



INTERNATIONAL CONFERENCE



Industrial Waste & Wastewater Treatment & Valorisation

AGENDA

21-23 May 2015
President Hotel, Athens



National Technical
University of Athens
NTUA



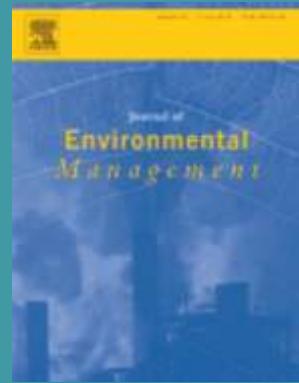
Hellenic
Water
Association

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Scientific Committee

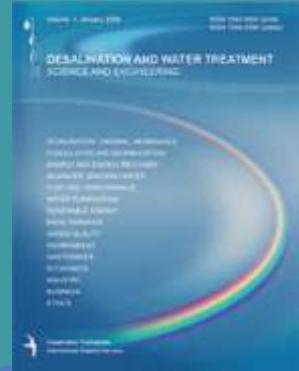
- **Maria Loizidou,**
National Technical University of Athens
- **Andreas Andreadakis,**
National Technical University of Athens
- **Agapios Agapiou,**
University of Cyprus
- **Apostolos Vlyssides,**
National Technical University of Athens
- **Celal Gokcay,**
Middle East Technical University
- **Costas Costa,**
Cyprus University of Technology
- **David Bolzonella,**
University of Verona
- **Dimitris Malamis,**
National Technical University of Athens
- **Dionisis Mantzavinos,**
University of Patras
- **Evangelos Diamantopoulos,**
Technical University of Crete
- **Francesco Fatone,**
University of Verona
- **Georges Ayoub,**
American University of Beirut
- **Gerasimos Lyberatos,**
National Technical University of Athens
- **Idil Arslan-Alaton,**
Istanbul University of Technology
- **Joan Dosta,**
University of Barcelona
- **Katherine-Joanne Haralambous,**
National Technical University of Athens
- **Munir Rusan,**
Jordan University of Science & Technology
- **Murat Mirata,**
Linköping University
- **Nick Voulvoulis,**
Imperial College
- **Nicolas Kalogerakis,**
Technical University of Crete
- **Okan Komesli,**
Atatürk University
- **Petros Gikas,**
Technical University of Crete
- **Simos Malamis,**
National Technical University of Athens
- **Ulku Yetis,**
Middle East Technical University
- **Vassilis Inglezakis,**
Nazarbayev University
- **Zorana Naunovic,**
University of Belgrade

The best papers
of the Conference
will be published



Organising Committee

- **Konstantinos Moustakas,**
National Technical University of Athens
- **Katerina Valta,**
National Technical University of Athens
- **Polina Damala,**
National Technical University of Athens
- **Aggelos Sotiropoulos,**
National Technical University of Athens
- **Christina Papadaskalopoulou,**
National Technical University of Athens
- **Maria Kasidoni,**
National Technical University of Athens
- **Vasiliki Panaretou,**
National Technical University of Athens
- **Dimitris Xevgenos,**
National Technical University of Athens
- **Jelica Novakovic,**
National Technical University of Athens



Welcome

The IWWATV 2015 International Conference on Industrial Waste and Wastewater Treatment and Valorisation aims to address the significant issue of treatment and utilization of the generated industrial waste through the promotion of effective technologies and safe practices.

The Conference participants will have the opportunity to exchange knowledge, views and ideas on the treatment and valorization of different industrial waste streams. After the SYMBIOSIS 2014 Conference that we organized in June 2014, the IWWATV 2015 Conference will also give emphasis on industrial symbiosis, the sharing of services, utility, and by-product resources among industries in order to add value, reduce costs and improve the environment. Industrial Symbiosis should be considered as one of the solutions to be addressed to achieve more efficient processing, resource and energy efficient systems for the process industry.

The Conference aims to stimulate the interest of scientists, industries and associations and inform them about the latest developments in the field of industrial waste and wastewater management and about creating economic and environmental value through interfirm collaboration. It foresees to contribute towards the improvement of the environmental performance of Industries, saving resources, as well as reducing H₂O and CO₂ footprints.

The Conference will provide an opportunity to bring together scientists & professionals from industries, industrial associations, government departments, Municipalities, private institutions, research & education institutions, being a forum for the exchange of the most recent ideas, techniques & experiences in all areas of effective industrial waste management and utilization.

We hope that you will find the **IWWATV 2015 Conference** interesting and stimulating and that you will enjoy making new contacts and collaborations and meeting up with old colleagues.



