Conference program

10-12 May 2015 Thessaloniki, Greece
DETAILED PROGRAM

Sunday 10 May 2015

WELCOME SESSION

(Bistrot La Place Mignon – White Tower)

18:00-19:30 Registration

19:30-21:00 Welcome reception
Monday 11 May 2015

0830-0900 Registration

OPENING SESSION
(Amphitheatre, Chair: G. Lyberatos)

0900-0910 Greetings - Addresses

0910-0930 IWA, Presence in Greece and Young Water Professionals Programme
M. Malioka

KEYNOTE SPEAKER 1
(Amphitheatre, Chair: G. Lyberatos)

0930-1015 Phosphorus recovery in municipal WWTP: research and case studies in Italy
F. Fatone

PARALLEL ORAL SESSIONS
NUTRIENT REMOVAL FROM WASTEWATER I
(Amphitheatre, Chair: P. Melidis)

1015-1030 Population dynamics of nitrifying bacteria for nitritation achieving in Johannesburg (JHB) process treating municipal wastewater
L. Zhang, X. Bai, J. Zhang, W. Zeng, X. Wang

1030-1045 Sewage sludge fermentation for nutrients recovery and production of polyhydroxyalkanoates (PHA) through the via-nitrite pathway
D. Crutchik, N. Frison, A. Jelic, F. Fatone

1045-1100 Kinetic evaluation of nitrification performance in an immobilized cell membrane bioreactor
D. Güven, E. Ubay Çokgör, S. Sözen, D. Orhon
MODELLING STUDIES IN WATER AND WASTEWATER SYSTEMS I

(Aeolos, Chair: M. Mitrakas)

10^{15}-10^{30} Using remote sensing technology with SWAT hydrological modeling to estimate soil moisture of an insular basin
V. Meliadou, C. Vasilakos, O. Tzoraki, K. Kalampokidis

10^{30}-10^{45} Comparative analysis of water-pipe network deterioration – case study
M. Kutyłowska, M. Orłowska-Szostak

10^{45}-11^{00} Model for planning maintenance of sewerage networks based on external inspection
I. Milojković, J. Despotović, K. Popin

11^{00}-11^{35} Coffee Break

PARALLEL ORAL SESSIONS

NUTRIENT REMOVAL FROM WASTEWATER II

(Amphitheatre, Chair: F. Fatone)

11^{35}-11^{50} Phosphorus removal from aqueous solutions and wastewater samples by chemical precipitation
K. Kalaitzidou, A. Tolkou, M. Mitrakas, A. Zouboulis

11^{50}-12^{05} Phosphates removal from various side-streams of a wastewater treatment plant
C. Raptopoulou, A. Tolkou, M. Mitrakas, P.-A. Palasantza, A. Zouboulis

12^{05}-12^{20} Efficiency of wastewater treatment in SBR and IFAS-MBSBBR systems in specified technological conditions
K. Sytek, J. Podedworna, M. Żubrowska-Sudoł

12^{20}-12^{35} Community structure of “Candidatus Accumulibacter” and nitrifying bacteria in denitrifying phosphorus removal via nitrite pathway
W. Zeng, X. Bai, L. Zhang, A. Wang, Y. Peng

12^{35}-12^{50} The effect of dark and light cycle on nutrient removal by using membrane bioreactor containing microalgae
HEAVY METAL REMOVAL FROM WATER

(Aeolos, Chair: A. Karabelas)

1135-1150 Hexavalent chromium removal from drinking water: A case study in Bulgaria
I.A. Angelova

1150-1205 Assessment of heavy metal soil pollution in the Prefecture of Elias, Greece
D. Papaioannou, P.H. Koukoulakis, F. Papadopoulos, A.H. Papadopoulos, I.K. Kalavrouziotis

1205-1220 Rapid small scale column tests for Cr(VI) removal by granular magnetite
E. Kaprara, K. Simeonidis, A. Zouboulis, M. Mitrakas

1220-1235 Efficiency of novel composite coagulants of iron and aluminium for As(III) and As(V) removal from groundwaters
A. Tolkou, N. Tzollas, M. Datseri, I. Katsoyiannis, A. Zouboulis

