



LIFE13 ENV/GR/000958
Development of an integrated
strategy for reducing the carbon
footprint in the food industry sector



National Technical
University of Athens

ATHENS2017



5th International Conference on Sustainable Solid Waste Management

21-24 June 2017



Conference Venue

The Conference Venue will take place at Aegli Zappiou. It is located in the very centre of Athens, in the Zappeio Gardens and next to the Zappeion Megaron (the first building designed to serve the needs of the Olympic Games). Aegli Zappiou multiplex includes the café restaurant Aegli Café, the Greek cuisine restaurant “Aegli Estiatorio”, Cine Aegli open air cinema, Aegli Garden summer bar and the events halls Olympia, Proteas, Prive. Aegli is also facing the Acropolis and the Lycabettus Hill, is right next to the Kallimarmaro Stadium and adjacent to Syntagma square and the Greek parliament.



Location of the Event – Athens

Athens is the largest city and capital of Greece. The urban area of Athens (Greater Athens and Greater Piraeus) has a population of approximately 4 million over an area of 412 km². Athens is the most important commercial and economic centre of the country and the main Greek port, Piraeus, is one of the biggest and more important of the Mediterranean. Athens international airport is well connected with the city centre with a train that runs every 30 minutes (blue line), while there is also a bus service (express bus X95 to Syntagma square). The city centre has many neoclassical buildings which are found in Plaka, Panepistimiou Avenue, Thissio Area and Monastiraki. Athens has a very long history and as expected hosts several important museums, including the National Archaeological Museum, featuring the world's largest collection of ancient Greek antiquities, the Byzantine and Christian Museum and the Acropolis Museum. The city offers a range of public transportation which includes the metro and train (3 lines), tram and buses. Furthermore, taxis are relatively cheap when used within the city. The temperature in Athens during June is usually pleasant & warm ranging from 21-33°C.

Social Programme

Conference Welcome Cocktail

Wednesday 21th June 2017



Time: 20.00-21.30

All conference participants and speakers are invited to a Welcome Cocktail.

Acropolis Museum tour

Friday 23rd June 2017



Time: 20.00-22.00

A guided tour will take place at the museum of Acropolis after the closing session. Each participant will just pay the entrance fee. The new Acropolis Museum was completed in 2007 and has a total area of 25,000 m², with exhibition space of over 14,000 m². The museum is located in the historical area of Makryianni, southeast of the Rock of the Acropolis, on Dionysiou Areopagitou Street. It is only 300 metres from the Acropolis, it is very close to the Acropolis metro station and approximately two kilometres from Syntagma Square.

Conference Gala Dinner

Thursday 22nd June 2017



Time: 20.00-24.00

During the Conference Gala Dinner, you will have the chance to taste traditional Greek food, as well as local delicatessen.

A guided tour to waste management facilities in Athens will take place.

Saturday 24th June 2017



Time: 8.30-18.00

A guided tour to waste management facilities in Athens will take place.

Social Programme

One-day Athens cruise Hydra, Poros, Aegina

Sunday 25th June 2017 - Tuesday 27th June 2017



Optional suggestions with additional cost are available at: <http://www.triaenatours.gr/toursRegistration.php>

The conference organizers will participate in the one-day Athens cruise Hydra, Poros, Aegina on 25th June.

Other options include visits to Argolis, Delphi & Cape Sounion (<http://www.athens2017.uest.gr/index.php/location/excursions>)



Committees

Scientific Committee

Maria Loizidou, *National Technical University of Athens, Chair*
Adam Smoliński, *Central Mining Institute*
Aleksandra Djukic-Vukovic, *University of Belgrade*
Alexandra Ribeiro, *Universidade Nova de Lisboa*
Anastasia Zabaniotou, *Aristotle University of Thessaloniki*
Anastasios Zouboulis, *Aristotle University of Thessaloniki*
Andrea Capodaglio, *University of Pavia*
Andres Illanes, *Universidad Catolica de Valparaiso*
Ange Nzihou, *Ecole des Mines d'Albi*
Antonis Mavropoulos, *International Solid Waste Association*
Apostolos Koutinas, *Agricultural University of Athens*
Apostolos Vlyssides, *National Technical University of Athens*
Barbara Ruffino, *Politecnico di Torino*
Carlos Ariel Cardona Alzate, *Universidad Nacional de Colombia sede Manizales*
Carol S.K. Lin, *City University of Hong Kong*
Celia Dias-Ferreira, *Polytechnic of Coimbra*
Chew-Tin Lee, *University Technology of Malaysia*
Christopher Cheeseman, *Imperial College*
Christopher Koroneos, *National Technical University of Athens*
Costas Costa, *Cyprus University of Technology*
Costas Velis, *University of Leeds*
David Bolzonella, *University of Verona*
David Newman, *World Biogas Association*
Dimitrios Kaliampakos, *National Technical University of Athens*
Dimitrios Komilis, *Democritus University of Thrace*
Dimitrios Malamis, *National Technical University of Athens*
Dolores Hidalgo, *CARTIF*
Evina Katsou, *Brunel*
Francesco Fatone, *Marche Polytechnic University*
Francisco Omil, *Universidad de Santiago de Compostela*
Florian Amlinger, *European Compost Network*
Gerasimos Lyberatos, *National Technical University of Athens*
Grigorios Itskos, *Purdue University*
Guangtao Fu, *University of Exeter*
Hussam Jouhara, *Brunel University*
Ioannis Skiadas, *Technical University of Denmark*
Isam Janajreh, *Masdar Institute*
Jiri Hrebicek, *Masaryk University*
Joan Dosta, *University of Barcelona*
Juan Antonio Baeza Labat, *Universitat Autònoma de Barcelona*
Justo García-Navarro, *Technical University of Madrid*

Katarzyna Chojnacka, *Wrocław University of Technology*
Katherine-Joanne Haralambous, *National Technical University of Athens*
Katia Lasaridi, *Harokopio University*
Konstantinos Aravosis, *National Technical University of Athens*
Konstantinos Moustakas, *National Technical University of Athens*
Laurent Lemeé, *Université de Poitiers*
Lidia Lombardi, *Università degli Studi Niccolò Cusano - Telematica Roma*
Lionel Limousy, *Université de Haute-Alsace*
Lorna Anguilano, *Brunel University*
Luben Tzankov, *Technical University of Sofia*
Luciano Matos Queiroz, *University of Bahia*
Marc Deshusses, *Duke University*
Marco Baratieri, *Free University of Bolzano*
Mauro Majone, *Sapienza University of Rome*
Mejdi Jeguirim, *Université de Haute-Alsace*
Michalis Kornaros, *University of Patras*
Nathalie Gontard, *French National Institute for Agricultural Research*
Nick Voulvoulis, *Imperial College*
Nikolaos Mousiopoulos, *Aristotle University of Thessaloniki*
Omar Assobhei, *University of Fez*
Pascale Champagne, *Queen's University*
Paul Christakopoulos, *Lulea University of Technology*
Petros Gikas, *Technical University of Crete*
Rafael Luque, *University of Cordoba*
Rémy Bayard, *DEEP - INSA Lyon - Université de Lyon*
Ronghou Liu, *Shanghai Jiao Tong University*
Siegfried Vlaeminck, *University of Antwerp*
Simos Malamis, *National Technical University of Athens*
Spyros Pavlostathis, *Georgia Tech*
Stephen Smith, *Imperial College*
Stijn Van Hulle, *Ghent University*
Ta Yeong Wu, *Monash University*
Thomas Pretz, *RWTH Aachen University*
Ulku Yetis, *Middle East Technical University*
Vassilis Inglezakis, *Nazarbayev University*
Weiguo Shen, *Wuhan University of Technology*
Yuksel Ardali, *Ondokuz Mayıs University*
Zorana Naunovic, *University of Belgrade*

Committees

Organizing Committee

Konstantinos Moustakas, *National Technical University of Athens*

Simos Malamis, *National Technical University of Athens*

Dimitrios Malamis, *National Technical University of Athens*

Aggelos Sotiropoulos, *National Technical University of Athens*

Anastasios Vasilopoulos, *National Technical University of Athens*

Anestis Vlysidis, *Agricultural University of Athens*

Apostolos Arvanitidis, *BIOCHEM SA*

Christina Papadaskalopoulou, *National Technical University of Athens*

Fotini Salta, *Federation of Hellenic Food Industries*

George Konstantzos, *National Technical University of Athens*

Ioannis Antoniou, *JOTIS SA*

John Kontzoglou, *Kontzoglou Bros Distribution Networks*

Maurizio Notarfonso, *Federazione Italiana dell'Industria Alimentare*

Nikolaos Kopsahelis, *Agricultural University of Athens*

Panagiotis Karamanos, *AKTINA*

Petros Gikas, *Technical University of Crete*

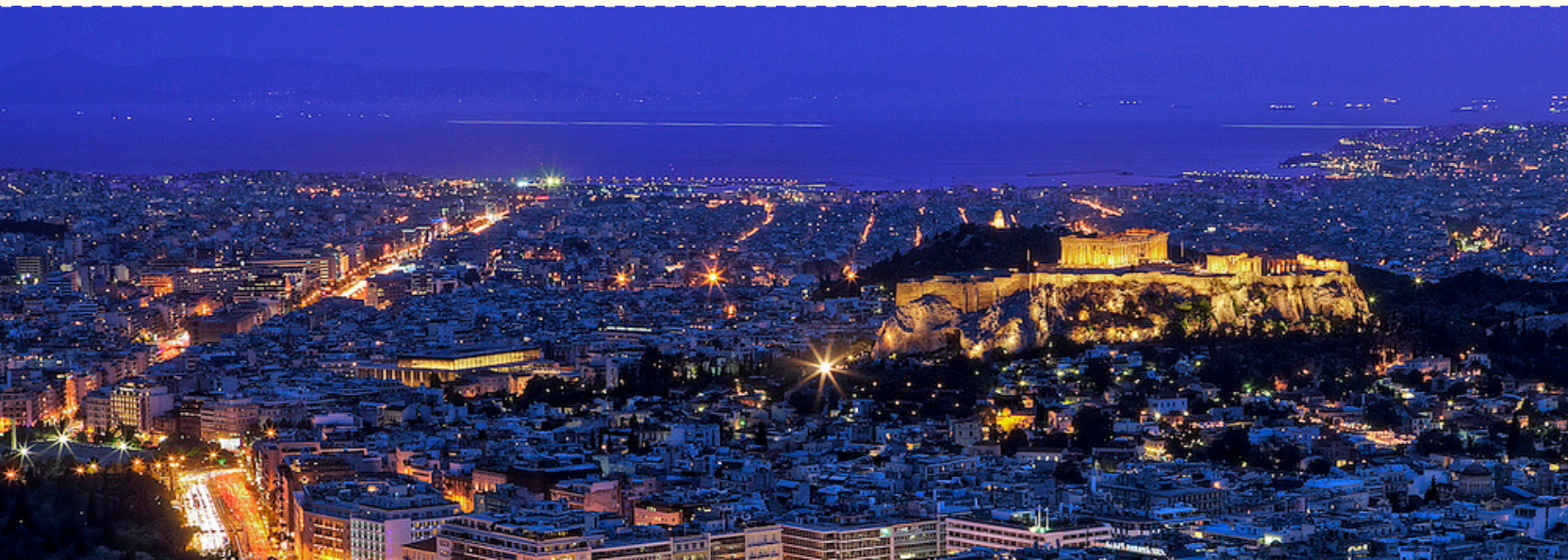
Stergios Vakalis, *National Technical University of Athens*

Vasiliki Panaretou, *National Technical University of Athens*

Vasiliki Papadimitriou, *Federation of Hellenic Food Industries*

Vasilis Spiliotis, *TEI of Athens*

Vasilis Zeimpekis, *University of the Aegean*



Publishing in Journals

The high quality ATHENS 2017 papers will be published after evaluation in:

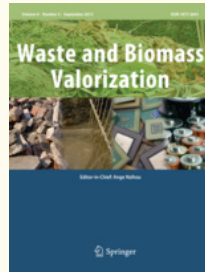
a Special Issue of **JOURNAL OF ENVIRONMENTAL MANAGEMENT** (Elsevier, Impact Factor: 3,131)



a Special Issue of **ENVIRONMENTAL SCIENCE and POLLUTION RESEARCH** (Springer, Impact Factor: 2.760)



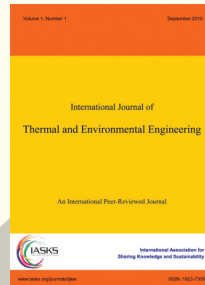
a Special Issue of **WASTE AND BIOMASS VALORIZATION** (Springer, Impact Factor: 0.915)



WASTE MANAGEMENT & RESEARCH (SAGE, Impact Factor: 1.338)



a Special Issue of **INTERNATIONAL JOURNAL OF THERMAL AND ENVIRONMENTAL ENGINEERING** (Impact Factor: 0.879)



The best ATHENS 2017 review papers on biotechnology will be published after evaluation in the open access journal **ELECTRONIC JOURNAL OF BIOTECHNOLOGY** (Elsevier, Impact Factor: 1.403)



The best water related papers will be published in a Special Issue of **DESALINATION & WATER TREATMENT** (Impact Factor: 1.272)





ATHENS2017 

Agenda

8.00 - 9.15

Registration

9.15 - 9.45

ROOM 1

Welcome Speeches

9.45 - 11.00

Keynote Speakers

Chair: M. Loizidou

Antonis Mavropoulos, Interational Solid Waste Association

David Newman, World Biogas Association

"How biowaste treatment is at the core of a low carbon economy"

David Bolzonella, University of Verona

"Can food waste be the right feedstock for the bio-based economy?"

Maria Loizidou, National Technical University of Athens

"Development of an integrated strategy for reducing the carbon footprint in the food industry sector"

11.00 - 11.15



Coffee Break

ROOM 1

SESSION I

MSW management

(session targeting at representatives of local authorities & food industries)

Chair: M. Loizidou

11.15-11.30

.

11.30-11.45

.

11.45-12.00

.

12.00-12.15

G. Konstantzos, D. Malamis, K. Moustakas, M. Loizidou
Effective waste management at municipality level

12.15-12.30

C. de la Paz
The LIFE Programme: good practices on sustainable solid waste management

12.30-12.45

G. Iliopoulos, D. Bourkas
2020 Financial Challenge of Municipal Source Separation Schemes

12.45-13.00

.