Maria Loizidou
Professor, NTUA
Chair of the Scientific
Committee



Thursday, 21 May 2015

08:00 - 09:15	Registration
09:15 - 09:45	Welcome Speeches K. Fotakis* , Alternate Minister of Research & Innovation Y. Tsironis* , Alternate Minister of Reconstruction of Production, Environment & Energy E. Kapetanios , General Secretary, General Secretariat of Waste Management Coordination, Ministry of Interior-Administrative Reform & eGovernance A. Moropoulou , Vice President, Technical Chamber of Greece K. Vafeiadis , President, Hellenic Association of Chemical Engineers E. Vidalis* , General Secretary, Hellenic Federation of Enterprises A. Savvakis , President, Federation of Industries of Northern Greece N. Koudounis , President, Association of Industries of Sterea Ellada E. Kaloussis , President of Federation of Hellenic Food Industries A. Loukatos , Solid Waste Management Consultant, ETVA Industrial & Business Parks SA A. Boudouvis , Dean, School of Chemical Engineering, NTUA I. Golias , Rector, National Technical University of Athens
09:45 - 11:00	Chair: M. Loizidou, C. Cheeseman Keynote Speakers Christopher Cheeseman , Imperial College, "Engineering the Circular Economy" Rafael Luque , University of Cordoba, "General overview of possibilities for waste valorisation & the concept of modular biorefineries" Francesco Fatone , University of Verona, "Policy, legislation and advanced treatment technologies for industrial-environmental symbiosis within the Lagoon of Venice" Maria Loizidou , National Technical University of Athens, "Industrial Symbiosis & Waste Management: The way forward for resource efficiency and circular economy"
11:00 - 11:30	Coffee Break
ROOM 1	SESSION I: Symbiosis Aspects Chair: M. Loizidou, C. Cheeseman
11:30 - 11:45	Y. Zorzios, A. Migiakis, K. Valta, P. Damala, M. Kasidoni, V. Panaretou, K. Moustakas, D. Malamis, N. Markatos, M Loizidou , Prospects of the Industrial Symbiosis Platform for the promotion of circular economy
11:45 - 12:00	R. Droop , Green Deals mobilize society and Government for greening the economy
12:00 - 12:15	N. Voulvoulis , Mining in the context of sustainable management of natural capital: the importance of waste recycling and reuse

12:15 - 12:30	L. Cutaia, G. Barberio, A. Luciano, E. Mancuso, S. Sbaffoni, M. La Monica, C. Scagliarino, A systematic methodology for industrial symbiosis approach development at a regional scale
12:30 - 12:45	Guibo Qiu, Ben Peng, Changsheng Yue, Min Guo, Mei Zhang, Recycling and regeneration of spent refractory in ironmaking and steelmaking industry
12:45 - 13:00	L.M. Queiroz, I.O.C. Nascimento, S.A.B. Vieira de Melo, R.A. Kalid, Aerobic, anaerobic treatability and biogas production potential of a wastewater from a biodiesel industry
13:00 - 13:15	A.S. Dounavis, I. Ntaikou, G. Lyberatos, Production of advanced biobased hydrogen enriched methane from waste glycerol in a two stage continuous system
13:15 - 13:30	P. Manara, M. Ganesa Pillai, A. Zabaniotou, Microwave pretreatment of residual biomass blends with crude glycerol prior to pyrolysis by means of the GlyCo Bio-Diesel Project concept
13:30 - 13:45	N. Cakir, E. Alp, U. Yetis, Evaluation of environmental performance based on proximity to BAT associated resource utilization and emission values: A case study in a steel-making industry
13:45 - 14:00	V. Aggelatou, S. Dabitzias, Th. Zampetakis, A. Meidani, N. Arvanitidis, Utilisation of mining waste for the development of added value final products
14:00 - 14:15	Discussion - Conclusions

ROOM 2	SESSION II: Wastewater Treatment I Chair: F. Dilek, E. Katsou
11:30 - 11:45	C. de la Paz, The LIFE Programme: Over 20 years improving waste and wastewater management in the EU
11:45 - 12:00	ZHANG Ruiping, WANG Xiaoyan, ZHANG Xiaoli, Decolorization of Brilliant Blue RAN By Laccase
12:00 - 12:15	J.T.G. Morais, K.P. Oliveira-Esquerre, A. Kiperstok, L.M. Queiroz, Prediction of organic matter removal from pulp and paper mill wastewater using artificial neural network
12:15 - 12:30	R.N. Coimbra, C. Escapa, A.I. García, M. Otero, A comparative study on the performance of a polymeric resin and an activated carbon for the adsorptive removal of diclofenac from water
12:30 - 12:45	L. Hadjittofli, I. Pashalidis, Thorium removal from acidic aqueous solutions by activated biochar derived from cactus fibres
12:45 - 13:00	V. Oloibiri, M. Chys, W. Audenaert, K. Demeesterec, S. WH Van Hulle, Economical and ecological removal and/or recuperation of organic matter and ammonium from landfill leachate: A full scale case study of Flemish landfills
13:00 - 13:15	M.A. Stylianou, V.J. Inglezakis, M. Loizidou, A. Agapiou, G. Itskos, Equilibrium ion exchange studies of Zn^{2+} , Cr^{3+} and Mn^{2+} on natural bentonite

