

LIFE10 ENV/GR/610: Development and implementation of a demonstration system on Integrated Solid Waste Management for Tinos in line with the Waste Framework Directive

In collaboration with the:



Tinos 2015

3RD INTERNATIONAL CONFERENCE
on Sustainable Solid Waste Management

agenda

2nd - 4th July 2015

MUSEUM OF MARBLE CRAFTS

PYRGOS VILLAGE

www.tinos2015.uest.gr



Municipality
of Tinos



National
Technical
University of
Athens



Università
degli studi di
Verona



Chemical
Process and
Energy
Resources
Institute

Centre for
Research &
Technology
Hellas



The Committees

Scientific

- Maria Loizidou
National Technical University of Athens,
Head of the Scientific Committee
- Anastasia Zabaniotou
Aristotle University of Thessaloniki
- Andreas Andreopoulos
Hellenic Solid Waste Management
Association
- Ange Nzihou
Ecole des Mines d'Albi
- Apostolos Vlyssides
National Technical University of Athens
- Barbara Ruffino
Politecnico di Torino
- Celal Gokcay
Middle East Technical University
- Celia Dias-Ferreira
Research Center for Natural Resources,
Environment and Society
- Chew-Tin Lee
University Technology of Malaysia
- Christopher Koroneos
National Technical University of Athens
- Costas Costa
Cyprus University of Technology
- Costas Velis
University of Leeds
- David Bolzonella
University of Verona
- Dimitrios Komilis
Democritus University of Thrace

- Dimitrios Malamis
National Technical University of
Athens
- Dolores Hidalgo
CARTIF
- Enzo Favoino
Scuola Agraria del Parco di Monza
- Emmanuel Kakaras
CERTH/CPERI
- Evangelos Kapetanios
EDSNA
- Evina Katsou
Brunel University London
- Fan Lu
Tongji University
- Francisco Omil
Universidad de Santiago de Compostela
- Franco Cecchi
University of Verona
- Florian Amlinger
European Compost Network
- Gerasimos Lyberatos
National Technical University of Athens
- Günay Kocasoy
Boğaziçi University
- Ioannis Skiadas
Aalborg University
- Katia Lasaridi
Harokopio University

- Konstantinos Aravosis
National Technical University of
Athens
- Luben Tzankov
Technical University of Sofia
- Michalis Kornaros
University of Patras
- Omar Assobhei
University of Fez
- Panagiotis Grammelis
CERTH/CPERI
- Paul Christakopoulos
Lulea University of Technology
- Petros Gikas
Technical University of Crete
- Philippos Kirkitsos
Ecological Recycling Society
- Rainer Janssen
WIP Renewable Energies
- Rubén Irusta Mata
University of Valladolid
- Stephen Smith
Imperial College
- Thomas Pretz
RWTH Aachen University
- Vassilis Inglezakis
Nazarbayev University
- Zorana Naunovic
University of Belgrade

Organizing

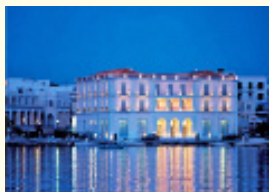
- Konstantinos Moustakas
National Technical University of Athens
- Panteleimon Armaos
Municipality of Tinos
- Anastasios Vidalis
Municipality of Tinos
- Vasiliki Panaretou
National Technical University of Athens

- Aggelos Sotiropoulos
National Technical University of Athens
- Katerina Valta
National Technical University of Athens
- Christina Papadaskalopoulou
National Technical University of Athens
- Sotirios Printezis
Municipality of Tinos

- Katerina Saltamanika
Municipality of Tinos
- Dimitrios Kourkoumpas
CERTH/CPERI
- Nicola Frison
University of Verona

Social Events

Wednesday, 1 July 2015



Conference Welcome Cocktail

Time: 20.30 – 22.30

Venue: Cultural Foundation of Tinos,
Chora

All conference participants and speakers are invited to a Welcome Cocktail, held in the beautiful and recently refurbished neo-classic building of the Cultural Foundation of Tinos.

Thursday, 2 July 2015



Gala Dinner

Time: 20.30 – 22.30

Venue: Panormos village

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

Thursday, 2 July & Friday, 3 July 2015



Marble Crafting (live demonstration lesson)

Conference Lunch Break

Venue: Museum of Marble Crafts

Live Workshop on Marble Crafting.