13.00-13.15

.

13.15-13.30

Th. Valkouma, D. Kintsakis
Integrated strategic waste management planning in Volvi Municipality

13.30-13.45

..

13.45-14.00

Discussion - Conclusions

14.15-15.00

Lunch Break

ROOM 2**SESSION II****Circular Economy & Symbiosis Networks****Chair: A. Mavropoulos, D.A. Sarigiannis, R. Droop**

- | | |
|-------------|--|
| 11.15-11.30 | N. Ferronato, E.C. Rada, M. Gorrity, L.I. Cioca, M. Ragazzi, V. Torretta
Development of the Circular Economy within emerging regions: a comparative analysis of advantages and opportunities for waste valorization |
| 11.30-11.45 | N. Ardeleanu, G. Lazar
Ecological reconstruction of fly ash and slag landfills in order to achieve ecological coherence between degraded ecosystems and Natura 2000 sites |
| 11.45-12.00 | D.A. Sarigiannis, S.P. Karakitsios, E. Handakas, A. Gotti
Life Cycle-based Health Risk Assessment of Plastic Waste |
| 12.00-12.15 | E. Iacovidou, P. Purnel
Sustainability in the built environment: A typology system for supporting construction components reuse |
| 12.15-12.30 | T. Cesarek
Advanced biorefineries for waste diversion and circular economy: the case of Enerkem |
| 12.30-12.45 | N. Voulvoulis
The Role of Policy in Shaping a Circular Economy: Corporate Carbon Tax |
| 12.45-13.00 | C. A. Tsilyiannis
Cyclic Economy: Forecasting product returns for viable remanufacturing |
| 13.00-13.15 | R. Droop
Circular Economy is more than recycling - European and national policies in support |
| 13.15-13.30 | V. Aristizábal M., C. D. Botero G., C. Cardona A.
Analysis of the improvement of biorefineries based on sugarcane through the sugarcane bagasse inclusion as raw material |
| 13.30-13.45 | I. Voukkali, A. A. Zorpas
The Impact on Waste Production on Sustainability and the Metabolism of the City |
| 13.45-14.00 | J. Sója, N. Miskolczi, R. Nagy
Valuable products from End of Life Vehicles (ELV) waste by thermal and thermo-catalytic degradation |

14.00-14.15	A. A. Zorpas, I. Voukkali, P. Loizia, K. Lasaridi, C. Chroni, J. Navarro Pedreño, S. Zorpa The ambitious concept of Circular Economy and the influences on Strategic Planning Development
14.15-14.30	P. Stanchev, V. Vasilaki, A. Mousavi, E. Katsou Measuring the circular economy of water sector in the three-fold linkage of water, energy and materials
14.30-15.00	Lunch Break

ROOM 3

Waste Valorization I

SESSION III

Chair: A. Zabaniotou, L. Limousy, A.M. Goula

11.15-11.30	B. Pedras, S. Barreiros, A. Paiva, P. Simões Valorisation of spent coffee grounds using hot compressed water
11.30-11.45	L. Limousy, M. Jeguirim, M. Labaki Coffee processing by-products valorization: An overview of energy and environmental applications
11.45-12.00	M.A. Stylianou, A. Agapiou, M. Omirou, I. Vyrides, I. M. Ioannides, G. Maratheftis, D.A. Fasoula Potential environmental applications of spent coffee grounds
12.00-12.15	S.S. Kontos, P.G. Koutsoukos, C. A. Paraskeva Implementation of different physicochemical techniques for the more efficient management of olive mill wastewater streams
12.15-12.30	M. Ververi, K. Kaderides, A. M. Goula Low cost biosorbents of phenolic compounds from olive mill wastewater: Kinetic and equilibrium studies
12.30-12.45	D. Kpogbemabou, R. Beauchet, L. Pinard, L. Lemée Bio oil produced from composted lignocellulosic biomass
12.45-13.00	K. Tzathas, G. Lamprou, A. Vlysidis, A. Vlyssides Recovery of residual oil and phenolic compounds from olive mill wastes derived from II-phase extraction process

13.00-13.15	H. Azaizeh; S. Abdelhadi, G. Rytwo, Y. Gerchman, C. G. Dosoretz Production of biochar from olive mill solid wastes for the removal of heavy metals from contaminated industrial wastewater
13.15-13.30	I. Mourtzinou, A. Ignatiadis, K. Topalidou, S. Grigorakis, D. Makris, T. Moschakis, C. G. Biliaderis Optimization of a green method for the recovery of polyphenols from onion solid wastes
13.30-13.45	K. Kaderides, E. M. Kapantai, A. M. Goula Pomegranate peels phenolics encapsulated in edible fruit fiber: storage stability and ingredient for functional foods
13.45-14.00	A.O. Adıgüzel, S. Könen-Adıgüzel, R.S. Ergene, M. Tunçer Hydrolysis of banana wastes by lignocelluloses degrading enzymes from newly isolated thermophilic Bacillus sp. AAX01
14.00-14.15	P. A. Milani, G. Labuto, E. N. V. M. Carrilho Sorption of Cu(II), Fe(II), Zn(II) and Mn(II) from aqueous medium using lettuce roots and sugarcane bagasse
14.15-14.30	S. R.H. Vanderheyden, S. Schreurs, J. Yperman, R. Carleer Modification of activated carbons from brewers' spent for chromium(VI) adsorption
14.30-14.45	M. Jeguirim, K. Haddad, N. Kraiem, A. Zorpas, S. Jellali, L. Limousy Olive mill wastewater: From a pollutant to green fuels, agricultural water source and bio-fertilizer

ROOM 4

SESSION IV

Sludge Management

Chair: Hongtao Wang, A. Zouboulis, F. Fatone

11.15-11.30	Lixiang Zhou, Jianru Liang Filamentous fungi and iron-oxidizing bacteria can improve dewaterability of sludge
11.15-11.30	B.M. Ren, Y.Q. Zhao, A. Nzihou, N. Lyczko Waterworks sludge management in a sustainable world: novel value-added alum sludge products for harmful gas purification

11.30-11.45	Hongtao Wang, Tan Chen Characteristics and modification of sludge-derived biochar and its adsorption performance on heavy metals
11.45-12.00	C. Shen, Y.Q. Zhao, R.B. Liu Developing Pellet-type Adsorbent Based on Drinking Water Treatment Residual
12.00-12.15	K.Y. Kim, H.S. Moon, D.J. Lee, T.W. Jeon, S.K. Shin A Study on Waste Acceptance Criteria for Landfill Zero Policy of Sludge in Korea
12.15-12.30	G. Salihođlu, S. Yenikaya, N.K. Salihoglu, G. Yenikaya Microwave Drying of Sewage Sludge from a Wastewater Treatment Plant in Turkey
12.30-12.45	V. N. Reckziegel, R. F. Thiesen, I. H. Schneider Treatment of a Forging Industry Wastewater Containing Graphite and Sludge Management
13.00-13.15	Gordon C. C. Yang, Chun-Kuan Lin Effects of conditioning and electrokinetics on sewage sludge dewatering
13.15-13.30	S. Varitis, P. Kavouras, G. Kaimakamis, E. Pavlidou, G. Vourlias, K. Chrissafis, E. Pantazopoulou, A.I. Zouboulis, Ph. Komninou, Th. Karakostas Vitrification of chromium containing tannery ash
13.30-13.45	A.G. Capodaglio, A. Callegari, D. Dondi Properties and beneficial uses of biochar from sewage sludge pyrolysis
13.45-14.00	J.L. Esguerra, L. Scholten, M. Hu Economic Assessment of Faecal Sludge Management and Sewer-Based Sanitation System in Maputo, Mozambique
14.00-14.15	Ranbin Liu, Yi Mao, Yaqian Zhao Recycle and reuse of dewatered alum sludge in green bio-sorption reactor (GBR) for wastewater treatment: Roles and concerns
14.15-14.30	E. Babayigit, D. Atik, A. Erdinçler Biodiesel production from petrochemical industry and sewage sludges by novel direct liquid-liquid extraction method
14.30-14.45	R.Ö. Sürmeli, A. Bayrakdar, E. Sahinkaya, B. Calli Drying anaerobically digested biosolids with ambient air

ROOM 1**SESSION V****Source Separation Schemes for Solid Waste****Chair: L. Lemée, A. Luciano, J. Colón**

- | | |
|-------------|---|
| 15.00-15.15 | M. Gibson
Educating the World - Separation at Source |
| 15.15-15.30 | C. Velis, H. Purshouse
A Typology of Operator Models within the Informal Recycling Sector of Latin America |
| 15.30-15.45 | A. Latora, L. Compagno, N. Trapani, D. Fino, G. Mancini
How to optimize a municipal solid waste management system by integrating open data via Geographic Information System |
| 15.45-16.00 | J. Hřebíček, J. Kalina, L. Hefková, J. Soukopová
Biowaste separation of household waste. Case study of the city Brno |
| 16.00-16.15 | M. Vitoraki
Municipal management of biowaste in Greece: overcoming weaknesses |
| 16.15-16.30 | S. Amarantidou, T. Tsalis, P. Calabró, I. Nikolaou, D. Komilis
Door to door recyclables' collection programs: Willingness to participate and influential factors with a case study in the city of Xanthi (Greece) |
| 16.30-16.45 | I. Ristovski, L. Avramovski, V. Milosevska, T. Filkoska, M. Blinkova, I. Macanovski, G. Lazarevska
Methodology for waste collection in rural areas: Experiences from project "Integrated Solid Waste Management in South East planning region" |
| 16.45-17.00 | R. Geurts, A. Maul, K. Broos, D. Van Loo, M. Boone, P. Segers, J. Vanhees, M. Quaghebeur
Characterise-to-Sort: Advanced solid waste characterisation by multi-sensor data |
| 17.00-17.15 | A. Patonia
Landfill gas-to-energy as a profitable form of sustainable solid waste management: The comparative study of Poland and Belarus |
| 17.15-17.30 | V. Kavvadias, M. Papadopoulou, E. Vavoulidou, S. Theocharopoulos, G. Koubouris, G. Psarras, Chr. Manolaraki, G. Giakoumaki, A. Vasiliadis
Soil properties in rainfed and irrigated olive groves following alternative cultivation practices |
| 17.30-17.45 | N. Thi Thanh Truc, Byeong-Kyu Lee
Selective separation of polyethylene terephthalate (PET) and polyvinyl chloride (PVC) by using H ₂ O ₂ under ultrasonic irradiation |

17.45-18.00	L. Breitenmoser, T. Gross, H. Dhar, S. Kumar, T. Wintgens Benefits and challenges of anaerobic digestion of organic waste for production in India: A review of established business models
18.00-18.15	B. Puyuelo, J. Colón, L. Llenas, E. Marti, C. Tayà, S. Ponsá Biodrying: An alternative process to produce biomass fuel from organic wastes
18.15-18.30	P. Brito, L. Calado, B. Garcia, O. Alves, P. Rodrigues, M. Samanis Thermal gasification in a downdraft fixed bed reactor of forest residues obtained from the mechanical control of invasive species (Acacia)
18.30-18.45	S. Braymand, A. Ferraille, N. Serres, F. Feugeas Benchmarking of materials composition and transportation influences on Life Cycle Assessment of Recycled Aggregate Concrete
18.45-19.00	A. Luciano, L. Cutaia Optimization of resources and waste stream management in building and mining chain through symbiosis networks and distributed Eco-Industrial Parks
19.00-19.15	Z. Kyramargiou, I. Vardopoulos Ships' waste management in ports. Studying the Port of Corinth
19.15-19.30	M. Kumar Awasthi, Zengqiang Zhang Feasibility of sewage sludge-wheat straw co-composting amended with biochar
19.30-19.45	N. Dilbaghi, S. Kumar, G. Bhanjana Novel Nanomaterials Based Sensors for Ultrasensitive Detection of Heavy Metals
19.45-20.00	O. Christou Developing Creative Recycling Training Programs for Adults

ROOM 2**SESSION VI****Waste Prevention Techniques, Collection Techniques & Treatment Technologies****Chair: J.P.A. Hettiaratchi, G. Mancini, D. Hidalgo**

- | | |
|-------------|---|
| 15.00-15.15 | M. Samaras, A. Karousis, I. Liatos, P. Gouvousis
Wastewater Characterization and Treatment in a Municipal Solid Waste Management Center |
| 15.15-15.30 | Haijuan Wang, Shaojun Chu, Ruidong Zhou, Guozhu Kang
A novel method for innocent treatment of reducing dephosphorization slags |
| 15.30-15.45 | E. Kucuk, D. Danaci, U. Yetis
Waste Generation in Primary and Secondary Aluminum Sector in Turkey |
| 15.45-16.00 | C.A. Díaz, E. Restrepo, W. F. Garzón, J.C. Higueta
Cocaine degradation by <i>Pseudomonas stutzeri</i> : an alternative approach for the final disposal of a dangerous solid waste |
| 16.00-16.15 | J.P.A. Hettiaratchi, E.M. Bartholameuz, PA Jayasinghe, S.K. Yadav
Enhanced Landfill Biocell: Cost-effective Technology to Achieve Sustainability of Landfill Operation |
| 16.15-16.30 | T. Tabata, M. Oda, P. Tsai, K. Katagiri
Does an increase in the number of aged persons affect segregation of plastic packaging waste? A case study in Kobe, Japan |
| 16.30-16.45 | D. Hidalgo, J.L. Juaristi, J.M. Martín-Marroquín, F. Corona
Sustainable vacuum waste collection systems in areas of difficult access |
| 16.45-17.00 | J. Faitli, B. Csőke, R. Romenda, Z. Nagy, Sz. Németh
Developing the Combined Magnetic, Electric and Air Flow Separator (KLME) for MSW Processing |
| 17.00-17.15 | L. Streff, G. Burkhardt
Experience and lessons learned from the supervision during construction and trial operation of the MBT plant in Sofia (Bulgaria) and its potential to contribute to renewable energy |
| 17.15-17.30 | M. Alexandropoulou, G. Antonopoulou, I. Ntaikou, G. Lyberatos
From waste to fuel: bioconversion of domestic food wastes to energy carriers |
| 17.30-17.45 | I. Noya, S. González-García, G. Feijoo, E. Katsou, V. Inglezakis, M.T. Moreira
Environmental comparative assessment of different waste strategies in developing regions |