13:15 - 13:30	D. Cingolani, A. L. Eusebi, P. Battistoni, Upgrading for zero liquid discharge of full scale industrial platform for leachate treatment: economical evaluations and performances optimization
13:30 - 13:45	Z.Z. Ismail, A.A. Habeeb, Simultaneous energy generation and organics removal from real industrial pharmaceutical wastewater by packed bed-microbial fuel cell

ROOM 3	SESSION III: Water Treatment Chair: K.-J. Haralambous, I. Janajreh
11:30 - 11:45	D. Xevgenos, K.-J. Haralambous, M. Loizidou, "GReen Desalination: A closed-loop technology for full recovery of water and raw materials from the wastewater effluent"
11:45 - 12:00	C. Koroneos, The Water Issue in Greek Islands: Existing Situation and Challenges
12:00 - 12:15	I. Janajreh, D. Suwwan, R. Hashaikeh, Coupled Modelling of Membrane Desalination
12:15 - 12:30	Th. Valkouma, Water management & wastewater treatment in Egnatia Odos Motorway
12:30 - 12:45	K. Chatzikonstantinou, D. S. Tsoukleris, N. Tzamtzis, E. A. Pavlatou, A novel combination of a membrane and a photocatalytic reactor for water reclamation
12:45 - 13:00	R.C. Eusebio, M.A. Promentilla, H.S. Kim, Optimization of FO system for the Utilization of RO Brine
13:00 - 13:15	I. Petousi, G. Daskalakis, M. Fountoulakis, A. Papadaki, C. Tsompanidis, E. Dialynas, P. Tzaferou, T. Manios, Performance comparison of three compact systems in grey-water treatment
13:15 - 13:30	G. Panagiotoulias, V. Paraskevopoulou, M.J. Scoullos, Cooling Water Management in Steel Hot Rolling Mills
13:30 - 13:45	S. Boudia, M. Fiallo, P. Sharrock, Permeable reactive barriers made with zero valent iron-doped porous plaster for the treatment of organic nitro compounds on laboratory scale
13:45 - 14:00	V. Panaretou, K. Valta, D. Xevgenos, M. Kasidoni, K.-J. Haralambous, Decoding the concept of water footprint through different perspectives
14:00 - 14:15	Discussion - Conclusions

14.15 - 15.00	Lunch Break
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ROOM 1**SESSION IV: Valorisation****Chair: R. Luque, A. Zabaniotou, T. Manios**

15:00 - 15:15	B. Quattrociocchi, N. Valle, C. Perrotto, F. Mercuri, L. Pasqualino, Valorization and awareness of the territory through wastewater treatment process: The project LIFE+ REWETLAND
15:15 - 15:30	J.P. Bolivar, S. Pérez-Moreno, M.J. Gazquez, M. Contreras, R. García-Tenorio, Recycling of wastes coming from the pigment TiO ₂ industry
15:30 - 15:45	J. Rosales, F. Agrela, M. Cabrera, M. G. Beltrán, J. Ayuso, Influence of processed biomass bottom ash on the mechanical and durability behaviour in mortars
15:45 - 16:00	J.P. Bolivar, M.J. Gazquez, S. Pérez-Moreno, R. García-Tenorio Uses of phosphogypsum in agriculture
16:00 - 16:15	K. Komnitsas, D. Zaharaki Co-utilization of construction/demolition wastes with metallurgical and mining wastes for the production of geopolymers
16:15 - 16:30	J. Rosales, F. Agrela, M. Cabrera, M.G. Beltrán, Application of stainless steel slag waste as a partial replacement to manufacture cement mortars
16:30 - 16:45	F. Galliou, A. Maragkaki, N. Markakis, G. Sabathianakis, C. Tsompanidis, G. Mavrogiannis, G. Koukakis, T. Manios, Solar drying of olive mill wastewater with manure for the production of organic fertilizers
16:45 - 17:00	S. Mavridou, E. Kaisidou, M. Kazdaglis, Construction and Demolition Wastes: Potential uses and current situation in Greece and Cyprus
17:00 - 17:15	A. Koutinas, M. Alexandri, C. Pateraki, H. Papapostolou, A. Vlysidis. Valorisation of pulp and paper industry waste streams for the production of succinic acid.
17:15 - 17:30	F. Chalkiopoulou, I. Chatzipanagis, C. Christidis, Perspectives for the production of industrial minerals from the exploitation of the waste stemming extraction of Greek white calcitic marble
17:30 - 17:45	Th. Valsamidis, M. Koumoutsakou, A. Papathanasoglou, Greek marble by-products - Limitations and Opportunities
17:45 - 18:00	N. D. Charisiou, C. A. Paraskeva, M. A. Goula, V. G. Papadakis, Techno-economical & Sustainability Analyses for Multilateral Exploitation of Olive Tree Cultivation Residues
18:00 - 18:15	S. Martínez-Martínez, L. Pérez-Villarejo, D. Eliche-Quesada, P. J. Sánchez-Soto, G.N. Angelopoulos, Ceramics from clays and by-product from biodiesel production: processing, properties and microstructural characterization
18:15 - 18:30	Discussion - Conclusions

