bozkir

12:50

Source separation technologies in western Europe.

P.D. Janssen and D. Todt

13:10

Area of environmental education of appropriate technologies for integrated water management in rural communities and marginalized periurban.

N. H. García, M.A. Córdoba, E. Cervantes and L. Otamora

13:30

LUNCH

WEDNESDAY, 27 APRIL 2011

DAY 3 ROOM B

EVENING

TREATMENT TECHNOLOGIES

TREATMENT TECHNOLOGIES

Chairperson: Juan Ramón Pidre.

15:00

Measurement of greenhouse gas emissions from constructed wetlands for sludge treatment.

E. Uggetti, J. Ferrer, J. García

15:20

MSABP technology application of urban wastewater treatment collection and decentralization in small towns. Case studies.

A. Lanzat and J.E. Garde

15:40

Microbial community dynamics during start-up of an OSA process.

S. Rodríguez Pérez, J.C. Gutiérrez and C. Arnáiz

16:00

Sludge accumulation in stabilization ponds in the soudano-sahelian climate of Burkina Faso.

Y. Konate, A.H. Maiga, J. Wethe, C. Casellas and B. Piroit

16:30

COFFEE BREAK

NEXOS HÍDRICOS

Encounter between Central American and Spanish Operators. Workshop.

Location: Room Andalucía 5, Barceló Renacimiento Hotel.

Schedule: 9:00 a 13:30 – 15:00 a 17:00

Detailed program aside.

Website: <http://alianzaporelagua.org/encuentro-operadores-agua/index.htm>

17:00

MASTER CONFERENCE – Plenary Room
CARRIÓN DE LOS CÉSPEDES
EXPERIMENTAL PLANT: 20 YEARS
WORKING FROM EXPERIENCE TO
EXCELLENCE.

Juan José Salas, Foundation CENTA, Spain.

18:00

CONGRESS CLOSING. Plenary Room

WEDNESDAY, 27 APRIL 2011
DAY 3 ROOM C
WATER GOVERNANCE

MORNING

Chairperson: César Alcácer

9:00

Keynote Speaker: **Rowan Liyanage**. *National Water Supply and Drainage Board, Sri Lanka.*

INVOLVEMENT OF CBOS IN MANAGING RURAL WATER SUPPLY SCHEMES: LESSONS FOR THE IMPLEMENTATION OF COMMUNITY WATER SUPPLY.

R. Liyanage

9:20

Suitability of the governance water management model: the service association of municipalities in the province of Huelva (MAS).

M. Novoa

9:40

Considering the categories of the right to water in a national survey: a case from Nicaragua.

H. Dalla Torre, P. García Moreno and A. Jiménez

10:00

Strengthening water governance in the border between Costa Rica and Nicaragua.

E. Galante and C. Umaña

10:20

Intermunicipal management systems for wastewater treatment in small communities.

F.J. García-Martínez and J.A. Salinas-Fernández

10:40

Governability problems with the supply of water in the rural communities of Guatemala and the township government role (Case: San Antonio Sacatepéquez, San Marcos).

F. Gondin

11:00

COFFEE BREAK

Chairperson: Eloy García Calvo

11:30

From state to community-Based water resources governance: Do water reforms in semi-arid Kenya lead to improved access?

M. Mwangi and M. Rutten

11:50

Water & sanitation community learning centres.

G. Saavedra and M. García

12:10

Local regulations for water saving: the experience of various catalan municipalities in urban water demand management.

M. Vallès, L. Domènech and D. Saurí

12:30

Importance of training in the management of small wastewater treatment plants.

F.J. García-Martínez and M. López-Galahorra

12:50

I.W.R.M and climate change: innovative water solutions in Veneto region, Italia.

E.R. Trevisol and C. Odolini

13:30

LUNCH

WEDNESDAY, 27 APRIL 2011
DAY 3 ROOM C
WATER GOVERNANCE

EVENING

15:00

Social participation in projects for the supply of water and sanitation in rural areas.

G. Millán

15:20

Use of web-based GIS tool for local wastewater planning in Norway.

G. Eggen, O.S. Hanserud, S. Turtumoygard and P.D. Jensen

15:40

Modelling the predicted contaminant contribution of on-site wastewater management systems to surface and groundwater at Loch Sport in the Gippsland Lakes Victoria, Australia.

J.H. Whitehead and P.M. Geary

16:30

COFFEE BREAK

17:00

MASTER CONFERENCE – Plenary Room
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WEDNESDAY, 27 APRIL 2011

DAY 3 ROOM D

MORNING

ENVIRONMENTAL ISSUES / TREATMENT TECHNOLOGIES

ENVIRONMENTAL ISSUES

Chairperson: René Molleta

9:00

Keynote Speaker: **Lluís Sala**. *Costa Brava Water Consortium, Spain*

THE COSTA BRAVA APPROACH TO THE DUTCH CONCEPT OF WATER HARMONICA.