17.45-18.00	S. Valente, J. Vaz, C. Dias-Ferreira Changing Social Practices of discarding pharmaceutical waste in households: a case study in Portugal
18.00-18.15	M. Tsakona, C. Velis The Role of Global Marine Litter Initiatives & Organisations in Tackling Marine Litter
18.15-19.00	C. Lambrinos, M. Kostopoulou, D. Kitsiou, A. Nikolaou Micro- and nano- plastics in the Eastern Mediterranean Sea: A preliminary investigation in Mytilene, Greece
19.00-19.15	A. Pivato, M.C. Lavagnolo, R. Raga, F. Garbo, M. Moretto Energy crops applied to landfills: Functional, environmental and cost analysis
19.15-19.30	Dicussion - Conclusions

ROOM 3**Waste Valorization II****SESSION VII****Chair: F. Dilek, T. Manios, P. Gikas**

- 15.00-15.15 Xiaohui Xu, Xinyi Shi, Zhaoxin Liu, Sheng Sheng, Fuan Wu, Jun Wang
Fed-batch fermentation of *Yarrowia lipolytica* using defatted silkworm pupae hydrolysate:
A dynamic model-based approach for high yield of lipid production
- 15.15-15.30 T. Stevanovic, G. Koumba Yoya
Valorization of Maple Bark Through a New Organosolv Biorefinery
- 15.30-15.45 E.E. Golia, V. Antoniadis, N. Tsiropoulos, G. Fuleky, A. Dimirkou, S. Vleioras
Influence of a mixture of zeolite, peat and *Posidonia oceanica* (L.) in reduction of Zn and Cu uptake
by tobacco (*Nicotiana tabacum*) plants of Central Greece
- 15.45-16.00 F. Mano, S. Barreiros, P. Simões, S. Bowra, A. Paiva
From fish to nutraceuticals – the potential of ‘green solvents’ to add value to fish by-products
- 16.00-16.15 J. Martín-Juárez, A. Lorenzo-Hernando, S. Bolado-Rodríguez
Revalorization of solid waste microalgae biomass from pig manure water treatment towards
fertilizers production
- 16.15-16.30 K. Borboudaki, I. Giakoumaki, P. Panteli, M. Georgiou, N. Stylianidis, C. Mamoulakis, G. Zervas,
J. Zentek, K. Lasaridi, T. Manios
The F4F Life Project – An Innovative Process for Transforming Hotels’ Food Wastes into Animal Feed
- 16.30-16.45 M.M. Zambon, M.M.M. Luna
Alternative Technologies to Urban Organic Waste Treatment in the Brazilian Context
- 16.45-17.00 V. Oliveira, L.M. Ottosen, J. Labrincha, C. Dias-Ferreira
Recovery of phosphorus from digestates of municipal solid wastes using electro dialytic extraction
and chemical precipitation
- 17.00-17.15 F. Corona, D. Hidalgo, J.M. Martín-Marroquín
A low energy two-stage technology for leachate valorisation
- 17.15-17.30 P. Gikas, S. Argyropoulos
Landfill Leachate Treatment by the Active Clay Sediments Process
- 17.30-17.45 K. B. Debs, D. S. Cardona, H. D. T. da Silva, P. S. Haddad, E.N.V.M. Carrilho, G. Labuto
Magnetite nanoparticles and ferromagnetic bionanocomposites for crude oil removal from water

17.45-18.00	A. E. Yilmaz , I. Cengiz , M. T. Yilmaz, O. T. Komesli, P. Stanchev, E. Katsou The effect of initial pH and retention time on Boron removal by continuous electrocoagulation process
18.00-18.15	Y. Hu, C. Du, C.S.K. Lin Fungal cellulase production on textile waste by solid state fermentation
18.15-18.30	C. Marzo, A.B. Díaz, I. Caro, A. Blandino Valorization of agro-industrial wastes to produce hydrolytic enzymes by fungal solid state fermentation
18.30-18.45	Wenjing Li, Guangming Li, Haochen Zhu, Juwen Huang, Wenzhi He Research on the entity of waste edible oils: based on the comparison of the outcomes from olive oil, peanut oil, soybean oil and corn oil
18.45-19.00	M.P. Neznakomova, L.I. Tzankov, S.B. Boteva, M. Elhag Obtaining bilayer particulate filters with the participation of a layer of electrospun nanofibers
19.00-19.15	A. Adeniyi, R.K.K. Mbaya, M.S. Onyango, A.P.I. Popoola Membrane selection for organic contaminants removal from Hartbeespoort dam water in South Africa
19.15-19.30	V. Singh Effect of biofilm structure on process design and performance of a rotating biological contactor for combined treatment of leachate with sewage
19.30-19.45	S. Yaman, H. Haykiri-Acma Production and Characterization of Biochars from Torrefaction of Biomass
19.45-20.00	D. Crutchik, G. Rodríguez, G. Bustos, B. González, C. Pabón Evaluation of liquid anaerobic digestate as hydrating agent for market waste vermicomposting
20.00-20.15	A. Salladini, A. Borgogna, L. Spadacini, M. C. Annesini, G. Iaquaniello Methanol production from Residue derived fuel: A preliminary analysis on the influence of the RDF composition on process yield
20.15-20.30	G. Haarlemmer, A. Roubaud Hydrothermal Liquefaction of Wet Waste Streams

ROOM 4**Management of Specific Waste Streams****SESSION VIII****Chair: N. Voulvoulis, U. Yetis, M. Baratieri**

- | | |
|-------------|---|
| 15.00-15.15 | C. Gutierrez
Proposal of an Official Mexican Standard for the location of disposal sites for Construction and Demolition Waste |
| 15.15-15.30 | A. López-Uceda, A. P. Galvín, J. Ayuso, J.R. Jiménez, T. Vanwalleghem
Experimental risk assessment of Extensive Green Roofs with fine fraction of mixed recycled aggregates from construction and demolition waste |
| 15.30-15.45 | A. Banerjee, U. Becker, V. Rath, S. Maity, A. Sekhar
The contribution of the Indo-German bilateral cooperation project on Resource Efficiency to India's fledgling effort in promoting Construction and Demolition Waste recycling |
| 15.45-16.00 | E. Ntinoudi, E. Pantazopoulou, H. Yiannoulakis, Th. Zampetakis, A.I. Zouboulis
Stabilization of heavy metals in solid industrial wastes, by using low-grade magnesia, Portland and Sorel cements |
| 16.00-16.15 | A. P. Galvín, A. Barbudo, J. Ayuso, M. Cabrera
Upscaling the pollutant emission from mixed recycled aggregates under compaction for civil applications |
| 16.15-16.30 | A. Young, M. Veras, M. Peticila, C. Petter, C. Sampaio
Statistical Analysis of CDW Dual Energy X-ray Transmission Characteristics |
| 16.30-16.45 | D.A. Sarigiannis, S.P. Karakitsios, A. Gotti
Health Risk From Accidental Fire In A Plastics Recycling Facility |
| 16.45-17.00 | P. Simões, R.C. Marques
Incentives on Packaging Waste Financing: A Step Forward for Sustainability |
| 17.00-17.15 | C. Ma, J. Yu, B Wang, Z.J. Song, Q.Q. Yan, L.S. Sun
Pyrolysis-Catalytic Reforming of Brominated High Impact Polystyrene over Fe- and Ni- Modified ZSM-5 Catalysts |
| 17.15-17.30 | E. Fathi Aghdam, C. Scheutz, P. Kjeldsen
The role of metals in methane production from shredder waste in landfills |

- 17.30-17.45 K. Lasaridi, C. Chroni, K. Abeliotis, K. Boikou, Ph. Kyrkitsos, A. Dalamagka, M. Rama, A. Sotiropoulos, G. Xydis, R. Charitopoulou, K. Kalafata, M. Intzeler, Ch. Angelakopoulos
State-of-the Art review on Waste Electrical & Electronic Equipment reuse in the framework of the LIFE REWEEE project
- 17.45-18.00 P Jadhao, G Chauhan, K. K. Pant, K. D. P. Nigam
Metal extraction from electronic waste using Chelation technology
- 18.00-18.15 Y.Y. Lin, J.C. Lin
Leaching of Yttrium and Europium from Waste CRT Phosphor by Subcritical Water Extraction
- 18.15-18.30 J. Snyman, K. Vorster, S.J. Jacobs
Towards sustainable E-Waste management in South Africa
- 18.30-18.45 K.C. Syrmakizis, K.G Tsakalakis, I.P. Sammas
Application of conventional mineral treatment processes in Printed Circuit Boards (PCBs) recycling
- 18.45-19.00 P. Li, M. Zhang, X.M. Hou, B.J. Yan, H.W. Guo, S. Seetharaman
Molten salt-enhanced production of hydrogen by using skimmed hot dross from aluminum remelting at high temperature
- 19.00-19.15 A. Ece Akay, U. Yetis, F. B. Dilek
Ranking of Pesticides According to Leaching Potentials to Groundwater for the Selected River Basins in Turkey
- 19.15-19.30 B. Erdogan, G. Salihoglu
Evaluation of the Solid and Hazardous Wastes Generated by the Automotive Industry in Turkey
- 19.30-19.45 X. Zeng, A.P. Borole, S. G. Pavlostathis
Processes and Electron Flow in a Microbial Electrolysis Cell Bioanode Fed with Furanic and Phenolic Compounds
- 19.45-20.00 R.N. Montagnolli, P.R.M. Lopes, E.D. Bidoia
Fluorinated Waste and Firefighting Activities: Biodegradation of Halogenated Foams from Petrochemical Refinery Soil
- 20.00-20.15 E. Tilahun, E. Sahinkaya, B. Calli
Biogas desulfurization using PDMS membrane in a gas-liquid contactor under slightly alkaline conditions: Optimization of Operational Parameters

Poster session (duration 3 days)

Xu Zhang, Huanhuan Yang, Zhaojie Cui,
Migration and distribution of heavy metals in saline soil of Iron tailings

J. Faitli, T. Magyar, A. Erdelyi, R. Romenda
Experimental and Theoretical Determination of the Power of Decomposition Heat Generation in MSW Landfills

J.A. Conesa, M.E. Iñiguez, A. Fullana
Marine debris characterization and thermal decomposition compared to their main constituents

E.D. Bidoia, N.F. Carmona, R.N. Montagnoli
Biodegradation of Firefighting Foam Waste in Diesel Contaminated Samples

C. D. Botero G., D. L. Restrepo S., C. Cardona A.
Enhancing the feasibility of biodiesel plants through the in situ use of the solid residues for energy and chemicals

D. L. Restrepo S, A. S. Caballero G, C. D. Botero G, C. A. Cardona A,
Energetic, techno-economic and environmental analysis of a biorefinery from sugarcane bagasse of different scales

K. Akubo, M. Anas Nahil, P.T. Williams
Pyrolysis-catalysis of waste plastics to produce high value fuel and aromatic compounds

I. Senturk, M. Alzein
Adsorption of Maxilon Blue GRL and Chrysoidine G (Basic Orange 2) onto pistachio from aqueous solutions

M. Cabrera, J. Rosales, A.P. Galvín, A. Barbudo, F. Agrela
Stabilization of expansive material with biomass bottom ash. CBR behaviour and triaxial test

Peng Diao, Chao Li, Qingyong Wu, Dianyi Hu, Di Xu, Zhidong Liu, Jingjing Yang, Ning Xue, Tengyi Liu
Nanostructured Semiconductor Composites: Design, Preparation and Application for Solar-to-Chemical Energy Conversion and Storage

Xu Zhang, Huanhuan Yang, Zhaojie Cui
Online monitoring on soil: pollution assessment of Pb and Cd based on Arabidopsis and Earthworm

J.A. Conesa, A. Soler, N. Ortuño
Emission of brominated pollutants during pyrolysis of WEEE debrominated in subcritical water

C. Tsakalou, P.E. Tsakiridis
Characterization and Leachability Evaluation of Fly and Bottom Ashes Generated During Incineration of Medical Wastes

B. Liu, Y. Li, S. Gao, X. Chen
Effects of composting on the association of oxytetracycline with dissolved organic matter (DOM) from animal waste

J. A. Martínez R, A. S. Caballero G, D. L. Restrepo S, C. A. Cardona A.
Techno-Economic and Environmental Evaluation for the Biogas Production from Banana Peel in a Biorefinery Concept (Musa paradisiaca)

M. Anas Nahil, E. Blanquet, P.T. Williams
Production of high quality syngas from biomass using a combined catalyst and non-thermal plasma technology

N. Howaniec, A. Smoliński, Utilization of coal slurry and coal dust blends in the process of co-gasification to hydrogen-rich gas

A. López-Uceda, Jesús Ayuso, F. Agrela
Roller compacted concrete made with recycled concrete aggregate and biomass bottom ash

C. Ruiz-Puente, E. Bayona
Modelling of an Industrial Symbiosis Network as a Supply Chain

Chengjun Pu, Liqun Liu, Ying Sun
High Prevalence of Streptomycin Resistance among Escherichia coli Isolated from Chicken and Pig Feces

Poster session (duration 3 days)

C. Asada, C. Sasaki, A. Suzuki, Y. Nakamura
Efficient separation and utilization of structural components in lignocellulosic waste

E. Özön, A. Erdinçler
Effects of Microwave, MW/H₂O₂ and Heat/H₂O₂ Pre-treatments on the Anaerobic Biodegradability of the Wastewater Sludges

S. Zen, F.Z. El Berrichi, N. Abidi, J. Duplay, A. Jada, B. Gasmî
Activated Algerian kaolins as low-cost potential adsorbents for the removal from industrial effluents of Derma Blue R67 acid dye: kinetic and thermodynamic studies

R. Ait Akbour, H. Ouchtak, A. Ait Addi, A. Jada, Jamaa Douch, M. Hamdani
Humic Acid Covered Alumina as Adsorbent for the Removal of Organic Dye from Coloured Effluents

Q. Zhang, B. Ma, L. Zhang
Effect of intermittent aeration mode on the population and community of nitrify bacteria in domestic wastewater treatment