1235-1250 Removal of Cadmium and Mercury from drinking water
E. Kokkinos, K. Soukakos, M. Mitrakas

1250-1420 Lunch – Poster Session

PARALLEL ORAL SESSIONS

SLUDGE TREATMENT AND MANAGEMENT

(Amphitheatre, Chair: W. Zeng)

1420-1435 Combined chemically enhanced primary sedimentation and biofiltration process for low cost municipal wastewater treatment
A. Bezirgiannidis, P. Melidis, S. Ntougias, A. Plesia-Efstathopoulou, V. Diamantis, A. Aivasidis

1435-1450 Influence of external factors on mixed culture fermentation of primary and waste activated sludge
E. Jankowska, J. Chwiałkowska, M. Stodolny, P. Oleskowicz-Popiel

1450-1505 Influence of mechanical disintegration of activated sludge on filamentous bacteria abundance
A. Miłobędzka, J. Walczak

1505-1520 Complete solids retention activated sludge process
G. Samiotis, E. Trikoilidou, D. Bellos, G. Pekridis, E. Amanatidou

1520-1535 Overview of legislation on sewage sludge management
A. Christodoulou, K. Stamatelatou

1535-1550 Two phase anaerobic codigestion of biowaste and activated sludge: pilot-scale study and implementation potential in energy and material (sCOD) recovery
F. Micolucci, M. Gottardo, P. Pavan, D. Bolzonella

MANAGEMENT IN THE WATER SECTOR

(Aeolos, Chair: N. Petroulias)

1420-1435 Domestic water charging policy in the municipality of Chania using game theory

1435-1450 The economic impact of pressure management in Kozani city’s water distribution system. Benefits, expenditures and revenue losses
K. Gonelas, V. Kanakoudis

1450-1505 Decentralised water management and analytics using wireless sensor networks
E. Katsiri, C. Makropoulos

1505-1520 Open data in the water utility sector in Greece
C. Menexidou, K. P. Tsagarakis

1520-1535 FaceWater, facing water challenges in the Web 2.0 era
K.N. Petrou

1550-1625 Coffee Break
PARALLEL ORAL SESSIONS

MICROPOLLUTANT IN WASTEWATER

(Amphitheatre, Chair: A. Zouboulis)

1625-1640 Effects of the antimicrobial and antibiotics on the microbial community structure and the development of antibiotic resistance genes in anaerobic sequencing batch reactor
S. Aydin, O. Ince, O. Arikan, Z. Cetecioglu, E.G. Ozbayram, A. Shahi, B. Ince

1640-1655 Effects of Nitrate and Sulphate on a microbial electrochemical sensor for continuous detection of Copper (II) in domestic wastewater
Y.C. Tan, S. Kharkwal, H.Y. Ng

1655-1710 Chronic effects of antibiotic mixtures on anaerobic sequencing batch reactors (ASBRs) treating pharmaceutical wastewater
E.G. Ozbayram, O. Ince, O. Arikan, Z. Cetecioglu, S. Aydin, A. Shahi, B. Ince

1710-1725 Aerobic biodegradation of emerging pollutants in river water/sediment system
E. Koumaki, D. Mamais, C. Noutsopoulos

1725-1740 Applications of response surface methodology (RSM) for the optimization of ciprofloxacin removal by electrocoagulation
S. Barışçı, O. Turkay

MODELLING STUDIES IN WATER AND WASTEWATER SYSTEMS II

(Aeolos, Chair: G. Lyberatos)

1625-1640 Evaluation and behaviour of slowly biodegradable substrate on mathematical modelling of oxygen uptake rate in activated sludge systems
J. Drewnowski

1640-1655 Dynamic modelling and design of free water surface constructed wetland systems
C. Galanopoulos, G. Lyberatos

1655-1710 Impact of Salt Wedge on a Coastal Mediterranean Lagoon Using a 3-D Numerical Model
A. Moysidis, K. Kopasakis, P. Angelidis