9:20

Wastewater from small communities and impacts to estuarine water quality used for aquaculture.

P.M. Geary and J.H. Whitehead

9:40

Nitrogen and phosphorus removal by red-clay ball coated with NZVI. *J. Chung, S. Hong, S. Kim and Y. Choi*

10:00

Small communities in deltic bengal and waste water in the context of climate change.

S. Gupta and S. K. Ghosh

10:20

Water-sewage sludge distribution of sixteen pharmaceutically active compounds.

L. Martín, D. Camacho-Muñoz, J.L. Santos, I. Aparicio and E. Alonso

10:40

Attenuation of trace organic contaminants during soil treatment associated with onsite wastewater treatment systems.

J. Teerlink, V. Martínez-Hernandez, J.E. Drewes and I.de Bustamante

11:00

COFFEE BREAK

TREATMENT TECHNOLOGIES

Chairperson: Carlos Aragón

11:30

Sequential batch reactors as alternative for wastewater treatment in small communities.

J.L. Bribián, A. Lorenzo, B. Guerrer and G. Schories

11:50

Biofilm reactor technology as an alternative to control fungal filamentous bulking caused by galactomyces geotrichum.

M. Matos, M.A. Pereira, A. Nicolau, A.G. Brito and R. Nogueira

12:10

Derrylin WWTW - Kee fixed film technology provides a high standard of wastewater treatment in northern Ireland. *S. Nathwani*

12:30

Technical validation of the compact system of waste water treatment model Facet STP.

M. Otero, I. Rial, R. Dogazo and G. Alfonsín

12:50

Attached growth denitrification system (SIDECA).

D. M. Seisdedos, S. A. Hernández, E. Durán, R. García, I. Sangüesa, I. Bernacer, J.A. Basiero, J. J. Morenilla and C. Ferrer

13:10

Removal of carbon and nitrogen of municipal wastewater with submerged filters. Experience from a full scale plant.

R. Novoa, J. Molina, A. Jácome, J. Suárez and S. Ferreira

13:30

LUNCH

WEDNESDAY, 27 APRIL 2011

DAY 3 ROOM D

EVENING

TREATMENT TECHNOLOGIES

Chairperson: Carlos Aragón

15:00

Onsite treatment of concentrated oil-rich farm wastewater in an arid environment.

M.J. Travis, N. Weisbrod and A. Gross

15:20

Moving BED technology for small communities.

G. Zalakain Bengoa

15:40

Microbial electrogenesis: wastewater as an energy resource. Aquaelectra project.

A. Reija, S. Tejedor, A. Berna, K. Boltes, C. Gutierrez, Z. Borjas, M. Estevez, J. Carpatos, M. Biel, E. Montero, B. Barroeta and A. Esteve-Núñez

16:00

Mimization of sewage sludge production as a solution for the managing problems in small WWTP.

P. Romero, M.D. Coello, J.M.ª Quiroga and C.A. Aragón

16:30

COFFEE BREAK

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Juan José Salas, Foundation CENTA, Spain.

18:00

CONGRESS CLOSING.
Plenary Room

THURSDAY, 28 APRIL 2011
DAY 4 TECHNICAL TOUR
MORNING

9:00 - 13:00

TECHNICAL TOUR TO THE EXPERIMENTAL CENTER OF CARRION DE LOS CESPEDES (Seville)

Singular infrastructure: Wastewater Treatment Technologies and Water Reuse.

DETAILS:

- » The tour will be organized in two main groups to coordinate the visit properly.
 - » First group will be picked up at 9:00 a.m. Meeting point: Barceló Hotel (congress venue).
 - » Second group will be picked up at 10:45 a.m. Meeting point: Barceló Hotel (congress venue).
 - » Everyone interested has to confirm the participation in the Technical Tour at the REGISTRATION DESK of the congress. You have to choose one of the groups (maximum 100 people in each group) and select please if you belong to SPANISH sub-group or ENGLISH sub-group, for having the tour explanation in one language or another.
 - » The confirmation must be done at the congress on Monday 25th or Tuesday 26th. Registration for the tour will close on Tuesday at 19:00 p.m.
 - » The expected duration of the Technical Tour in the Experimental Center is 2 hours.
-

POSTER

Dear all

If somebody wishes to contact with the authors whose works have been admitted as posters, the attendance persons will facilitate you a "contact form" in the REGISTRATION AREA.

In the standard form you will find the name of the work/project and the authors and you will be able to write your name and contact data, together with your comments or interests. To make it easier it is important to specify first the POSTER NUMBER.

Also at the REGISTRATION AREA, you may ask for a copy of the poster in A4 layout. Please check at the registration desk whether the author you are looking for has facilitated those printed copies to the organization.

The personnel of the technical secretariat will coordinate the contact to reach the specific author you are looking for.

For further questions do not hesitate to ask at the technical secretariat or to the organization.

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Cooperación Internacional para el desarrollo
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