I. Drevelegka, K. Kaderides, A. M. Goula
Kinetics and modeling during phenolics extraction from grape pomace

J. Gu, H.R. Yuan, Y.Z. Wang
Co-pyrolysis of the mixtures of lignin and polyethylene with various ratios using thermogravimetric analysis-mass spectroscopy (TG-MS)

W. Chen, C. Dias-Ferreira, G.M. Kirkelund, P.E. Jensen, L.M. Ottosen
Incorporation of electro-dialytically treated MSWI fly ash in sintered clay brick

A.B. Díaz, M. González, C. Marzo, A. Blandino, I. Caro, Bioconversion of agro-industrial wastes: effect of the solid particle size on the yield of the saccharification process

K.Y. Kim, H.S. Moon, D.J. Lee, T.W. Jeon, S.K. Shin
Characteristics and Criteria on Residue from MBT Facilities in Korea

A. Jada, R. Ait Akbour
Transport, sorption and desorption of organic dye through quartz sand particles

S. Akhouairi, H. Ouchtak, R. Ait Akbour, A. Ait Addi, A. Jada, J. Douch, M. Hamdani
Transport and retention of anionic dye through hematite -coated quartz sand

D. Li, X.F. Liu
Feasibility assessment of the production of biogas and fertilizer from the mechanically separated organic fraction of municipal solid waste from a small city in China

A. Polat Bulut, G. Topal Canbaz
Biogas Potential from Poultry Animal Waste of Sivas Province

D. Gounaris, K. Kaderides, A. M. Goula
Solid foodstuff supplemented with phenolics from pomegranate wastes by ultrasound-assisted osmotic treatment

E. Evangelou, P. Raptis, C. Tsadilas, M. Tziouvalekas
Nitrogen mineralisation potential in two typical soils of Thessaly in central Greece amended with sewage sludge

P. Guedes, A. R. Ferreira, N. Couto, E. Mateus, M. G. Silva, A. B. Ribeiro
Degradation kinetics of emerging organic contaminants subjected to electro- and photo- degradation

V. Athanasiadis, S. Grigorakis, S. Lalas, D.P. Makris
Eco-Friendly Glycerol/Glycine Low-Transition Temperature Mixture (LTTM) as an Effective Solvent for the Extraction of Antioxidant Polyphenols from *Olea europaea* Leaves

Poster session (duration 3 days)

R.G. Yilmaz, O.N. Ağdağ

Investigation of the Effects of Different Operational Parameters on Vermicomposting

M. Mosunmola Adekunle

Separation at Source: Key to Sustainable Solid Waste Management in Nigeria

Y.L. He, Q.Y. Wang, Y.J. Rong

Improvement of pilot-scale anaerobic digestion of waste activated sludge by fruit processing waste addition and the shift of microbial community distribution

N.G.Mavlyanova, V.A.Lipatov

Socio-political issues related to trans-border waste management from mining

A. Moujanni, A. Ouatmane, A. Ghamouh

Modeling biogas production from leachate co-digested with wastewater. A laboratory scale study

Lei Wen, Jingfu Wang, Jiangzhao Ge

Study of combustion and dechlorination characteristic of garbage and wood waste compound fuel

X. Gómez-Quiroga, K. Aboudi, C. J. Álvarez-Gallego,

L. I. Romero-García

Stabilization of thermophilic and mesophilic anaerobic digestion of sugar beet by-products in semi-continuous stirred tank reactors

E. Lorenc-Grabowska, P. Rutkowski

Activated carbons from waste biomass for phenolic compounds removal from water

Poh Ying Hoo, Haslenda Hashim, Wai Shin Ho, Sie Ting Tan,
Techno-economic Assessment for Biomethane Upgrading for Injection into Natural Gas Grid and Electricity Generation to Electricity Grid

Z. Kamoun, A. Sellami Kamoun, R. Gdoura

Oxidative stress and genotoxicity induced by ethanol: protective effect of sardinelle (*Sardinella aurita*) protein hydrolysate

Sudhakar Yedla

Development of Methodology for E-Waste Estimation – A Material Flow Analysis Based SYE-Waste Model

M. Calero, G. Blázquez, A. Pérez, A. Ronda, I. Iáñez, M.A. Martín-Lara

Characterization of the physical and chemical properties of olive cake for its use as fuel

M. Alzein

Producing and installing pervious concrete from the rubble and waste resulting from destroyed buildings, and review the economic and thermal insulation benefits

Dabin Kim, Hyun-Woo Kim

Biochemical methane potential of rendered wastes from carcass in a burial site

N. Ngullie, A. Kalamdhad, L.B. Singh

Best Practices in Solid Waste Management through PPP in Indian cities

E. Lorenc-Grabowska, P. Rutkowski

Hydrothermal carbons from waste biomass

A. Sadeeq Mohammed, A. D. Wheatley, E. Danso-Boateng

Characterisation of adsorbents produced from hydrothermal carbonisation of various biomass wastes

A. Bayrakdar, R. Molaey, R.Ö Sürmeli, B. Çalli

Bio-methane potential of tannery wastes

Poster session (duration 3 days)

W. Tao, A.T. Ukwuani

Design considerations to scale up vacuum thermal stripping for ammonia recovery from anaerobic digestate

M. Kaszubska, M. Wzorek

Development of measurement techniques for siloxanes in landfill gas

T. Majid Khan Niazi, J. Ali

Alternative Energies

K. Philippou, I. Pashalidis

Uranium monitoring in ground and wastewaters

Vijay V. Nair, Mohan Sankaralingam

Treatment of Leachate from Open Dumpsite using Low-cost Composite Block

G.M. Kirkelund, L.Díez, C. Scheutz, R. Eisted

Evaluating potentials for waste sorting in the Arctic: waste separation studies from Greenland

N Yilmaz, M. Elhag

Cost - Benefit Analysis of Water Management Projects of Nestos River, Greece

M. Harmankaya, T. T. Onay, A. Erdinçler

Impact of sewage sludge co-disposal on waste degradation in anaerobic reactors

C. Katsimpouras, P. Bistis, E. Topakas

Enhanced bioethanol production from acetone/water oxidation pretreated corn stover at high-gravity

N. Durmuş, A. Demir Mülazımoğlu, İ. E. Mülazımoğlu

A novel highly sensitive carbon based HMPD/GC sensor electrode: Cu (II) ions analysis in flour and drinking water samples

N. Durmuş, İ. Yılmaz, İ. E. Mülazımoğlu, A. Demir Mülazımoğlu

Development of a novel highly sensitive voltammetric sensor electrode a TKAN modified based carbonaceous materials for dopamine measurement

S. Sağır, A. Demir Mülazımoğlu, İ. E. Mülazımoğlu

A novel synthesis and investigation of electrochemical behaviors of HPNPC/GC sensor electrode: Using simultaneously determination of dopamine, ascorbic acid and uric acid

A. Demir Mülazımoğlu, N. Durmuş, S. Sağır, İ. E. Mülazımoğlu

Electrochemical behaviours of Aclonifen on GC electrode in non-aqueous media: Investigation of Aclonifen determination

Weiguo Shen, Xujia He, Jiangwei Li, Yi Liu, Gelong Xu, Wuzong Zhang

The classification system of solid wastes based on comprehensive utilization as cementitious materials

F. Safari, V. Saadattalab

Hydrogen production via hydrothermal gasification of algal biomass using hydrochar catalyst as a solid waste of the process

Xu Zhang, Huanhuan Yang, Zhaojie Cui

Potential risk assessment: Migration and distribution characteristics of heavy metals in iron tailings

Xu Zhang, Huanhuan Yang, Zhaojie Cui

Migration and speciation of Heavy metal in salinized mine tailings affected by Iron mining

D. Hidalgo, R. Piñero J.M. Martín-Marroquín, F. Corona, P. Acebes, G. Antolín

From biogas to biomethane: integrated process for the production of natural gas substitute

A. Aguado, M. Calvo

Chemical recycling of polyurethane foams from shoe soles for use them in the footwear sector

D. Hidalgo, J.M. Martín-Marroquín, F. Corona, M. Mussons, G. Antolín

Combined remediation and protein production using microalgae growth on waste bakery products

Poster session (duration 3 days)

J.G. Busato, C.M. Carvalho, D. B. Zandonadi, R.D. Navarro
Fish waste as source of humic acids biostimulants: enhancing water use efficiency and rizosphere acidification in lettuce

M. A. Andreou, I. Pashalidis
Removal of Malachite Green from Aqueous Solution by Biofibers

C.T. de Oliveira, T.K. de Andrade, M.M.M. Luna, L.M.S. Campos
Expanded Polystyrene (EPS) Chain Applied to the Circular Economy Concept in Brazil

C. Badila, Q. Yuan
Innovative use of tire derived aggregate (TDA) in septic field

A. Chrysargyris, A. Stamatakis, M. Prasad, N. Tzortzakis
Evaluation of municipal solid waste compost and/or fertigation as peat substituent for pepper seedlings production

A. Chrysargyris, N. Charalambous, A. Tzision, M. Prasad, N. Tzortzakis
Alternative soilless media using olive-mill and paper-mill wastes for growing ornamental plants

Xun-an Ning, Xiaoyuan Man, Jieying Liang, Xinwen Lu
Degradation of PAHs in textile-dyeing sludge by zero valent iron/EDTA/Air system assisted with ultrasound

C. Garcia Lopez, B. Küppers, D. Höllen, A. Clausen, T. Pretz
Landfilled materials composition at the landfill site in Halbenrain (Austria)

L. Pekas, K. Sentzas, I. Voukkali, P. Loizia, A. A. Zorpas
Determination of Houses LCA within warm climate changes using GaBi software

I. Voukkali, P. Loizia, A. A. Zorpas
Boosting Regulations-Legislation Reliefs regarding Environmental Management Systems (ISO 14001-EMAS) in the framework of BRAVER

O. Cuevas, R. Justo, F. Aguilar, J. Moreira, P.J. Sebastian
Anaerobic co-digestion of solid organic waste and sheep manure for biogas production

S. Onenc, S. Retschitzegger, N. Evic, N. Kienzl, J. Yanik
Characteristics and synergistic effects of co-combustion of carbonaceous waste with coal

M. Georgiopoulou, G. Lyberatos
Management of Municipal Solid Waste with Drying Technology: A Case Study

A. Chrysargyris, N. Charalambous, O. Antoniou, P. Xylia, N. Tzortzakis
Paper-mill wastes: A putative growing medium component for ornamental plants

Weijie Guo, Qingyun Li, Liangyuan Zhao, Weihua Zhao
Effects of ecological restoration on speciation and release of copper in lake sediments

Zhang Shici, Luo Zejiao, Xia Shibin
Study on the adsorption/desorption behavior of mercury in wastewater by wheat straw biochar

S.M Pérez-Moreno, D. Paz-Gómez, M.J. Gázquez, G. Ríos, I. Ruiz-Oria, J.P. Bolívar
Physico-Chemical Characterisation of a waste from copper smelting electric arc furnace

P. A. Milani, J. L. Consonni, K. B. Debs, G. Labuto, E. N. V. M. Carrilho
Characterization and use of solid wastes for metal ions sorption from aqueous medium

Poster session (duration 3 days)

N. Ttofali, I. Voukkali, P. Loizia, A. A. Zorpas

What kind of wastes passengers produce when they travel with airlines

A Pérez-Gimeno, J. Navarro-Pedreño, M.B. Almendro-Candel,

I. Gómez, A.A. Zorpas, I. Voukkali
Characteristics of organic and inorganic wastes for their use in land restoration

S. Alatzas, S. Vakalis, K. Moustakas, D. Malamis

Biomass potential from agricultural waste for energetic utilization in Greece: a review

Yonggen Chen, Chuanbin Zhou, Wanying Xu

Comprehensive assessment of composted materials from different sources on cultivating *impatiens balsamina* L in municipal solid waste management

S.S. Kim, S.G. Won, S.M. Shim, J.W. Park, T. Yuliani, N.A. Qambrani, J.I. Song, C.S. Ra

Development of automatic control technology for producing a continuous liquid fertilizer

S.M. Shim, S.G. Won, S.S. Kim, J.W. Park, T. Yuliani, N. Qambrani, C.S. Ra, G.Y. Kim

Optimization of circulation rate on the performance of phosphorus recovery process to improve particle size

M. Peticila, B. Cazacliu, C. H. Sampaio, C. O. Petter, M. M. Veras, A. S. Young

Improved the characteristics of the recycled aggregates by using the specific equipments for mineral processing: water-jig and automatic sorting

S. Vakalis, C. Caligiuri, K. Moustakas, D. Malamis, M. Renzi, M. Baratieri

Modelling the emissions of a dual fuel engine coupled with a biomass gasifier – Supplementing the Wiebe model

K. Krajewski, M. Świątkowska

Losses and waste in food supply chain – the context of sustainable development, product management and innovative form market communication

T. Staněk, M. Boháč

Decomposition and utilization of asbestos-cement waste

D. Kioupis, A. Skaropoulou, S. Tsvilis, G. Kakali

Construction and Demolition Wastes as Resources for the Development of Green Building Materials

Đ. Požgaj, P. Korica, N. Golubovac, I. Gudelj

Assessment of separate collection of recyclable municipal waste in Croatian municipalities and determination of potential for material recovery

M. Contreras, M.J. Gázquez, J.P. Bolívar

Separation and characterization of the mineral phases in ilmenite ore: optimization of the TiO₂ pigment process and recovery of economical minerals

Yong Qin, Haoshu Wang, Xiangru Li, Weixiang Wu

Promoting methane generation from kitchen waste leachate with fine magnetic rice-straw biochar

L. Lemée, K. Kombilson

Molecular characterisation of fertilizing materials of residual origin to envisage interactions with pollutants

M. Mierzwa-Hersztek, K. Gondek, M.Kopeć

Biochar changes in soil based on quantitative and qualitative parameters of humus compounds

Poster session (duration 3 days)

M. Boháč, D. Kubátová, T. Staněk
Rheology and packing density of biomass fly ash/Portland cement mixtures

D.S. Cardona, A.R. Imamura, K.B. Debs, E.N.V.M. Carrilho, P.S. Haddad, G. Labuto
Low cost agroindustrial biomasses and ferromagnetic bionano-composites to treat textile effluent