ROOM 2	SESSION V: Wastewater Treatment II Chair: M. Rusan, F. Fatone, S. Malamis
15:00 - 15:15	V. Makrigianni, A. Giannakas, I. Konstantinou, Chromium (VI) removal from wastewater by acid-treated pyrolytic char derived from used rubber tires
15:15 - 15:30	A.G. Thanos, A. Sotiropoulos, S. Malamis, E. Katsou, E.A. Pavlatou, K.-J. Haralambous, Regeneration of organo-modified mineral loaded with chromate anions
15:30 - 15:45	T. Alvarino, N. Torregrosa, S. Suarez, J. Lema, F. Omil, The effect of activated carbon and membrane filtration in the removal of pharmaceutical products in hospital wastewaters
15:45 - 16:00	C. Escapa, R.N. Coimbra, S. Paniagua, A.I. García, M. Otero, Removal of pharmaceuticals from industrial wastewaters by microalgae culture
16:00 - 16:15	A. Zerva, E. Gkatzarou, D. Mioteli, M. Mousavi, G. Zervakis, P. Christakopoulos, E. Topakas, Degradation of olive mill waste waters by two wood-rot fungi and their effect on the induction of extracellular ligninolytic enzymes
16:15 - 16:30	A. G. Vlyssides, Ch. Tsiodra, K. Bampalioukas, Anaerobic digestion of olive mill wastewater after fenton oxidation as pretreatment stage
16:30 - 16:45	J. Raiti, H. Kiai, A. Hafidi, Aqueous two phases extraction of phenolic compounds from pretreated olive mill wastewater
16:45 - 17:00	M. J. M. Rusan, H. I. Malkawi, Dilution of olive mill wastewater eliminates its phytotoxicity and enhances plant growth and soil fertility
17:00 - 17:15	K. Tsigkou, A. Kotoulas, A. Kopsahelis, M. Kornaros, Development of a high-rate thermophilic anaerobic UPBR reactor for the treatment of three-phase olive mill wastewater (OMW)
17:15 - 17:30	D. Kanellopoulos, E.M. Barampouti, S. Mai, A. Vlyssides, Chemical Oxidation of Cosmetic Industry Wastewater by Fenton Reagents
17:30 - 17:45	V. M. Bhandari, L. Gayatri Sorokhaibam, V. V. Ranade, Industrial wastewater treatment for fertilizer industry- A case study
17:45 - 18:00	S. Kulshreshtha, N. Mathur, P. Bhatnagar, Treatment of cardboard industrial effluent in nutrient amended and non-amended condition
18:00 - 18:15	S. Georgopoulos, M. Panitsa, D. Vlastos, I.K. Konstantinou, M.I. Papadaki, Treatment of Cow-Farm Wastewaters using an Environmentally Friendly Method
18:15 - 18:30	Bheemaraju Sarada, Studies on bisorption of trivalent Chromium using Caulerpa fastigiata

ROOM 3**SESSION VI: Food Industries and waste treatment and products recovery**
Chair: M. Loizidou, D. Bolzonella

15:00 - 15:15	M. Alexandropoulou, G. Antonopoulou, G. Lyberatos, Fermentative hydrogen production from food – industry wastes
15:15 - 15:30	C. Da Ros, C. Cavinato, P. Pavan, D. Bolzonella, Mesophilic and Thermophilic anaerobic co-digestion of winery wastewater sludge and wine lees: an integrated approach for wine production
15:30 - 15:45	V. Varelas, E. Sotiropoulou, M. Liouni, E. T. Nerantzis, Production of β-Glucan from winery yeast waste biomass
15:45 - 16:00	E. I. Sotiropoulou, V. Varelas, M. Liouni, E. T. Nerantzis, Grape seed oil: From a winery waste to a value added cosmetic product
16:00 - 16:15	G. Z. Kyzas, D. N. Bikaris, Molecularly Imprinted Polymers (MIPs) for recovery of resveratrol from winery effluents
16:15 - 16:30	E. Nikolaïdou, M. Iossifidou, V. Tataki, A. Eftaxias, A. Aivasidis, V. Diamantis, Energy recovery and treatment of wine lees using a compact-portable anaerobic digester
16:30 - 16:45	D. Trasanidou, S. Grigorakis, A. Apostolakis, D. P. Makris, Implementation of Box-Behnken Experimental Design and Kinetics to Optimise Organic Solvent-Free Ultrasound-Assisted Extraction of Red Grape Pomace Polyphenols and Pigments
16:45 - 17:00	K. Kaderidis, A. M. Goula, K. G. Adamopoulos, An integrated process for utilization of pomegranate peels
17:00 - 17:15	I.F. Strati, V. Oreopoulou, Recovery and isomerization of carotenoids from tomato processing by-products
17:15 - 17:30	V. Diamantis, A. Aivasidis, A. Eftaxias, C. Achillas, K. Mimides, F. Pliakas, Agro-industrial residuals for enhanced food production in geothermal greenhouses
17:30 - 17:45	M. Ghimpusan, G.D. Nechifor, A. C. Nechifor, P. Passeri, Performance of combination of treatment processes for food industry wastewater depuration
17:45 - 18:00	A. Orfanos, H.K. Karapanagioti, I.D. Manariotis, Removal of methylene blue from food-industry byproducts
18:00 - 18:15	M. E. Abd El-Hack, S. A. Mahgoub, Mitigating harmful emissions from laying hens manure and enhancing productive performance through feeding on DDGS supplementation with enzymes and <i>Bacillus</i> spp
18:15 - 18:30	M. L. Montoro, M. L. Herrero, M. Di. Vallejo, M. F. Sardella, C. Deiana, Influence of pretreatment variables on the bioavailability of sugars for the production of bioethanol from melon
18:30 - 18:45	L. Mailin López González, I. Pereda Reyes, O. Romero Romero, H. Vervaeren, Synergetic effects on methane yield from sugarcane press mud co-digested with vinasse