Friday, 3 July 2015



Live music by the 'Orchestra of Friends of the Museum of Marble Crafts', dedicated to Vassilis Tsitsanis

Time: 21.00

Venue: Museum of Marble Crafts

Musical Tribute, entitled "Ακρογιαλιές Δειλινά (Seashores Sunsets)", to the leading Greek composer and bouzouki player, Vassilis Tsitsanis, 30 years after his death.



Social Events

Saturday, 4 July 2015

Departure Time: 8.30 Departure Location: Chora of Tinos



Site visit to the prototype composting unit

Duration: 9.00 – 10.30

Location: Panormos area



Tour at Volax village

Duration: 11.30 – 12.30

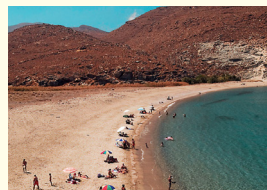
Volax village is a place of a unique scenery, which has attracted the interest not only of tourists but also scientists which study the unique characteristics of the surrounding rocks. This is the most traditional village of Tinos. It is located at a height of 280 m, 3 km from the northern region of Exomvourgo.



Tour at Exomvourgo Castle

Duration: 11.00 – 11.30

The Castle was erected by the Venetians in 1204. It is located at the highest mountain of Tinos (640m) with an outstanding view on the seaside (Aegean archipelagos). Details regarding the history of the Castle will be given by the tour guide.



Visit to Kolimbithra Beach

Duration: 13.00 – 17.00

The Castle was erected by the Venetians in 1204. It is located at the highest mountain of Tinos (640m) with an outstanding view on the seaside (Aegean archipelagos). Details regarding the history of the Castle will be given by the tour guide.



Arrival Time: 18.00 Return to the capital of Tinos (Chora)

Thursday, 2 July
2015

08.00 - 9.15

Registration

09.15 - 9.45

ROOM 1

Welcome Speeches

Keynote Speakers

Chair: M. Loizidou, S. Orfanos

9.45 - 10.45

Georges Kremlis, DG Environment, European Commission
"Waste Management & Circular Economy"

Ange Nzihou, Ecole des Mines d'Albi
"Energy from Biomass and Waste: Impact of metal species"

Florian Amlinger, European Compost Network
"Back to the roots - the art of composting and the humus challenge"

Maria Loizidou, National Technical University of Athens
"Waste Management in isolated areas: The case of the ISWM-TINOS project"

10.45 - 11.15



Coffee Break

ROOM 1

Biowaste management

(session targetting at representatives of local authorities)

SESSION I

Chair: M. Loizidou, G. Kremlis, Ev. Kapetanios

11.15 - 11.30

Vassilis Liogkas, Senior Advisor of the Minister
Legal framework and policy issues for the management of municipal organic waste

11.30 - 11.45

A. Andreopoulos
Hellenic Solid Waste Management Association

11.45 - 12.00

D. Kanakopoulos
Association of Composting Companies

12.00 - 12.15

S. Orfanos

12.15 - 12.30

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

12.30 - 12.45

D. Malamis, V. Panaretou, K. Moustakas, M. Loizidou
Implementation of an integrated solid waste management scheme for the case of Pyrgos and Panormos

12.45 - 13.00	D.-S. Kourkoumpas, P. Grammelis, A Life Cycle Analysis approach focusing on source separation systems: Case Study of Pyrgos in Tinos Island
13.00 - 13.15	D. Bolzonella, F. Cecchi Deep separate collection of biowaste and energy recovery through anaerobic digestion: a territorial approach
	Discussion - Conclusions
14.15 - 15.00	 Lunch Break