S. Vakalis, K. Moustakas, D. Malamis, M. Castaldi, M. Baratieri,
Modelling and potential assessment of catalytic and non-catalytic methanation of syngas/ producer gas from biomass gasification

A.J. Moya, S. Mateo, S. Sánchez
Modelling xylitol and ethanol fermentation using D-xylose and D-glucose mixtures substrate on different aeration conditions by *Debaryomyces hansenii*

Yong Zhang, Rui Zhang
A fuzzy multi-objective optimization model for reverse logistics network design

K. Gorazda, B. Tarko, Z. Worek, A.K. Nowak, K. Kulczycka, M. Smol, A. Henclik
Sustainable use of sewage sludge ash in fertilisers production-PolFerAsh technology

D. Díez, A. Urueña, R. Gil, F. Corona
Steam reforming of model tar compounds over nickel catalysts prepared from hydrotalcite precursors

G. M. Quiterio, J. M. Cruz, R. N. Montagnolli, E. D. Bidoia
Bioremediation of diesel/biodiesel blends in soil: a respirometric approach

L.S. Cadavid-Rodríguez, C.E. Agudelo-Morales
Solid waste management in a Colombian University

S. Varitis, P. Kavouras, G. Kaimakamis, E. Pavlidou, G. Vourlias, Th. Karakostas, Ph. Komninou
Structural and mechanical properties of vitrified and devitrified ceramic products from tannery ash stabilization

D. Djafari, A. Semcha, B. Mekerta
Production of eco-cement by substitution of ash from treatment of wastewater sludge

A.J. Moya, S. Peinado, S. Mateo, S. Sánchez
Sodium borohydride treatment to improve the fermentation of acid hydrolysates from pruning olive-tree biomass. Reduction of phenolic and furans compounds

L.N.B. Menezes, P.A.Z. Suarez
Diesel-like fuel production from the waste grease of the biggest wastewater treatment plant of the capital of Brazil

C. P. C. Bong, C. T. Lee, L. Y. Lim, W. S. Ho, H. Hashim, J. S. Lim
Feasibility study of integrated biogas and composting plant at community scale in Malaysia

M. Aadraoui, M. Elbaghdadi, J. Rais, A. Barakat, W. Ennaji, L.A. Karroum, H. Oumenskou, F. Echogdali, A. Ouigmane, S. Didi, I. Karaoui
Characterization and possible uses of sewage sludge from wastewater treatment plants

Jasneet Grewal, S.K. Khare
Lactic acid production by *Lactobacillus brevis* mediated bioprocesses utilizing lignocellulosic agro-wastes

T. Kritikou, K. Abeliotis, K. Lasaridi
Consumers' awareness and behaviour on food waste prevention

P.F. Rupani, A. Embrandiri, M. H. Ibrahim, A.K.M. Omar, C.T. Lee
Kinetic evaluating of carbon to nitrogen ratio in relation to different POME-PPF mixture during vermicomposting process

Poster session (duration 3 days)

L.Y. Lim, C.T. Lee, T. Fujiwara, J.S. Lim
Effects of Compost Produced from Food and Vegetable Wastes on the Physicochemical and Biological Properties of Soil

A. Urueña, D. Díez, J.A. Conesa
Determination of cellulose, hemicellulose and lignin content of different biomass species by a unique kinetic model from TGA analysis

A. Dmytryk, M. Samoraj, Ł. Tuhy, A. Zdunek, P. Rusek, K. Chojnacka
Utilization of alfalfa and goldenrod post-extraction residues as sorbent of plant micronutrients and energy material

K. Papadopoulou, G. Lyberatos, J. Merino Lizarraga, I. López Torre, M. Ibarra, N. Zafeiri, C. Lytras, M. Kornaros, S. Egenfeldt-Nielsen, M. Giavini, R. Mariani, S. Colombo, G. Drosi, A. Schmidt, J. Dinis, M. Vila, P. Andriani, J. Arambarri, E. Melanitou, S. Niakas, A. Alonso-Vicario
Moving towards Life Cycle Thinking by integrating Advanced Waste Management Systems: WASTE4THINK

G. Z. Kyzas, A. C. Mitropoulos
Banana waste residues for environmental applications

A.K. Nowak, Z. Wzorek, K. Gorazda, K. Krupa-Żuczek, R. Wagner, K. Wojdyga, M. Chorzelski, A. Jamróż
The composition of the bottom ash from professional and individual heat production systems - the Polish case

H.N.F. Lira, P.A.Z. Suarez, E.T. Rangel
Fuel Synthesis with Biocidal activity and lubricating grease from industrial oil waste

K. Lasaridi, C. Chroni, K. Abeliotis, K. Boikou, M. Villares, A. Jandric, J. Hobohm, K. Kuchta, E. Terzis
Waste electrical and electronic equipment (WEEE) collection for recovery of rare earth elements and other critical metals

Z. K. Kaliaskarova, S.Dh. Usabalieva, Zh.N. Alieva, A.A. Bekkuliev
Modern municipal solid management problems in the Republic of Kazakhstan

A. Kyriacou, K. Abeliotis, E. Mitsou, K.E. Lasaridi
Antibiotics resistance in sewage sludge enterococci

V. Diyamandoglu, L. Fortuna
Effectiveness of Secondhand Product Diversion by the Materials Exchange Development Program of New York City

T. Hernandez, G. Berlanga, I. Tormos, D. Miguel, L. Chacón, M. Ballesteros, C. Gonzalez, C. Garcia
Agronomic valorization of the "active sludges" proceeding from the treatment of waste-waters with a microalgae-bacteria consortium

Hong Chen, JianSa Fan, Ying Wu, Erping Cui, Yiru Zuo
The fate of antibiotic resistance genes and Class 1 Integrons during two-phase anaerobic digestion

A.K. Nowak, Z. Wzorek, K. Krupa-Żuczek, K. Gorazda, R. Wagner, K. Wojdyga, M. Chorzelski
Characteristics of solid waste from the combustion of biomass for energy purposes

S. Patnala, P. Madikizela, R. Tandlich, S. C. Srinivas
Biomedical waste management at a regional hospital in Belgaum, Karnataka, India

A. Neves, K. Moustakas, D. Malamis, C. Dias-Ferreira
Transition to PAYT tariffs in southern European Countries: the contribute of project LIFE PAYT

Poster session (duration 3 days)

S. Delibacak, A. Riza Ongun

Influence of treated sewage sludge applications on total and available heavy metal concentration of sandy clay soil

M. Nurariffudin, H. Hashim, P.Y. Hoo

Opportunities of co-firing for CO₂ mitigation in Malaysia: A spatially-explicit optimization model

K. Pikoń, M. Bogacka, M. Landrat

New approach in PV panel LCA evaluation

K. Lasaridi, C. Chroni, K. Abeliotis, T. Manios, A. Zorpas, E. Terzis
Food waste prevention in the hospitality sector: prospects and challenges

Y. Sarbassov, A. Myrzagaliev, M. Amouei Torkmahalleh,

L. R. Rojas-Solórzano

Development of process modeling system for utilization of biogas from municipal solid waste of Astana city

S. Safari, D.F.E. Galarza, E. Katsou, S. Malamis

Phosphate removal from aqueous solution with Fly Ash and natural zeolite

I. Giakoumaki, K. Borboudaki, P. Panteli, M. Georgiou, N. Stylianidis, C. Mamoulakis, G. Zervas, J. Zentek, K. Lasaridi, T. Manios

Source separated food waste collection system from hotels for animal feed production – the F4F Life project

V. Panaretou, S. Vakalis, A. Ntolka, A. Sotiropoulos, K. Moustakas, D. Malamis, M. Loizidou

Study of carbon balances from organic waste in a decentralised composting facility in Tinos island

P. Romano, P. S. D. Brito

Materials degradation monitoring - A sustainable factor and a way to decrease solid waste

D. Kintsakis, Th. Valkouma

Sustainable Waste Management in Volvi Municipality - Zero Waste Scenario

M. Nastac, A. Resteanu

Valorization of some resources wastes in the benefits of organic farmers

D. Cizeikiene, J. Damasius, R. Rimkevicius

Bioconversion of lignocellulosic agro-industrial by-products to lactic acid applying by lactic acid bacteria

S-J. Oh, K-B. Park, J-S. Kim

Production of bio-oil from palm kernel shell in a newly developed two-stage pyrolyzer

RES-URBIS consortium, Resources from Urban Biowaste: The RES URBIS Project

C. García, G. Berlanga, E. Zuriaga, B. Hernández, I. Pastor, T. Hernández

STO3RE LIFE Project: First results with new organic digestate

K. Pikoń

Uncertainty of the future in environmental impact assessment of PV panels scenarios

M. Stylianou, V. Inglezakis, G. Itskos, A. Jetybayeva, M. Loizidou, A. Agapiou

Comparative study on phyllosilicate and tectosilicate mineral structural properties

A. Lais, E.M. Barampouti, S. Mai

Challenges and opportunities of anaerobic digestion of agricultural residues and livestock manure in the regional unit of Florina, Greece

8.00 - 9.30

Registration

9.15 - 9.45

ROOM 1

Welcome Speeches

9.00 - 10.30

Keynote Speakers

Chair: A. Nzihou, D. Newman

Stephen Smith, Imperial College London

"Organic micropollutants in wastes recycled to agriculture and their potential significance for the human foodchain"

Costas Velis, University of Leeds

"Marine litter: can sound waste management solve this global challenge?"

Bruna Rego de Vasconcelos, Doan Pham Minh, Patrick Sharrock, Ange Nzihou, Ecole des Mines d'Albi

"Syngas production in dry reforming of methane using phosphate-based and conventional catalysts"

Mauro Majone, Sapienza University of Rome

"An Urban Biowaste Biorefinery: the H2020 RES URBIS project"

Nathalie Gontard, National Institute for Agricultural Research (INRA)

"Innovative approaches to turn agricultural waste into ecological and economic asset: the NoAW H2020 project"

10.30 - 11.00



Coffee Break

ROOM 1

Composting

SESSION IX

Chair: S. Smith, D. Komilis, D. Malamis

- | | |
|-------------|---|
| 11.00-11.15 | A. Luebke, B. Gamerith, K. Tsitouridis
Biofilter technology to treat odours from compost and MBT plants |
| 11.15-11.30 | B.C. Lima, L.M. Lima, M.L. Brandão, V.M. Zanta, D.V. Vich, L.M. Queiroz
Composting as an alternative for final disposal of digested sludge from UASB reactors: a case study in the small municipalities of the state of Bahia, Brazil |
| 11.30-11.45 | A. Karimi-Jashni, N. Talebbeydokhti, S. Azadi, A. Binaei
Assessment of compost production from mixed municipal solid waste: A case study in Shiraz city, Iran |
| 11.45-12.00 | E.R. Oviedo-Ocaña, I.C. Dominguez, D. Komilis, A. Sanchez
Understanding biowaste composting in developing countries: Lessons from Colombia |
| 12.00-12.15 | S. Hemidat, A. Nassour, M. Nelles
Optimization of Composting Parameters for the Production of Organic Fertilizers from Different Organic Waste Materials |
| 12.15-12.30 | A. Ksheem, O. Ermithi, A. Bridan
Evaluation of composting vegetable waste and physic-chemical properties for compost maturity |
| 12.30-12.45 | A.S. El-Gendy, H. El-Gamal, H.I. El-Kassas, T.M.A. Razik
Co-composting of Sludge and Rice Straw in Full Scale Windrow Piles |
| 12.45-13.00 | N. Jaafarzadeh Haghighi Fard, M. Ravanbakhsh, B. Moradi, M. Abbasi, R. Alivar Babadi
H. Bahrani, A. Mirzaie
Investigation of vermicomposting feasibility of dewatered sludge and green wastes using a native earthworm in Ahvaz, Iran |
| 13.00-13.15 | C. Tsiodra, G. Lambrou, A. G. Vlyssides, A.A. Vlysidis
Dynamic model of humic and fulvic compounds determination in compost |
| 13.15-13.30 | M. Grigatti
Short term phosphorus release from composts in a soil-plant system: the effect of elemental sulphur (S ₀) addition |

13.30-13.45	M. Quintern, M. Morley One Size Fits All - How households, schools, prisons, municipalities and industries successfully use vermicomposting
13.45-14.00	M. Kumar Awasthi, Zengqiang Zhang Effect of biochar on nitrogen loss control and the change of bacterial populations in sewage sludge composting
14.00-14.15	Discussion – Conclusions
14.15-15.00	Lunch Break

ROOM 2

SESSION X

Tools in the field of waste management

Chair: G. Lyberatos, M. Majone, V. Sousa

11.00-11.15	M. Georgiopoulou, G. Lyberatos Life Cycle Assessment of the Management of Municipal Solid Waste: A Case Study
11.15-11.30	P. de Morais Lima, P. Loureiro Paulo Risk Analysis for Domestic Waste Management Practices in Rural Brazil
11.30-11.45	J. Seixas, V. Sousa, J.M. Vaz, C. Dias-Ferreira Life-cycle cost analysis of waste collection equipment: The case study of Cascais Municipality
11.45-12.00	I. Oribe-Garcia, E. Borges Cruz, M. Vila, G. Nohales, M. Giavini, E. Amodeo, J. Dinis, G. Lyberatos, A. Alonso-Vicario WESTE methodology for holistically evaluation of the waste management chain
12.00-12.15	M. Tsakona, N. Mavropoulou, M.J. Sora, J. A. Morales Sánchez Setting Up Municipal Local Action Plans for Waste Management Involving the Use of ICT Tools
12.15-12.30	I. Noya, S. González-García, G. Feijoo, M.T. Moreira, The analytical hierarchy process (AHP) in the analysis of the sustainability of Municipal Solid Waste management in Northwest Spain
12.30-12.45	S. Mucyo, J.C. Akunna Support tools for effective food waste management and bioenergy production in sub-Saharan Africa: Case Study - Kigali City, Rwanda