POSTER SESSION

<p>N.E. Belkhouche, N. Benyahia, Removal of Lead by emulsion organophosphorus liquid membrane: Response surface modeling</p>	<p>K. P. Stavropoulos, A. Kopsahelis, C. Zafiri, M. Kornaros, Life Cycle Assessment (LCA) of End-of-Life Dairy Products (EoL-DPs) management in Cyprus, via their energetic valorization through anaerobic co-digestion with agro-industrial wastes</p>
<p>A.N. Apergis, Small standard subirrigation plant processing units</p>	<p>A. Ngomsik-Fanselow, R. Menéndez González, J. Kearney, M. Lock, C. Tang, V. Eijsink, A. Varnai, J. Agger, C. P. Brandstetter, F. Gehring, I. Pari, G. Pettigrew, D. Randall Waste2go: Development and verification of an innovative full life sustainable approach to the valorisation of municipal solid waste into industrial feedstocks</p>
<p>N. Gerogianni, A. Maggnas, M. Stamatakis, P. Pomonis, Effectiveness of Olivine-Rich Ultrabasic Rocks from Greece on Acid Mine Drainage and Dairy Wastewater Treatment</p>	<p>A. Kallis, M.A. Stylianou, K. Kostarelos, Innovative Water Resources Management Plan: Cyprus Case Study</p>
<p>D. Kołodyńska, A. Skiba, Z. Hubicki, B. Górecka, Superabsorbents as effective materials for adsorption of metal complexes with biodegradable complexing agent</p>	<p>L. Lintzos, K. Chatzikonstantinou, N. Tzamtzis, Performance evaluation of different membrane types in a pilot scale SMBR system</p>
<p>A. Zabaniotou, N. Antoniou, G. Stavropoulos Activated Carbon filters with End of Life Tyres pyrolytic char - The DEPOTEC project</p>	<p>M. Vilaseca, V. López-Grimau, C. Gutiérrez-Bouzán, Valorisation of Moringa oleifera waste: treatment and reuse of textile dye effluents</p>
<p>Ji Sun Kim, Cheong Seek Kim, Hyun Soo Shin, Ji Won Rhim, Application of Synthesized Anion and Cation Exchange Polymers to Membrane Capacitive Deionization (MCDI)</p>	<p>C. Gutierrez-Bouzan, M. Sala, ElectroChemical techniques combined with UV irradiation for the treatment and reuse of textile dyeing wastewater</p>
<p>D. Kołodyńska, I.Pańczyk-Figura, Enhanced removal of metal ions in the presence of GLDA</p>	<p>E. Ntinoudi, H. Yiannoulakis, Th. Zampetakis, A.I. Zouboulis, E. Pantazopoulou Stabilization of chromium in fly ash using magnesia</p>
<p>A. Adamczuk, D. Kołodyńska, Fly ash coated chitosan as efficient adsorbent for removal of heavy metal ions from waters and wastewaters</p>	<p>E.Önal, A.Ş.Yargıcı, N.Özbay, Dye adsorption behavior in aquaous solutions of activated carbon prepared from peach stone</p>
<p>A. Adamczuk, W. Sofińska-Chmiel, D. Kołodyńska, Chelating ion exchangers in heavy metal ions removal from acidic streams</p>	<p>N. Basset, E. De Arana, A. Coll, J. Dosta, J. Mata-Álvarez, Operation of an AnMBR for winery wastewater treatment at low temperature</p>
<p>I. Janajreh, T. ElSamad, M. Hussain, Numerical Simulation of Transesterification</p>	<p>X. Fonoll, S. Astals, J. Dosta, J. Mata-Álvarez, Effect of paper fraction on the mesophilic anaerobic digestion of OFMSW: Biogas and digestate evaluation</p>
<p>N. Abidi, J. Duplay, A. Jada, R. Baltenweck-Guyot, E. Errais, M. Trabelsi-Ayadi, Removal of Anionic Dye from Textile Effluents by using Kaolinite as Adsorbent</p>	<p>N. Abidi, J. Duplay, A. Jada, E. Errais, G. Sophie, F. Colin, F. Ayari, M. Trabelsi-Ayadi, Discoloration of textile effluent by natural clay. Effect of chemical dyeing additives on the adsorption of anionic dyes</p>
<p>M. Vilaseca, M.G. García-Jiménez, V. Buscio, M. Crespi, C. Gutiérrez-Bouzán, Reuse of textile effluents treated with nanofiltration membranes</p>	<p>K. Valta, E. Aggeli, G. Antonopoulou, D. Malamis, K.-J. Haralambous, Waste and wastewater treatment from the Greek dairy industry: existing situation and valorisation opportunities</p>
<p>K. Valta, E. Orli, P. Damala, K. Moustakas, M. Loizidou Review and assessment of waste and wastewater treatment from fruit and vegetable processing industry in Greece</p>	