1710-1725 Estimation of sediment yield with MUSLE and monitoring. A case study for
Tsiknias dam at Lesvos Island in Greece
S. Michas, K. Nikolaou, A. Koukouvinos, N. Mamassis

20th Gala dinner
Tuesday 12 May 2015

KEYNOTE SPEAKER 2
(Amphitheatre, Chair: M. Ochsenkühn-Petropoulou)

0900-0945 Membrane water treatment and desalination: Prospects for development of a maturing technology and research needs
A. Karabelas

PARALLEL ORAL SESSIONS
MEMBRANE BIOREACTOR TECHNOLOGY FOR WASTEWATER TREATMENT
(Amphitheatre, Chair: E. Dialynas)

0945-1000 Filterability tests and SMP concentration measurements for membrane fouling pre-assessment in a pilot-scale MBR
P. Gkotsis, E. Peleka, D. Zamboulis, M. Mitrakas, A. Tolkou and A. Zouboulis

1000-1015 Household grey water treatment using a submerged membrane bioreactor
M. Fountoulakis, G. Markakis, I. Petousi, T. Manios

1015-1030 Investigating effect of powdered activated carbon on dynamic membrane formation in a membrane bioreactor
F. Bahrami, M.R. Mehrnia

WATER QUALITY ASSESSMENT
(Aeolos, Chair: I. Kalavrouziotis)

0945-1000 Water quality assessment of a shallow lake in a specially protected area: Lake Mogan, Ankara, Turkey
M. Kiraz, E. Alp

1000-1015 Radioactivity monitoring in mineral springs of Greece
G. Kuburas, E. Tzempelikou, H. Florou

10\(^{15}\)-10\(^{30}\) The determination of disinfection by-products in drinking water for a long period of time in Greece
S.K. Golfinopoulos, A.D. Nikolaou

10\(^{30}\)-11\(^{05}\) Coffee Break

PARALLEL ORAL SESSIONS

ASSESSMENT OF WASTEWATER TECHNOLOGIES

(Amphitheatre, Chair: N. Frison)

11\(^{05}\)-11\(^{20}\) Performance evaluation of grey water treatment systems for urban use using multi-criteria analysis
I. Anagnostou, G. Kaparos, A. Katsiri, E. Katsiri, A. Andreadakis

11\(^{20}\)-11\(^{35}\) Greywater characterization and treatment
A. Andreadakis, C. Noutsopoulos, I.D. Mantziaras, N. Kouris

11\(^{35}\)-11\(^{50}\) Assessing the environmental consequences of the co-management of wastewater and domestic organic waste
L. Lijó, S. González-García, E. Katsou, S. Malamis, F. Fatone, G Feijoo, M.T. Moreira

11\(^{50}\)-12\(^{05}\) Sustainability assessment of tertiary wastewater treatment technologies: A multi-criteria analysis
K.V. Plakas, A.A. Georgiadis, A.J. Karabelas

12\(^{05}\)-12\(^{20}\) Appropriate technology for small scale wastewater treatment in FYROM
I. Foelmli, T. Kempter, N. Vangelov, D. Lefkov, R. Buehler

ENVIRONMENTAL IMPACT

(Aeolos, Chair: P. Samaras)

11\(^{05}\)-11\(^{20}\) Pathogen occurrence caused by flooding of sewerage networks
I.M. Skoullos, C.M. Lopez Vazquez, M. Hammond, Z. Vojinovic, D. Brdjanovic

11\(^{20}\)-11\(^{35}\) The impact of sewage sludge on the heavy metal composition of spinach
S. Sotiropoulos, I.K. Kalavrouziotis, S. Varnavas, Ch. Paschalidis, V. Kavvadias,
P.H. Koukoulakis, A. Koriki, G. Xirogiannis

11^{35}-11^{50} Environmental performance of mid-sized waste-water treatment facilities based on life cycle assessment
E.A. Breska, G.E. Konstantzos, M.P. Papadopoulou

11^{50}-12^{05} Surveying of suburban forest hydrologic networks for supporting environmental management and fostering natural protection
V.C. Drosos, N.C. Tsolakis, S.-A.G. Liampas