- 12.45-13.00 D. San Martin, M. Orive, E. Martínez, B. Iñarra, S. Ramos, N. Gonzalez, A. Guinea de Salas, L. Vázquez, J. Zufía
MCDA help decision tool for the implementation of food waste valorisation alternatives: animal feed as case study
- 13.00-13.15 E. Iacovidou, N. Voulvoulis
Sustainable food waste management: A Multi-Criteria approach for assessing the use of food waste disposal units (FWDS) and the anaerobic co-digestion of separately collected food waste with sewage sludge
- 13.15-13.30 N. Tsolakis, N. Trokanas, J. Singh Srai
A System Dynamics Framework for Supply Chain Sustainability Assessment: A Case Study in Process Industries
- 13.30-13.45 G. Stengos, S.T. Ponis, A. Maroutas, E. Freri, A. Bourtsalas, M. Tsakona
An innovative low-cost waste-tracking technology and rewarding mechanism to increase Citizen's participation in recycling
- 13.35-14.00 V. Diyamandoglu, L. Fortuna
An Online Facilitated Urban Materials Exchange as a Tool for Diversion of Secondhand Products from a Solid Waste Stream
- 14.15-14.30 A. F. Branha, G. Feijoo-Costa, C. Dias-Ferreira
Application of LCA at local level to test the viability of PAYT systems in Southern Europe: state of the art and new strategies
- 14.15-14.30 F. Bernocchi
Waste Travel 360 2.0: The first European project of environmental education to the circular economy with virtual reality

ROOM 3

SESSION XI

Water- Energy efficiency: From practice to policy

Chair: M. Papadopoulou, C. Laspidou, Z. Naunovic

- | | |
|-------------|---|
| 11.00-11.15 | C.-A. Papadopoulou, M. P. Papadopoulou, C. Laspidou
Unfolding Policy Goals and Interactions through an Informative Policy Analysis of the Nexus Water-Energy-Land-Food-Climate |
| 11.15-11.30 | B. Tomaszewska, M. Dendys
Zero-waste initiatives – waste geothermal water as a source of medicinal raw material and drinking water |
| 11.30-11.45 | K. Chojnacka, Z. Kowalski, A. Dmytryk, H. Górecki, M. Gramza
Carbon footprint of fertilizer technologies |
| 11.45-12.00 | M. Spinelli, V. Vasilaki, E. Katsou, A. L. Eusebi, F. Fatone
Dynamics of GHG emissions from a typical full-scale WWTP in Italy |
| 12.00-12.15 | B. Verbinnen, J. De Greef, J. Van Caneghem
Increasing energy efficiency in Waste-to-Energy: from waste processing to combined heat and power production |
| 12.15-12.30 | E. Ieremiadi, C. Tsompanidis, T. Lolos, G. Lolos
GHG emissions from an Integrated Solid Waste Management System: the case of Dubrovnik-Neretva County/Croatia |
| 12.30-12.45 | G. Bartzas, K. Komnitsas
Energy flow analysis of irrigated pistachio production in Aegina, Greece |
| 12.45-13.00 | M. S. Babel, K. Anusart
Potential of Water and Energy Savings in Bangkok Water Supply System, Thailand |
| 13.00-13.15 | T. Gienau, M. Kraume, U. Brüß, S. Rosenberger
Nutrient recovery from biogas digestate in semi-technical scale in Northern Germany |
| 13.15-13.30 | M. Adi, F. Al Ghaferi, S. Alyahyaee, M. Aljabri, B. Abu-Jdayil
Development of Thermal Insulation Material based on Bauxite Residue |

- 13.30-13.45 A. Batool Zeshan, M. Arshad, S. Jamal Khan
Effect of substrate on phytoremediation of leachate by *Phragmites australis* and *Typha latifolia* in pilot scale constructed wetland
- 13.45-14.00 N. Abidi, J. Duplay, A. Jada, E. Errais, K. Semhi, M. Trabelsi-Ayadi
Removal of Anionic Dye from Textile Industries' Effluents by using Tunisian clay as adsorbent. Electrophoretic and Streaming potential investigations

ROOM 4

SESSION XII

Master-class on Horizon 2020 & LIFE: How to win funds for your innovative research projects?
Praxi Network, National Contact Point for H2020
Chair: EC representative, P. Papazoglou

- 11.00-14.15 H2020: General Introduction, Legal & Financial Rules, Fast Track Innovation, SME Instrument, H2020 Prizes, Climate Change and Environment, Participant's Portal, Consortium Agreements and Partner Search Facilities Success stories from specific H2020 consortiums described by coordinators and partners

ROOM 1

Anaerobic Digestion

SESSION XIII

Chair: P. Pavlostathis, D. Bolzonella, S. Malamis

- | | |
|-------------|--|
| 15.00-15.15 | M. Imeni, B. Puyelo, J. Bartroli, N. Puy, L. Llenas, E. Martí, S. Ponsá, J. Colón
Anaerobic Digestion of raw and briquetted lignocellulosic compounds |
| 15.15-15.30 | A. E. Maragkaki, M. Fountoulakis, A. Kyriakou, K. Lasaridi, T. Manios
Boosting anaerobic digestion of sewage sludge |
| 15.30-15.45 | Nuo Liu, Jianguo Jiang, Feng Yan, Sicong Tian
Effect of surfactants on volatile fatty acid and hydrogen production from food waste during anaerobic digestion |
| 15.45-16.00 | C.M. Dykstra, S.G. Pavlostathis
Sulfide Effect on Biogas Upgrading with a Bioelectrochemical System |
| 16.00-16.15 | D. Bolzonella, N. Frison, G. Strazzer, M. Gottardo, C. Cavinato, P. Pavan
Volatile fatty acids production from municipal, industrial and agricultural organic waste |
| 16.15-16.30 | R. Teixeira Franco, P. Buffière, R. Bayard
How to preserve the energy potential of organic residues during storage?
Focus on anaerobic digestion |
| 16.30-16.45 | A. Cerutti, G. Campo, M.C. Zanetti, G. Scibilia, E. Lorenzi, G. Genon†, B. Ruffino
Effect of the duration of the first-stage anaerobic digestion on the efficiency of intermediate treatments carried out on Waste Activated Sludge (WAS) |
| 16.45-17.00 | Kun Li, Guodong Qin, Shaofeng Cui, Lijuan Wu, Ruijie Ma, Ronghou Liu
Pretreatment of rice straw by NaOH and H ₂ O ₂ and its anaerobic digestion for biogas production |
| 17.00-17.15 | K. Aboudi, X. Gómez-Quiroga, C.J. Álvarez-Gallego, L.I. Romero-García
Comparison of single-stage and temperature-phased anaerobic digestion of sugar beet by-products |
| 17.15-17.30 | W. Tao, J. Masih-Das
Enhancing stable anaerobic digestion of foodwaste: Co-digestion with liquid dairy manure or manure digestate? |
| 17.30-17.45 | J. Dosta, A. Martin-Ryals, M. Garrigó, V. Ortiz-Roca, I. Fernández, J. Mata-Álvarez
Acidogenic fermentation and anaerobic codigestion of OFMSW and Polyethylene glycol |

17.45-18.00	I. Markidis, M. Coma, T.C. Arnot Anaerobic digestion treating sewage and domestic waste. How small can it be?
18.00-18.15	C. Gonzalez-Fernandez, I. de Godos, E. Tomás-Pejó, M. Ballesteros Proteins: a key macromolecule for an efficient anaerobic digestion of microalgae biomass
18.15-18.30	J. J. Chávez Fuentes, D. Papale, M. Hutnan Smart-farms: Transforming chicken litter into a reliable source of heat through anaerobic digestion
18.30-18.45	Q. Yin, Y. Li, Y. Wang, G. Wu Thermophilic hydrolysis and acidification of activated sludge with a low organic carbon content under different sludge concentrations
18.45-19.00	F. Kaldis, D. Cysneiros, A. Chatzifragkou, A. Karatzas Thermal and high pressure pretreatment with steam explosion of lignocellulosic substrates prior to anaerobic digestion
19.00-19.15	C.M. Dykstra, S.G. Pavlostathis Sulfide Effect on Biogas Upgrading with a Bioelectrochemical System
19.15-19.30	P. Madikizela, R. Tandlich, N. Ngqwala, R. Laubscher Optimizing biogas recovery from pit latrine faecal sludge
19.30-19.45	K. Tsigkou, P. Tsafraikidou, C. Zafiri, M. Kornaros Pretreatment of disposable nappies towards valorization of the fermentable fraction through anaerobic digestion
19.45-20.00	M.-Y. Peña, A. Duran Moreno Towards to anaerobic co-digestion of OFMSW based on the analysis of whey and meat waste on two types of sludge
20.00-20.15	Y. Küçükağa, C. Yaman, B. Pala, G. Delice Using Geotextile Filter as Biofilm Media in Anaerobic Landfill Bioreactor

ROOM 2

SESSION XIV Socio economic Issues and Management in Islands & Isolated Areas

Chair: L. Streff, K. Abeliotis, C. Koroneos

- | | |
|-------------|---|
| 15.00-15.15 | K. Abeliotis, C. Chroni, K. Lasaridi
Social Life Cycle Assessment for WEEE Reuse |
| 15.15-15.30 | M. Struk
Impact of biowaste collection on municipal solid waste management in Czechia |
| 15.30-15.45 | B.R. Dlamini, I.T Rampedi
Waste collection and recycling benefits and challenges in tribal rural areas - the case of Umkhanyakude & Zululand Districts in the KwaZulu-Natal province in South Africa |
| 15.45-16.00 | Xiaoqian Zhang, Hui Gong, Heng Xu, Kaijun Wang, Hainan Gan, Guanglan Zhang
Systematic Solution for Reduction of Greenhouse Gas Emission From Refuse Landfills |
| 16.00-16.15 | L. Streff, C. Venetis
Integrated Waste Management Planning in the Southern Region of Azerbaijan (Lankaran Economic Region) |
| 16.15-16.30 | Wenchao Ma, Minhui Pan, Xiao He, Guanyi Chen, Beibei Yan, Zeng Dan
Technical-economic analysis of waste pyrolysis/ gasification in rural area of China |
| 16.30-16.45 | J.E. Rutkowski, F. G. Oliveira, E.W. Rutkowski, F.de P. A. Lima, L. H. Silva, L. M. Silva
Brazilian Observatory for inclusive and solidary recycling |
| 16.45-17.00 | Z. K. Kaliaskarova, A.S. Ikanova, Zh.N.Aliyeva, A.A.Bekkuliev
Modern condition of locations of municipal solid waste in a residential buffer suburb of the city of Almaty |
| 17.00-17.15 | F. Chen, Z. B. Luo, J. LV, G.J. Liu, Y. J. Yang, J. Ma
Waste picker: an indispensable but unappreciated link of municipal solid waste management in China |
| 17.15-17.30 | C. Falzon, T. Pretz, H. Wenzel
Optimizing Household Biodegradable Waste Management within European Islands |
| 17.30-17.45 | M. Giang Hoang, T. Fujiwara
Estimation of household waste generation using multivariate linear regression model – A study in Hoi An, Vietnam |

17.45-18.00	P. Krütli, G. Meylan, M. Stauffacher Solid waste management in the Seychelles
18.00-18.15	N. Tzaberis, K. Georgiou, S. Xenitidou Views on solid waste management by related agencies of the island of Rhodes, Greece
18.15-18.30	C. Koroneos, E. Nanaki Comparative Analysis of Municipal Solid Waste Treatment Technologies – the case study of Western Macedonia
18.30-18.45	Discussion - Conclusions

ROOM 3**Food waste management, bioeconomy, food industry****SESSION XV****Chair: K. Lasaridi, E. Katsou, K. Chojnacka**

- | | |
|-------------|--|
| 15.00-15.15 | E. Imbert, L. Ladu, A. Tani, P. Morone
The transition towards a bio-based economy: networks and policies |
| 15.15-15.30 | D. Lee, J. Bae
Optimum methane production from food waste leachate in the in-situ anaerobic digestion |
| 15.30-15.45 | Xiaoqian Zhang, Giwa Abdulmoseen Segun, Fengmin Chang, Heng Xu, Kaijun Wang
TG analysis and kinetic study of residues from biological treated food waste |
| 15.45-16.00 | P. Stanchev, V. Vasilaki, E. Katsou
Multilevel environmental assessment of dairy processing industry in the context of circular economy |
| 16.00-16.15 | G. Perkoulidis, N. Moussiopoulos
Perspectives of energy recovery from food waste generated from hotels |
| 16.15-16.30 | K. Lasaridi, K. Abeliotis, K. Boikou, T. Manios, C. Chroni
Household food waste generation and composition in Greece as assessed by self-reporting diaries |
| 16.30-16.45 | H. Barco, I. Oribe-Garcia, C. Martín, E. Borges Cruz, A. Alonso-Vicario
New methodology for food wastage quantification. Identifying gaps and data inconsistencies |
| 16.45-17.00 | I. Zarkadas, E. Handakas, D.A. Sarigiannis
Food Waste Biomethanation In Farm-Scale Systems |
| 17.00-17.15 | Meris Zheng, John Orbell, Bob Fairclough
Household Food Waste Treatment Technologies and Relevant System |
| 17.15-17.30 | V. Costarelli, K. Abeliotis, V. Detsis
Greek traditional breakfast foods: nutritional value and environmental sustainability |
| 17.30-17.45 | M. Elhag
Crop Vigorous limitations under Soil Salinity Variation by Using Remote Sensing Indices in Arid Environments |
| 17.45-18.00 | F. Battista, G. Mancini, A. Luciano, D. Fino
LCA-based comparison of traditional and alternative scenarios in the management of wastes generated from the extra virgin olive oil production |

18.00-18.15	B. Ruffino, M. Zanetti Potential for methane production and optimization of the anaerobic digestion of waste and wastewater from a candied fruit – jam factory
18.15-18.30	M. Kwapinska, J.J. Leahy Pyrolysis – a way of recovering energy from wastewater sludge from milk processing factories
18.30-18.45	K. Muhammad Safar, M. Rasool Bux, U. Muhammad Aslam Anaerobic Biodegradability and biomethanation potential of fruit-vegetable wastes at Hyderabad-Sindh, Pakistan
18.45-19.00	L. Foong Koong, Y. Lok Lee, G. Mckay, D. Hui Shrimp Shell Waste Management study in Hong Kong
19.00-19.15	E. Elimelech, O. Ayalon, E. Ert Households' Food Waste Composition – Evidence from a Field Survey
19.15-19.30	Discussion-Conclusions