Friday, 22 May 2015

08:00 - 09:15	Registration
	Chair: G. Lyberatos, F. Dilek Keynote Speakers Filiz Dilek , Middle East Technical University, "Treating Micropollutants of Emerging Concern – A Case of Triclosan" Petros Gikas , Technical University of Crete, Towards energy sustainable wastewater treatment plants Gerasimos Lyberatos , National Technical University of Athens, "Valorisation of agroindustrial waste for the production of energy, biofuels and biopolymers" Nicola Colonna, Valerio Miceli , Italian National Agency for New Technologies, Energy and Sustainable Economic Development, "Mediterranean agrofood organic waste streams: opportunities for value recovering through a cascade approach"
09:15 - 10:15	
10:15 - 10:45	Coffee Break

ROOM 1	SESSION VII: Wastewater Treatment III Chair: G. Lyberatos, A. Zouboulis
10:45 - 11:00	V.J. Inglezakis, S. Malamis, A. Omirkhan, J. Nauruzbayeva, Z. Makhtayeva, T. Seidakhmetov, A. Kudarova , Investigating the inhibitory effect of phenol and cyanide in the activated sludge process employed for the treatment of petroleum wastewater
11:00 - 11:15	I. Fernández, J. Dosta, J. Mata-Álvarez , A critical review of the future trends and perspectives for the implementation of Anammox in the main line of municipal WWTPs
11:15 - 11:30	G. Yuksek, D. Okutman Tas, E.Ubay Cokgor, G. Insel, B. Kirci, O. Erturan , Effects of Eco-friendly Production Technologies on Wastewater Characterization and Treatment Plant Performance
11:30 - 11:45	K. Abeliotis, K. Sheittane, K. Lasaridi , An environmental Life-Cycle study of the Limassol wastewater treatment plant
11:45 - 12:00	S. Milia, E. Malloci, A. Carucci , Aerobic granulation with petrochemical wastewater in a sequencing batch reactor under different operating conditions
12:00 - 12:15	L. Heidari, M. Jalili Ghazizade , Industrial waste management in PVC production process by focusing on caustic flake waste (Case study: Ghadeer Petrochemical Company, Mahshahr, Iran)
12:15 - 12:30	E.L.Batsari, A.K. Tolkou, A.I. Zouboulis, P.K. Gkotsis, E.N. Peleka Fouling control in MBR systems: comparison of several commercial applied coagulants

12:30 - 12:45	O.T. Komesli, M. Muz, S. Ak, S. Bakırdere, C.F. Gökçay, Comparison of EDCs Removal in Full and Pilot Scale Membrane Bioreactor Plants: Effect of flux rate on EDCs removal in short SRT
12:45 - 13:00	K. Chatzikonstantinou, N. Tzamtzis, N. Aretakis, A. Pappa, Application of high frequency power vibration (HFPV) on fouling limitation in submerged membrane modules of a pilot MBR system
13:00 - 13:15	R.C. Eusebio, M.A. Promentilla, H.S. Kim, Application of Integrated FO-MBR System to Utilize RO Concentrate as Draw Solution
13:15 - 13:30	N. Potakis, Z. Frontistis, D. Mantzavinos, Degradation of Endocrine Disrupting Chemicals by heat activated persulfate
13:30 - 13:45	Th. Patsoules, Continuous improvement strategy for increasing the efficiency of wastewaters treatment facilities in the Black Sea coastal states