12^{05}-12^{20} Drama VS losses & leaks- A case study
E. Bougoulia, N. Petroulias, D. Foufeas

12^{20}-14^{00} Lunch – Poster Session

PARALLEL ORAL SESSIONS

INDUSTRIAL WASTEWATER I

( Amphi theatre, Chair: P. Gikas)

14^{00}-14^{15} Biodegradation and decolorization of synthetic and real melanoidins by potential manganese peroxidase yeasts isolated from biological reactor treated molasses wastewater
S. Mahgoub, C. Tsioptsias, P. Samaras

14^{15}-14^{30} Sulphate-reducing bioreactors: current practices and perspectives
P. Kousi, E. Remoundaki, A. Hatzikioseyian, M. Tsezos

14^{30}-14^{45} Removal of paracetamol from aqueous solutions by photocatalysis and phytoremediation
S. Georgopoulos, M.I. Papadaki

14^{45}-15^{00} Bromate removal from industrial cooling water with the use of granular activated carbon (GAC)
F.A. Megalopoulos, M.T. Ochsenkuehn-Petropoulou

15^{00}-15^{15} A novel Two Phase Solid: Liquid Bioreactor (TPSLB) for microbial Cr(VI) removal from wastewaters
G. Lytras, C. Lytras, C. Papadopoulou, I. Ntaikou, G. Lyberatos
ADVANCED WATER TREATMENT TECHNOLOGIES
(Aeolos, Chair: I. Katsoyiannis)

14:00-14:15 Adsorption of cyanide on activated carbon and metals impregnated activated carbon
K. Papadimitriou, X. Dabou, M. Mitrakas, G. Stavropoulos

14:15-14:30 Impact of coagulation, sedimentation and sand filtration on wastewater disinfection efficiency
I. Johanidesová, S. Lama, P. Čiháková, J. Bindzar, J. Wanner

14:30-14:45 Experimental and theoretical study of calcium carbonate scaling of reverse osmosis desalination membranes
S.T. Mitrouli, M. Kostoglou, A.J. Karabelas, A. Karanasiou

14:45-15:00 Implementation and operation of small-scale solar-powered groundwater desalination plants in rural areas – A case study from N. Namibia
A. Papangelou, M. Brenda, W. Urban

15:00-15:15 Comparison of sulphonamides degradation efficiency in chemical and enzymatic oxidation processes
N. Lemańska-Malinowska, M. Poraj-Kobielska, Z. Gajda-Meissner, V.A. Bjerkelund

15:15-15:50 Coffee Break

PARALLEL ORAL SESSIONS
INDUSTRIAL WASTEWATER II
(Amphitheatre, Chair: A. Kungolos)

15:50-16:05 Monitoring trace PCBs in large industrial centralized wastewater plant
A. Jelic, S. di Fabio, F. Cecchi, F. Fatone

16:05-16:20 Bioaugmentation of microorganisms in activated sludge systems and characterization of excreted Extracellular Polymeric Substances (EPS)
D.C. Banti, M. Lachani, P. Samaras, C. Tsioptsias, M. Mitrakas

16:20-16:35 Potential for Energy Production from Olive Oil Mill Wastewater and Cheese
Whey Wastewater Using Anaerobic Digestion in the Region of Chania
C. Sifaki, M. Farazaki, P. Gikas

16\textsuperscript{35}-16\textsuperscript{50} Nitrogen removal bacteria dynamics in rotating biological contractor biofilm treating coke wastewater
A. Ziemińska-Buczyńska, G. Cema, S. Żabczyński

16\textsuperscript{50}-17\textsuperscript{05} Treatment of hazardous landfill leachate using Fenton process followed by a combined (UASB/DHS) system
S. Ismail, A. Tawfik

NANOTECHNOLOGY IN WATER SYSTEMS
(Aeolos, Chair: M. Papadopoulou)