ROOM 4

Waste Valorization III

SESSION XVI

Chair: A.G. Capodaglio, G.M. Kirkelund


- | | |
|-------------|---|
| 15.00-15.15 | D. A. Agar, M. Kwapinska, J.J. Leahy
The Feasibility of Pyrolysis for the Valorisation of Organic Fines and Sludge |
| 15.15-15.30 | A. S. Amarasekara, Dre'Langala N. Edwards
γ -Valerolactone from pyrolysis of calcium salts of levulinic-formic acid mixtures derived from solid cellulosic biomass waste |
| 15.30-15.45 | K-B. Park, G-G. Choi, S-J. Oh, J-S. Kim
Preliminary study on the two-step pyrolysis of PVC using batch processing |
| 15.45-16.00 | T.V. Rakotonimaro, M. Guittonny-Larchevêque, C.M. Neculita
Reclamation of metal-contaminated tailings with organic amendments: pore water quality control and phytostabilization |
| 16.00-16.15 | L. Zichella, P. Marini, R. Bellopede
Characterization of sludge resulting from extraction and processing of natural stones. Piedmont focus case |
| 16.15-16.30 | E. Georgakopoulos, R.M. Santos, Y.W. Chiang, V. Manovic
Parallel production of precipitated calcium carbonate and zeolitic heavy metal adsorbents from blast furnace slag |
| 16.30-16.45 | A. Kappel, G.M. Kirkelund, L.M. Ottosen, Utilisation of electro-dialytic treated sewage sludge ash in cement based materials |
| 16.45-17.00 | O. Hammoud, D. Blanc, M. Lupsea-Toader, C. de Brauer
Influence of chemical pre-treatment on the leaching behaviour of bottom ash |
| 17.00-17.15 | J.P. Bolívar, M.J. Gázquez, M. Contreras
Valorisation of ilmenite mud in commercial cements manufacturing |
| 17.15-17.30 | E. Bursi, I. Lancellotti, L. Barbieri, A. Sacconi, M.C. Bignozzi
CRT glass management: chemical pretreatment for use in cementitious composite |
| 17.30-17.45 | C. Magro, L. Ottosen, E. P. Mateus, A. B. Ribeiro
Electrodialytic technology as effluent treatment for reuse in construction materials |

17.45-18.00	F. Özalp, Ha. Dilşad Yılmaz, Ö. Kaya, M. Kara, Y. Kılıç Effects of Using Recycled Concrete as Aggregate on Physical and Mechanical Properties of Concrete
18.00-18.15	M. Ziypak, Z. Olgun, M. Turan, J. Erdogan, Y. Kilic, A. Sahin, M. Kara Utilization of coal slurry waste as an alternative raw material in portland cement clinker production
18.15-18.30	R. Tolosa, V. Ramírez, D. Rojas, N. Arias, O. Giraldo, C. Cardona Innovative use of residual biomass from agricultural processes. Case study: Use of Oil Palm and Sugar Cane Bagasse fibers for the improvement of construction materials
18.30-18.45	M. Cabrera, J. Rosales, F. Agrela Reuse of aggregates from recycled construction and demolition waste commonly disposed in landfill
18.45-19.00	F. Andreola, L. Barbieri, I. Lancellotti Valorization of rice husk ash (RHA) as silica precursor for the obtainment of heavy clay bricks and deflocculating additives
19.00-19.15	A. Tremouli, J. Greenman, I. Ieropoulos Ceramic stacks for urine energy extraction
19.15-19.30	S.M. Pérez-Moreno, J. Rosales, M. Cabrera, F. Mosqueda, M.J. Gázquez, F. Agrela, J.P. Bolivar Physico-chemical and radiological characterization of cement mortars manufactured by using phosphogypsum as setting regulator
19.30-19.45	J. Rosales, M. Cabrera, S.M. Pérez, F. Mosqueda, M.J. Gázquez, J.P. Bolivar, F. Agrela Influence of phosphogypsum as setting regulator on the mechanical performances of cement mortar
19.45-20.00	C.P. Silva, G. Jaria, C.I.A. Ferreira, M. Otero, V.I. Esteves, V. Calisto Converting wastes into resources: the repeatability of carbon adsorbents production from paper mill sludge
20.00-20.15	G. Jaria, C. P. Silva, J. Oliveira, M. V. Gil, M. Otero, V. Calisto, V. I. Esteves Production of a paper mill sludge-based activated carbon and application in the removal of pharmaceuticals from water
20.15-20.30	D. Kołodyńska, J. Bąk Uptake of heavy metal ions in aqueous solution by chitosan modified biochar

ROOM 1

SESSION XVII Waste-to-Energy with the active involvement of the Global WTERT

Chair: N. Themelis, M. Loizidou, K. Aravosis

9.00-9.15	P. Fetsis The LIFE Programme: over 20 years improving waste-to-energy management in the EU
9.15-9.30	S. Vakalis, K. Moustakas, M. Loizidou Assessing the 3T method as a replacement to R1 formula for measuring the efficiency of waste-to-energy plants
9.30-9.45	L. Lombardi, E. Carnevale, B. Mendecka WtE efficiency improvements: integration with solar thermal energy
9.45-10.00	Đ.H. Yılmaz, A. Abdulvahitoğlu, M. Kılıç Evaluation of energy potential for municipal solid waste in Turkey
10.00-10.15	N. Talebbeydokhtit, A. Karimi Jashni, F. Azadi Technical, economic and environmental analysis of waste to energy using incinerator from municipal solid waste in Shiraz, Iran
10.15-10.30	A.C. Bourtsalas, Lin Ao Carbon Mitigation Cost of Waste Management Methods and retrofit of old coal-fired power plant to a waste to energy facility
10.30-10.45	I. Petrovic, N. Kaniski Numerical Modelling of Biodrying of Organic Fraction of MSW
10.45-11.00	J. Zeaiter Catalytic Solar Pyrolysis of Waste Rubber Tires
11.00-11.15	V. Pérez, J.M. Murillo, R. Bados, L.S. Esteba, R. Ramos, J.M. Sánchez Preparation and gasification of brewers spent grains
11.15-11.30	I.C. Kantarli, S. D. Stefanidis, K. G. Kalogiannis, A. A. Lappas In-situ catalytic fast pyrolysis of poultry wastes
11.30-11.45	 Coffee Break

11.45-12.00	C. S. Psomopoulos, S. D. Kaminaris, G. Ch. Ioannidis Contribution of WTE plants in the EU targets for renewables
12.00-12.15	M. Anas Nahil, J. Oladipo, P. T. Williams Novel catalytic three-stage reactor system for hydrogen production from biomass
12.15-12.30	G. Mavrias, P. Vounatsos, P. Grammelis Physico-chemical properties of Greek End of Life Tyres intended for energy recovery
12.30-12.45	F. A. Shahat, A. S. El-Gendy, S. M. El-Haggar Alternative fuels from solid waste in Egypt
12.45-13.00	K. Papanikola, K. Papadopoulou, C. Tsiligiannis, A. Katsiampoulas, E. Chalarakis, M. Georgiopoulou, G. Lyberatos Food Residue Biomass Product as an Alternative Energy Source for the Cement Industry
13.00-13.15	I. Janajreh, I. Adeyemi Gasification of Plastic Waste: High fidelity modeling and simulation
13.15-13.30	T. Fujino, M. Iijima, T. Shimogo, H. Sato Benefits of the self-heat two stage biomass gasification facility
13.30-13.45	D. Basso, S. Vakalis, F. Patuzzi, A. Gasparella, W. Tirlir, S. Dal Savio, A. Rizzo, D. Chiaramonti, M. Baratieri The "NEXT GENERATION" project: valorization alternatives for char from small scale gasification systems in South-Tyrol
13.45-14.00	N. Themelis Current State of WTE Technology and the Global WTERT Council
14.00-14.15	Discussion - Conclusions
14.15-15.00	Lunch Break

ROOM 2

Recycling & Resources Recovery I

SESSION XVIII Chair: A. Ribeiro, J. Hřebíček, J. Martínez Urreaga

9.00-9.15	D. Schwabl, H. Flachberger, M. Bauer, M. Lehner, L. Kranzinger, R. Pomberger, W. Hofer Mechanical Processing of Post-Consumer Plastics for Feedstock Recycling
9.15-9.30	M. K. Mondal, B. P. Bose, P. Bansal Recycling Waste Thermoplastic for Making Lightweight Bricks
9.30-9.45	X. Li, Y. Hu, C. Du, C.S.K. Lin Recovery of glucose and polyester from textile waste by enzymatic hydrolysis
9.45-10.00	I. Senturk, M. Alzein Application of cleaner production technology to reduce pollution resulting from the textile industry
10.00-10.15	F.R. Beltrán, V. Lorenzo, J. Martínez Urreaga, M.U. de la Orden Valorisation of poly(lactic acid) wastes by mechanical recycling: improvement of the properties of the recycled polymer
10.15-10.30	F.R. Beltrán, V. Lorenzo, M.U. de la Orden, J. Martínez Urreaga Preliminary evaluation of the mechanical recycling of poly(lactic acid): effect on physical ageing and hydrolytic degradation
10.30-10.45	A. Aguado, E. Pérez Collection and recycling of expanded polystyrene (EPS) in the urban zone of Valladolid - LIFE COLRECEPS
10.45-11.00	J. Martínez Urreaga, E. Rubio, S. Bilbao, M.U. de la Orden, C. González-Sánchez, F.R. Beltrán, V. Lorenzo Eco-composites developed for the valorisation of postconsumer plastics and waste cellulose fibres: water uptake
11.00-11.15	Kaimin Li, Jianguo Jiang, Feng Yan Fly ash derived nano silica as support used for synthesizing solid amine CO2 capture materials
11.00-11.30	A. R. Ferreira, P. Guedes, E. P. Mateus, N. Couto, A. B. Ribeiro Electrokinetic technology applied to PPCPs removal from effluent - feasibility assessment
11.30-11.45	 Coffee Break


11.45-12.00	J. Elvina, L. Foong Koong, G. McKay, D. Hui Solvent Extraction as Decolorization Step in Chitosan production
12.00-12.15	M. Mikos-Szymańska, P. Rusek, K. Borowik, M. Rolewicz, J. Gluzińska Characterisation of drilling wastes from shale gas industry and their use in soil amendment production technology
12.15-12.30	A.M. Paula, T.C. Amaral, L.C. Tavares, L.S. Rocha, L.P. Fraga, I.B. Schmidt Sewage sludge and tree pruning residue use in the recovery of degraded area and their effects on epigeic invertebrates of Brazilian Savannah soil
12.30-12.45	H. A. Abdulbari, W. K. Mahmood, R.M.Yunus Biodegradable Grease from Palm Oil Industry Wastes
12.45-13.00	Hui Gong, Zhijie Wang, Xue Zhang, Zhengyu Jin, Cuiping Wang, Liping Zhang, Kaijun Wang Organics and nitrogen recovery from domestic sewage via membrane-based pre-concentration combined with ion exchange process
13.00-13.15	M. Rolewicz, P. Rusek, K. Borowik Technology of obtaining granulated phosphate fertilizers based on municipal sewage sludge ashes and bacteria <i>Bacillus megaterium</i>
13.15-13.30	G. Meylan The urban mining potential of zinc in Switzerland
13.30-13.45	A. Cannone Falchetto, K.H. Moon, D. Wang, C. Riccardi, M.S. Kang, M.P. Wistuba Investigation on the combined recycling of reclaimed asphalt pavement and steel slag in asphalt mixture at low temperature
13.45-14.00	A.Ouigmane, O. Boudouch, M.Berkani, A.Hasib, M. Aadraoui, E.Dhairi Towards an energy recovery approach for household waste in the province of Khenifra – Morocco
14.00-14.15	Discussion - Conclusions

ROOM 3

Biotechnology

SESSION XIX

Chair: C. Cardona, P. Champagne, A. Koutinas

9.00-9.15	Mengmeng Tian, Georg Hausner, Tuhin K. Guha, Qiuyan Yuan Production of cellulase and xylanase using food waste by solid-state fermentation
9.15-9.30	S. Serna, A. Martínez, Y. Pisarenko, C. A. Cardona Integral use of plants and their residues: the case of Cocoyam (<i>Xanthosoma sagittifolium</i>) conversion through biorefineries at small-scale
9.30-9.45	D. Parra Ramírez, V. Aristizabal Marulanda, G. Aroca, J. Quintero, A. Martínez, C. Ariel Cardona Analysis of the ethanol and butanol production at different scales from plantain peel and eucalyptus globulus
9.45-10.00	Ashley Sthefanía Caballero Galván, Daissy Lorena Restrepo Serna, Carlos Ariel Cardona Alzate Determination of Extraction Kinetics of Bioactive Compounds from Spent Coffee Grounds (<i>Coffea arábica</i>)
10.00-10.15	Yan Xu, Sheng Sheng, Wen-Miao Song, Dan Zhu, Jun Wang, Fu-An Wu A novel inhibitor of plant pathogenic bacteria extracted from propolis residues
10.15-10.30	E.M. Bartholameuz, J.P.A. Hettiaratchi, S.S. Gunasekera, H. Farokhzadeh High-rate Methanotrophic Biofiltration (HMBF) Technology to Minimize Atmospheric Emission of Greenhouse Gas
10.30-10.45	J. Yongpisanphop, S. Babel Assessment of Pb accumulation in roots of fast-growing trees inoculated with endophytic bacteria: Hydroponic culture
10.45-11.00	A. Papadaki, N. Kopsahelis, M. Patsalou, M. Koutinas, S. Papanikolaou, A. A. Koutinas Fumaric acid production through valorization of biodiesel and sugar cane industries by-products
11.00-11.15	P. Wang, Y. Q. Qiu, L.H. Ren Study on synthesis of polyhydroxyalkanoates (PHA) by bacteria from food waste fermentation liquid
11.15-11.30	 Coffee Break

11.45-12.00	A. Cherubin, N. Frison, A. L. Eusebi, F. Fatone Recovery of Volatile Fatty Acids from cellulosic sludge to enhance phosphorus bio-uptake or PHA production
12.00-12.15	A. Mekki, F. Arous, F. Aloui, S. Sayadi Treatment and Valorization of Agro-wastes as Biofertilizers in a Mediterranean Soil
12.15-12.30	M.B Benitez, G. Leite, P. Champagne Growth of Algae and Microbiome Cultures on Anaerobic Digester Centrate
12.30-12.45	E.J. Cho, H.-J. Bae Production of bioethanol and mangiferin from mango peel waste using green technology
12.45-13.30	Yong Zhang, Lei Shi Simulation and optimization of biofuel supply chain under the uncertainty of periodic supply and stochastic demand
13.30-13.45	Discussion - Conclusions