ROOM 2

SESSION II

Waste Valorization I

Chair: A. Nzihou, K. Komnitsas

11.15 - 11.30	N. Dimitrioglou, P.E. Tsakiridis, N.S. Katsiotis, M.S. Katsiotis, M. Beazi Production and characterization of concrete paving blocks containing ferronickel slag as a substitute for aggregates
11.30 - 11.45	K. Komnitsas, D. Zaharaki Co-geopolymerization of construction and demolition waste components
11.45 - 12.00	M. T. Santos, P. Lamego Construction and demolition wastes from residential recuperation
12.00 - 12.15	A. Kritikaki, K. Komnitsas Fabrication and characterization of glass ceramics produced from industrial wastes and by-products
12.15 - 12.30	A. Esfandyari Bayat, R. Junin Transportation and Aggregation of Metal Oxide Nanoparticles through various Porous Media
12.30 - 12.45	R. Junin, A. Azdarpour, O. Rahmani Mineral Carbonation by using Solid Waste Red Gypsum
12.45 - 13.00	M. A. B. Promentilla, N. Hoc Thang, F. Bacani, S. Gallardo Utilizing waste as a resource for geopolymer-based materials
13.00 - 13.15	F. Jose Alguacil, I. Garcia-Díaz, F. Lopez, O. Rodriguez Management of a copper smelter dust for copper profitability

13.15 - 13.30	J. Kisser, T. Rosenkranz, M. Puschenreiter, H. Gattringer, D. Kretschy, A. Zraunig, M. Iordandopoulos-Kisser Alternative biohydrometallurgical recovery of metals from sewage sludge, waste incineration residues and similar substances with hyperaccumulating plants
13.30 - 13.45	K. Valta, F. Chalkiopoulou, I. Chatzipanagis The evolution of the domestic carbonate fillers' production based on white calcitic marble waste during the last decade (2005-2015)
13.45 - 14.00	S. Boteva, L. Tzankov, M. Neznakomova Study of the effectiveness of nonwoven filters from textile waste
14.00 - 14.15	S. Valili, A. Maneta, I.D. Manariotis, H.K. Karapanagioti Development of biochar sorbents from food-industry by-products for the removal of phenanthrene and mercury from aqueous solutions

ROOM 3

SESSION III

Sludge Management

Chair: A. Vlyssides, M. Wzorek

11.15 - 11.30	S. Paniagua, L. Escudero, R.N. Coimbra, C. Escapa, M. Otero, L.F. Calvo Effect of applying organic amendments on the pyrolytic behavior of a poplar energy crop
11.30 - 11.45	D. Dondi, A. Callegari, A.G. Capodaglio Microwave-assisted pyrolysis process for "bio-oil" production from wastewater treatment sludges
11.45 - 12.00	M. Wzorek Evaluating the potential for combustion of fuels from sewage sludge in grate furnaces
12.00 - 12.15	Coimbra, S. Paniagua, L.F. Calvo, M. Otero Thermal valorisation of pulp mill sludge by co-pyrolysis with coal
12.15 - 12.30	M. Collard, B. Teychené, L. Lemée Double-shot Pyrolysis as a tool to characterize wastewater sludge – Application to the evolution of organic matter during different sludge drying processes
12.30 - 12.45	M.J. San José, S. Alvarez, R. López, I. García Treatment of sewage sludge by drying-combustion in a Conical Spouted bed reactor
12.45 - 13.00	I. Senturk, H. Buyukgungor Energy from Sewage Sludge under Thermophilic Conditions

13.00 - 13.15	E. Yilmaz, M. Wzorek Determination of the effect of different parameters of drying sewage sludge by using solar energy in Aydin region
13.15 - 13.30	M. Margaritis, A. Thanos, D. Malamis, S. Malamis Investigation of the extractability of heavy metals from sewage sludge when natural minerals are used as additives
13.30 - 13.45	L. Ziyang, M. Chen, W. Yachen, Z. Nanwen, A. Vityi, I. Czupy Preparation of sludge derived carbon with Fenton and NaClO activated and the application on the odor abatement
13.45 - 14.00	E. S. Varela, M. T. Santos, A. M. Barreiros Screenings and grits production from Portuguese WWTP
14.00 - 14.15	S.D. Koutroubas, V. Antoniadis, C.A. Damalas, S. Fotiadis Reuse of municipal sewage sludge in agriculture: the case of maize crop
14.15 - 14.30	V. Cremades, C. Soriano, J. A. Cusidó Odours and gas emissions during the process of ceramic sintering of sewage sludge: Atmospheric dispersion study and implementation guidelines
14.30 - 14.45	M. T. Santos, A. O. Ferreira, A. M. Barreiros Municipal sewage sludge - a problem that must be solved
ROOM 1 SESSION IV Composting Chair: F. Amlinger, A. Zouboulis, D. Malamis	
15.00 - 15.15	Sun Zhenjun, Wu Yupeng In situ vermicomposting organic wastes on field and impact on crop performance and soil quality
15.15 - 15.30	G. Setyamukti, V.S. Rotter, M.A. Siebel, H. Gijzen The potential Greenhouse Gas Emission reduction by using small low-tech box composters
15.30 - 15.45	V. M. Zanta, S. L. Melo, R. M. Saraiva, R. Rossi, H. P. Miyamoto Householders perception of the on-site food waste composting process
15.45 - 16.00	D. V. Vich, H. P. Miyamoto, C. V. dos Santos, L. M. Queiroz, V. M. Zanta Domestic composting of food waste using small-scale composter