15\textsuperscript{50}-16\textsuperscript{05} Industrial synthesis of ZnO nanoparticles: study on the synthesis method, characteristics, and suggestive proposal for application in biological filtration medium
M. Homayoonfal, Y. Rabbani, M. Ezati, M. Shariati-Niassar

16\textsuperscript{05}-16\textsuperscript{20} Fouling behaviour of PSf/ZnO nanocomposite membrane in Humic acid filtration
Sh. Javdaneh, M.R. Mehrnia, M. Homayoonfal

16\textsuperscript{20}-16\textsuperscript{35} Effect of magnetic field on Fe\textsubscript{3}O\textsubscript{4}-Alumina-polysulfone nanocomposite ultrafiltration membranes in terms of dye rejection and pure water flux
A. Marandi, M. Reza Mehrnia, M. Homayoonfal, Sh. Javdaneh

17\textsuperscript{05} Closing ceremony – Best Poster Award
POSTER SESSION

(Conference Center Hall, Chair: G. Lyberatos, F. Fatone, K. Stamatelatou)

P-01 Fate of oxytetracycline in two-stage anaerobic digestion of manure from therapeutically treated cattle
Ç. Akyol, O. Ince, G. Türker, B. Ince

P-02 Comparison of ammonia removal in the microalgal and microalgal-bacterial system
E. Amini, J. Shayegan, M. Reza Mehrnia, A. Babaei

P-03 Detection of poly-p bacteria in activated sludge
L. Chovancová, H. Šedivá, I. Růžičková

P-04 Competitive studies on the adsorption of chromate and borate onto magnesia
A. Demetriou, I. Pashalidis

P-05 Arrangement strategies of dynamic membrane formation for membrane bioreactor applications
N. Fakhimi, M. Reza Mehrnia

P-06 Investigation of operational parameters and optimization for Micro-Algae dynamic membrane formation in Membrane Bio Reactor
G. Hatami Fard, M. Reza Mehrnia, N. Sehat, K. Hatami Fard

P-07 Concentration of denitrifying phosphate accumulating microorganisms in the total amount of phosphate accumulating microorganisms
E.M. Galas

P-08 Removal of trivalent samarium from aqueous solutions by activated biochar derived from cactus fibres
L. Hadjittofi, S. Charalambous, I. Pashalidis

P-09 Investigating the effect of different halophilic microbial populations on membrane fouling in membrane bioreactors
N. Sehat, M. Reza Mehrnia, M. Shavandi, G. Hatami, M. Ali Khoddam

P-10 Biodegradation of pentachlorophenol by activated sludge
M. Niesler, J. Surmacz-Górska

P-11 Toxicity assessment of hydrophobic contaminants sampled with SPMDs at different stages of water treatment
M. Pogorzelec, K. Piekarska, N. Gemza
P-12 Influence of hydrodynamic disintegration on the release of organic and nutrient compounds from activated sludge
J. Walczak, M. Zubrowska-Sudol, P. Augustyniak

P-13 Balance of contamination of midwater, suspended solids and sediments of Wilanowskie Lake
A. Witeska, M. Wojtkowska

P-14 Using a complexing agent to enhance the Separation of Co(II) from Ni(II) in H$_2$SO$_4$ solutions with carriers in hollow-fiber contactors
S.-H. Lin, R.-D. Chien, S.-C. Chen, S.-Y. Dai

P-15 Effect of transmembrane pressure on fouling behaviour of microalgae membrane bioreactor
A. Alipourzadeh, M. R. Mehrnia, A. Hallaj, A. Babaei, F. Bahrami

P-16 Numerical computation of Bubbly flow using Euler-Lagrange approach in Membrane bio reactor
A. Rahimzade, Z. Mansourpour, M. Reza Mehrnia, S. Javdaneh

P-17 Factors affecting the use of irrigation water from farmers in Crete, Greece

P-18 Pretreatment of molasses wastewater for the enhancement of anaerobic digestion
M. Mischopoulou, P. Naidis, P. Samaras

P-19 Effect of roofing material on quality of roof-harvested rainwater-correlation with rainfall events

P-20 Setting the framework for the optimization of sludge management practices based on multicriteria analysis
M. Malioka