ROOM 4

Agricultural Waste

SESSION XX

Chair: N. Gontard, N. Tzortzakis, M. Doula

9.00-9.15	D. Broitman, O. Raviv, I. Kan, O. Ayalon Absorbing shocks: Designing an agriculture vegetative waste management system resilient to final product price fluctuations
9.15-9.30	T. Sapmaz, G. Pekyavas, S. Aydin, C. Yangin-Gomec Microbial dynamics in laying hen waste and its anaerobic treatability at mesophilic temperature
9.30-9.45	M.K. Doula, K. Komnitsas Small, low cost systems for agricultural waste management at field level -the case of pistachio waste at Aegina island, Greece
9.45-10.00	E. I. Sotiropoulou, M. Liouni, A. C. Calokerinos, E. T. Nerantzis Utilization of grape pomace for the production of microbial protein by solid state fermentation
10.00-10.15	N. Tzortzakis, C. Saridakis, A. Chrysargyris, A. Stamatakis Treated wastewater and/or Municipal Solid Waste Compost might be applied for greenhouse pepper cultivation
10.15-10.30	M.A. Kougioumtzis, A. Marianou, K. Atsonios, C. Michailof, N. Nikolopoulos, N. Koukouzas, A. Lappas Production of bio-based HMF from cellulosic biomass: Experimental analysis, process design and technoeconomic evaluation
10.30-10.45	Y. Zhao, Y.J. Xu, S. Liu Hydrothermal modification of lignocellulosic waste as microbial immobilization carriers for lignocellulosic ethanol fermentation
10.45-11.00	P. Mortreuil, C. Lagnet, B. Schraauwers, F. Monlau Fast prediction of organic wastes methane potentials by Near Infrared Reflectance Spectroscopy (NIRS): a successful tool for agricultural biogas plant monitoring
11.00-11.15	F. Galliou, M. Fountoulakis, J. Sampathianakis, N. Markakis, A. Papadaki, G. Daskalakis, A. Maragkaki, N. Nikolaidis, A. Niarhos, L. Fletcher, T. Manios The CONDENSE managing system for the production of novel fertilizers from OMW and manures
11.15-11.30	G. Raschio, S. Smetana, E. Herrera, V. Heinz, V. Aguilar Valorisation of agricultural waste via insect technology in Peru

11.30-11.45	E. Yilmaz, G. Soyer Waste management in dairy cattle farms in Aydin region: Potential of energy application
11.45-12.00	S. Georgopoulos, M. I. Papadaki Photocatalytic treatment of cow-farm wastewaters
12.00-12.30	Discussion - Conclusions
12.30-14.30	Consultation workshop for the H2020 project SIM4NEXUS: The Greek case study, Διαβούλευση με τους ενδιαφερόμενους φορείς του προγράμματος H2020 SIM4NEXUS: Η βιώσιμη και συνδυαστική διαχείριση των πόρων για την αποτελεσματική χρήση τους - Η Ελληνική μελέτη περίπτωσης

ROOM 1

Biogas and Materials Recovery from Waste

SESSION XXI

Chair: A. Vlyssides, C. Velis, L. Lombardi

15.00-15.15	A. A. Hashim Habib , A. A. Abdel-Rehim Estimation and Utilization of landfill gas from Egyptian municipal waste: A case study
15.15-15.30	N. M. Katsoulakos, I. G. Doulos, D.C. Kaliampakos Sustainable organic waste treatment in mountainous areas through small biogas plants: Insights from Metsovo, Greece
15.30-15.45	J. Camilo Solarte Toro, Y. Chacón Pérez, C. Ariel Cardona Alzate. Comparison of biomethane and syngas production as energy vectors for heat and power generation from palm residues: A techno-economic, energy and environmental assessment
15.30-15.45	L. Lombardi, E. Carnevale, I. Pecorini Biogas upgrading by wood combustion ash accelerated carbonation
15.45-16.00	J.R. Bastidas-Oyanedel, A. Sowunmi, J.E. Schmidt Enhancement of biomethane potential of waste paper by steam pretreatment
16.00-16.15	J. C. Henao, B. E. Bueno, T. Sanches, M. Cabral, A. L. Oliveira, J. Fiorelli, G. Tommaso Anaerobic Digestion of Lignocellulosic Biomass Pre-treated by Sub and Supercritical Conditions

16.15-16.30	T. Gross, L. Breitenmoser, H. Dhar, S. Kumar, T. Wintgens, C. Hugli Estimation of biogas potential in Indian communities using a Geographic Information System combined with Material Flow Analysis
16.30-16.45	N. Howaniec, A. Smoliński Chemometric modelling of experimental data on rare earth elements content in ash from coal slurry and sewage sludge gasification and combustion
16.45-17.00	A. S. Al-Rahbi, P. T. Williams Waste Derived Carbons for Syngas Tar removal
17.00-17.15	M. Anas Nahil, J. Oladipo, P. T. Williams Novel catalytic three-stage reactor system for hydrogen production from biomass
17.15-17.30	V. Mau, A. Gross Conversion of Poultry Manure into an Energy-Dense Solid Fuel by Hydrothermal Carbonization
17.30-17.45	A. Toptas Tag, G. Duman, J. Yanik Hydrothermal carbonization of biomass for production of densified solid fuel
17.45-18.00	Junting Zhang, Guangming Li, Wenzhi He, Juwen Huang, Haochen Zhu Hydrothermal carbonization (HTC) for recovery of organic fractions in municipal solid waste (OFMSW)
18.00-18.15	T. Alsamad, L. Mazoni, I. Janajreh Assesment of Thermochemical Conversion of Glycerol: Pyrolysis vs Steam and CO2 Moderation
18.15-18.30	A. Zabaniotou, N. Antoniou Development of an integrated system for end of life tyres (ELTs) pyrolysis to energy and carbonaceous material production: experimental proof of concept, conceptual design and scale up
18.30-19.30	CLOSING SESSION: Conclusions from each Session

ROOM 2

Recycling & Resources Recovery II

SESSION XXII Chair: K. Moustakas, C. Dias-Ferreira, J. Vaz

- | | |
|-------------|--|
| 15.00-15.15 | J. Hřebíček, J. Soukopová
Is a common EU target for recycling of municipal waste achievable? |
| 15.15-15.30 | G. Stengos, S.T. Ponis, A. Maroutas, E. Freri, A. Bourtsalas, M. Tsakona
An innovative low-cost waste-tracking technology and rewarding mechanism to increase Citizen's participation in recycling |
| 15.30-15.45 | L. Mahmoudian-Boroujerd, A. Karimi-Jashni, N. Talebbeydokhti
Evaluation of the Potential Use of Municipal Solid Waste for Recovery Options: A Case Study of Fars Province, Iran |
| 15.45-16.00 | G. Stengos, S.T. Ponis, A. Maroutas, E. Freri, A. Bourtsalas
Incentivized Municipality Recycling: Perceptions, Motives and Preferred Reward Schemes |
| 16.00-16.15 | M. Farazaki, T. Geronymakis, P. Toursidis, H. Marakas, P. Gikas
Potential for Recyclables Recovery from the Mixed Municipal Solid Waste of the Municipality of Lesbos |
| 16.15-16.30 | H. Wang, J.X. Hao, X.J. Wang
Overall process of using valerate-dominant sludge hydrolysate to produce high-quality polyhydroxyalkanoates (PHAs) by mixed culture |
| 16.30-16.45 | A.M. Paula, T.C. Amaral, L.C. Tavares, L.S. Rocha, L.P. Fraga, I.B. Schmidt
Sewage sludge and tree pruning residue use in the recovery of degraded area and their effects on epigeic invertebrates of Brazilian Savannah soil |
| 16.45-17.00 | Mei Zhang, Zhitao Bai, Min Guo, Fuming Wang
Synthesis and Characterization of Glass-ceramics From Magnetic Separation Tailings of Ferrochromium Slag |
| 17.00-17.15 | I. Matino, V. Colla, S. Baragiola
Evaluation of Internal Slag Reuse in an Electric Steelmaking Route: Simulation Analyses through the EIRES Monitoring Tool |

17.15-17.30	Min Guo, Hui-gang Wang, Mei Zhang One-step and green synthesis of metal doped spinel ferrite (Ni,Zn)Fe ₂ O ₄ with high magnetic property from Zn-containing electric arc furnace dust
17.30-17.45	V. Reinberg, C. Zehetbauer, J. Edlinger, J. Kissler Recovering metals from waste incinerator ash with biohydrometallurgical methods
17.45-18.00	A. İşildar, E. D. Van hullebusch, E. R. Rene, P.N. Lens Biorecovery of metals from electronic waste
18.00-18.15	Gordon C. C. Yang, Sheng-Chih Huang, Yu-Chen Huang Recovery of valuable metals from cylindrical 18650-type spent lithium-ion batteries
18.15-18.30	Gordon C. C. Yang, Yao-Ming You Recovery of Zn and Mn from spent zinc-manganese-carbon batteries
18.30-18.45	Gordon C. C. Yang, Yu-Chen Huang, Fang-Wei Yang Reductive acid leaching of valuable metals from mixed spent lithium-ion batteries

ROOM 3

Characterisation of Waste Residues

SESSION XXIII Chair: E. Remoundaki, A. Zorpas

15.00-15.15	O. Baietto, P. Marini, V. Randazzo Characterization of natural materials containing N.O.A. (naturally occurring asbestos): The problem of quantification
15.15-15.30	D. Blanc, L. Gonzalez, M.O. Lupsea, C. de Brauer Mineralogical evolution and leaching behaviour of a heap of Bottom ash as a function of time – influence on its valorization
15.30-15.45	P. Kousi, E. Remoundaki, A. Hatzikioseyan, M. Tsezos Mineralogy and granulometry of biogenic sulphidic sludge
15.45-16.00	Siming You, Zhiyi Yao, Yanjun Dai, Yen Wah Tong, Chi-Hwa Wang Particulate emission from the gasification of solid wastes: Feedstock-dependant particle size distributions and chemical compositions

16.00-16.15	S. Serranti, A. Trella, G. Bonifazi, C.G. Izquierdo Characterization of an innovative waste-derived fertilizer by hyperspectral imaging
16.15-16.30	M. Medeiros Veras, A. Samuel Young, M. Peticila, C. Otávio Petter, C. Hoffmann Sampaio CCD camera sensor and X-Ray imperfection evaluation in automatic sorting of civil construction waste
16.30-16.45	N. Ttofali, I. Voukkali, A. A. Zorpas How airlines affect solid waste production through in-flights
16.45-17.00	A. A. Zorpas, V. Inglezakis, T. Daddi, M. Jeguirim, L. Limousy, J. Navarro Pedreño, M. Doula, P. Loizia, I. Voukkali, N. Ttofali, S. Zorpa Differences between waste compositional analysis and management system from European and Mediterranean Area as well as from Central Asia
17.00-17.15	H. Kitamura, A. Viandila Dahlan, Y. Tian, F. Takahashi Individual and inter-particle heterogeneity analysis of the surface and inner matrices of chelate-treated MSWI fly ash particles employing water extraction
17.15-17.30	Y. A. Rodríguez-Restrepo, S. Ospina Corral, C. E. Orrego Morphology and properties of cellulose nanofibers from passion fruit stalks (<i>PASSIFLORA EDULIS</i> SIM F.) obtained through chemical and mechanical treatment
17.30-17.45	Y. Sarbassov, G. Khamitova, D. Nurmukhambetov, D. Berillo, V. Inglezakis, S. Pouloupoulos Characterisation of landfill leachate from municipal solid waste of Astana city
17.45-18.00	C.H. Chihobo, A. Chowdhury, P.K. Kuipa, D. J. Simbi Combustion kinetics of acid tar waste from crude benzol using thermogravimetric Analysis
18.00-18.15	J. Yanik, G. Duman, O. Karlström, A. Brink NO and SO ₂ emissions from combustion of raw and torrefied biomasses and their blends with lignite
18.15-18.30	Discussion - Conclusions

ROOM 4

SESSION XXIV The contribution of the LIFE FOODPRINT project to reducing the carbon footprint in the food industry sector

Chair: D. Ladikos, V. Papadimitriou, M. Loizidou

15.00-15.20	A. Vasilopoulos, FOODPRINT philosophy and audits performed in food industries in Greece & Italy
15.20-15.40	G. Konstantzos Presentation and demonstration of the multi-criteria analysis tool for the selection of the best mix of measures for carbon footprint reduction in the food industry
15.40-16.00	I. Antoniou, G. Tavantzis Carbon footprint offsetting programs for the case of JOTIS SA
16.00-16.20	P. Karamanos Carbon footprint offsetting programs for the case of AKTINA SA
16.20-16.40	M. Notarfonso Environmental sustainability as a business opportunity for the agrofood industry: the case of carbon footprint and other environmental labelling methods
16.40-17.00	F. Salta Elaboration of a strategy for carbon footprint emissions reduction
17.00-17.15	E. Aivazidou, D. Vlachos An optimisation model for strategic supply chain network design with water footprint consideration
17.15-18.45	Active demonstration of the FOODPRINT tool and discussion with representatives of different food industries

ATHENS2017

5th International Conference on Sustainable Solid Waste Management

21–24 June 2017

Athens, Greece

<http://athens2017.uest.gr>



National Technical
University of Athens

National Technical University of Athens
School of Chemical Engineering
Unit of Environmental Science & Technology

9, Heron Polytechniou Street
157 73 Zographou Campus, Athens, Greece
Tel: +30 2107723106/3108/2334
Fax: +30 2107723285
Website: www.uest.gr

Prof. Maria Loizidou
email: mloiz@chemeng.ntua.gr
Dr. Konstantinos Moustakas
email: konmoust@central.ntua.gr



LIFE13 ENV/GR/000958
Development of an integrated
strategy for reducing the carbon
footprint in the food industry sector

Communication Sponsor



GREENAGENDA^{gr}