ROOM 2	SESSION VIII: Ash Chair: S. Agatzini - Leonardou, L. Lombardi
10:45 - 11:00	L. Lombardi, E. Carnevale, A. Paradisi, Bottom ash treatment at the site of producing plant for reutilization
11:00 - 11:15	G. Itskos, A. Koutsianos, V. Inglezakis, N. Koukouzas, D. Torkmuzin, C. Vasilatos, Zeolite formation utilizing fly ash from Greece and Kazakhstan
11:15 - 11:30	R. Taurino, E. Karamanova, L. Barbieri, S. Atanasova-Vladimirova, F. Andreola, I. Lancellotti, A. Karamanov, New ceramic bricks based on pretreated MSW bottom ash
11:30 - 11:45	M. Stefanidou, E. Anastasiou, O. Mantziou, E. Mpougla, E. Vasiliou, P.D. Konti, K. Antoniadis, Incorporation of glass particles in high-performance mortars
11:45 - 12:00	V. Montenegro, S. Agatzini - Leonardou, P. Oustadakis, P. Tsakiridis, Hydrometallurgical Treatment of EAF Dust by Direct Sulphuric Acid Leaching at Atmospheric Pressure
12:00 - 12:15	J. Grönniger, M. P. Wistuba, A. Cannone Falchetto Reuse of Linz-Donawitz (LD) Slag in Asphalt Mixtures for Pavement Application
12:15 - 12:30	E. Karamanova, B. Ranguelov, G. Avdeev, F. Andreola, I. Lancellotti, L. Barbieri, A. Karamanov, Sintered glass-ceramic from iron-rich MSWA
12:30 - 12:45	S. Martínez-Martínez, L. Pérez-Villarejo, D. Eliche-Quesada, P. J. Sánchez-Soto, G.N. Angelopoulos, Reuse of fly and bottom ash for clinker production
12:45 - 13:00	Discussion - Conclusions

ROOM 3	SESSION IX: Biomass & Municipal Waste Chair: N. Voulvoulis, D. Malamis
10:45 - 11:00	F. Riedel, CombiTech Waste Treatment Process for mixed unsegregated Municipal Waste with no Presorting and no Residues
11:00 - 11:15	Xiaoying Liu, Yanfeng He, Chang Chen, Wen Wang, Guangqing Liu, Set-up of CSTR for treating kitchen waste and effects of operation conditions on biodegradability performance
11:15 - 11:30	C. Ghenai, I. Janajreh, Combustion of Biomass and Waste-Based Syngas Fuels
11:30 - 11:45	M. Loizidou, K. Chatzikonstantinou, Integrated treatment of waste and wastewater generated from the food industry
11:45 - 12:00	K. A. Spanos, I. Khah, D. Gaitanis, Utilisation of woody biomass from urban parks, street trees ad plantations of fast growing forest trees - possibilities for energy production, chemical and biological conversion
12:00 - 12:15	N.D. Charisiou, G. Siakavelas, K.N. Papageridis, M.A. Goula, Effect of La ₂ O ₃ addition on Ni/Al ₂ O ₃ catalysts to produce H ₂ from glycerol
12:15 - 12:30	S. Nanda, R. Azargohar, J. A. Kozinski, A. K. Dalai, Valorization of pretreatment wastes from hydrolyzed biomass by slow pyrolysis
12:30 - 12:45	A. Sotiropoulos, D. Malamis, D. Alamanou, D. Kekos, M. Loizidou, Development and demonstration of an innovative approach for converting biowaste to bioethanol: The WASTE2BIO LIFE+ Project
12:45 - 13:00	N.D. Charisiou, A. Baklavaridis, V.G. Papadakis, M.A. Goula, Synthesis gas production via the biogas reforming reaction over Ni/MgO-Al ₂ O ₃ and Ni/CaO-Al ₂ O ₃ catalysts
13:00 - 13:15	C. Katsimpouras, P. Christakopoulos, E. Topakas, Enzymatic bioconversion and fermentation of corn stover at high-solids content for efficient ethanol production
13:15 - 13:30	F.O Unuofin, P. N. S. Mnkeni, Optimizing rock phosphate incorporation rate for efficient vermidegradation of cow dung waste paper mixtures
13:30 - 13:45	E. Tsouko, D. Ladakis, N. Kopsahelis, C. Kourmentza, I. Mandala, S. Papanikolaou, A. Koutinas, Utilisation of food wastes and biodiesel industry by-products for Bacterial Cellulose production.

13.45 - 14.30

Lunch Break

ROOM 1	SESSION X: Industrial Waste Management Chair: U. Yetis, G. Mancini
14.30 - 14.45	S. Zanni, A. Bonoli, M. Luca Mancini, Abatement and bio-digestion of airborne contamination in precision mechanics: the case study of Beretta firearms
14.45 - 15.00	D. Kallidromitou, K. Korizi, K. Aravosis, Industrial Wastes and the National Waste Management Plan
15.00 - 15.15	G. Capar, U. Yetis, Development of a National Set of Environmental Performance Indicators for Turkey
15.15 - 15.30	M.M. Rajabi, M. Jalili Ghazizade, M.E. Ghanbari, B. Madadi, Waste Characterization and Management of the Phosphorus and Phosphoric Acid Industry
15.30 - 15.45	M. Padervanda, M. Vossoughia, Fabrication and antibacterial performance of Ag-Au nanoparticles decorated ionic liquid modified magnetic core-analcime shell microspheres
15.45 - 16.00	B.B. Uzun-Akinlar, E. Yaman, Thermogravimetric Pyrolysis of Walnut Shell an Assessment of Kinetic Modeling
16.00 - 16.15	I. Karachristou, St. Chouvardas, A. Savvidou, Management of Radioactive Devices at the NCSR “Demokritos”
16.15 - 16.30	S. Dayana Priyadarshini, A.K.Bakthavatsalam, Biodegradation of Phenolic Effluent of Producer Gas Plant using Scenedesmus sp.
16.30 - 16.45	G. Mancini, M. Panzica, E. Palmeri, S. Cappello, M. M. Yakimov, A. Luciano, Small improvements in the treatment of oily wastes from marine transportation
16.45 - 17.00	L. Antonozzi, A. Bonoli, S. Zanni, Life Cycle Assessment applied to remediation technologies: methodological and practical issues
17.00 - 17.15	P. Damala, E. Katsou, J. Novakovic, K. Chatzikonstantinou, G. Karathanasi, A. Patsia, S. Malamis, Application of MBR for the treatment of textile wastewater
17.15 - 17.30	Z. Zeybek, H. Ayyıldız, H. Hapoğlu, M. Alpbaz, In the treatment of textile wastewater with coagulation, modeling of treatment and pH control using artificial neural networks
17.30 - 17.45	W. Lemlikchi, N. Oubagha, P. Sharrock, M. Fiallo, M.O. Mecherri, Calcium phosphate precipitation for removal of textile dyes from industrial wastewaters
17.45 - 18.00	N. Ozbay, A.S. Yargic, M.F. Gozukizil, E. Onal, The Comparative Study on Decolorization of Remazol Yellow Dye from Aqueous Solutions by Biosorption, Fenton and Photo-Fenton Processes

ROOM 2	SESSION XI: Sludge Management Chair: A. Vlyssides, O. Komesli
14.30 - 14.45	D. Vouk, D. Nakic, N. Stirmer, Reuse of sewage sludge - problems and possibilities
14.45 - 15.00	N. Kathijotes, E. Zlatareva, S. Marinova, V. Petrova, Application of Wastewater Sludge to Crop- Monitoring Changes in the "Soil-Fertilizer-Plant" System and Phosphorous Recovery Options
15.00 - 15.15	I. Janajreh, A. Alshehhi, T. Arink, A. Al Katheerib, R. Ahmedb, Bioreactor Landfilling of Oil Sludge
15.15 - 15.30	E. Pantazopoulou, O. Zebiliadou, A. Zouboulis, Stabilization of tannery waste using ferronickel sludge
15.30 - 15.45	J.Kisser, H. Gatringer, M. Iordandopoulos-Kisser, Recovering metals from sewage sludge, waste incineration residues and similar substances with hyperaccumulative plants
15.45 - 16.00	E. Borràs; P. Bosch-Jimenez, S. Martinez-Crespiera, O. Alonso, R. Shechter, Integration of Partial Anaerobic Digestion and Microbial Fuel Cell Technologies for treatment of sludges from wastewater treatment plants
16.00 - 16.15	Z. Golhosseini, M. Jalili Ghazizade, Characterization of bottom sludge waste in a thermal power plant evaporation pond (Case study: Damavand Combine-Cycle Power Plant, Tehran, Iran)
16.15 - 16.30	M.J. San José, S. Alvarez, R. López, Preliminary study of anaerobic digestion process of biomass waste sludge in a Conical Spouted Bed reactor
16.30 - 16.45	Discussion - Conclusions
ROOM 1	CLOSING SESSION Chair: M. Loizidou, C. Cheeseman, G. Lyberatos, R. Luque, D. Bolzonella, F. Fatone, A. Zabaniotou, A. Vlyssides, N. Voulvouli, F. Dilek, U. Yetis, S. Malamis
18.00 - 18.30	Synopsis of the IWWATV 2015 conclusions with the active participation of all Chair Persons
Saturday, 23 May 2015	
08:45	Excursion-site visit to the NTUA Lavrion Technological & Cultural Park, the Sounion Temple of Poseidon and the "Mavro Lithari" beach
18:00	Estimated return to President Hotel



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Επίπεδη Παραγωγή, και Εφευραντικός Σταθμός
ΕΤΕΥ - ΕΥΑΣ-ΕΤΑΚ



ΕΠΙΧΕΙΡΗΣΕΙΣ ΚΑΙ ΕΠΙΧΕΙΡΗΣΗΣ ΤΗΣ ΕΛΛΑΣΣΑΣ

Ε.Π. Ανταποκρισιακά και Επεξεργαστικά Σύστημα (ΕΠΑΝ II), ΗΧΤΙ Μακεδονίας, Θεσσαλίας, Ήπειρου, Λευκάδας, Κέρκυρας, Πελοποννήσου, Βορείου Αιγαίου, Νησιών Αιγαίου, ΠΕΙΡΑΙΑΣ, Στερεάς Ελλάδας, Ηπειρωτικής Ελλάδας, ΠΕΙΔΑΚΩΣΙΑΣ