16.00 - 16.15	K. Chassapis, P. Krithymos, M. Exarchou Innovative biocatalytic production of upgraded peat alternative composts from green wastes and biowastes
16.15 - 16.30	V. Chintzios, A. Evangelou, D. Komilis Effect of aeration rate on the respiration activity of the fresh organic fraction of municipal solid wastes
16.30 - 16.45	M, Ros, J. Blaya, R, Macías, J.A. Pascua Enhancement of organic waste and byproducts from fruit and vegetable processing by composting: use as organic substrate in seedbeds
16.45 - 17.00	C.T. Lee, W.S. HO, J.S. Lim, H. Hashim, F. Aliah Phang, Z. Zainon Noor, R. Ky Goh, C.S. Ho, F. Takeshi The Potential of Community Composting Project in Felda Taib Andak In Iskandar Malaysia
17.00 - 17.15	D. Kučić, M. Vuković Domanovac, F. Briški Determination of exhaust gases evolved during composting of agro-industrial waste
17.15 - 17.30	F. Amlinger Industrial Emission Directive (IED) - What composting and biogas plants may expect from the new Best Available Technique Reference document (BREF) for biological treatment of waste
17.30 - 17.45	P.V. Petrakis Insects in urban and agricultural waste management
17.45 - 18.00	D. Kučić, M. Vuković Domanovac, M. Šabić, F. Briški Column study of ammonia adsorption onto natural zeolite evolved during composting of agro-industrial waste
Discussion - Conclusions	
ROOM 2 SESSION V Waste Valorisation II Chair: G. Lyberatos, M. Kornaros, M. Goula	
15.00 - 15.15	C.J. Israilides, A. Vlysidis, N. Van den Smissen, D. Iconomou, D. Arapoglou, M. Girgis, Th. Varzakas, J. Kotzamanis, S. Harding, I. Connerton Utilization of Agro-Industrial Solid Wastes for high added value products by recycling Bio-technologies

15.15 - 15.30	M. Samoraj, Ł. Tuhy, I. Michalak, S. Baśladyńska, K. Chojnacka Using white mustard (<i>Sinapis alba</i> L.) in vegetation tests with micronutrient biological fertilizer components based on berries seeds
15.30 - 15.45	A. Saeid, M. Wyciszkiewicz, K. Chojnacka, H. Górecki Microbial solubilization as a method for utilization low-quality secondary phosphorus raw materials into biofertilizers
15.45 - 16.00	M. Gulyás, Z. Varga, M. Fuchs, G. Füleký Responses of soil properties and plant nutrient uptake to solid pyrolysis product application
16.00 - 16.15	M. Rolewicz, P. Rusek, M. Dawidowicz, S. Schab The production of suspended fertilizers based on ashes from combustion of sewage sludge with the use of phosphate solubilization with <i>Bacillus megaterium</i>
16.15 - 16.30	P. Siamandoura, S. Chanioti, C. Tzia Evaluation of extracts prepared from olive oil by-products using microwave-assisted enzymatic extraction - Effect of encapsulation on the stability of final products
16.30 - 16.45	A.G. Vlyssides, E.M.P. Barampouti, S.Th. Mai Olive stone wooden residues and olive pomace characterization - potential uses in co-composting with olive mill wastewater
16.45 - 17.00	M. Gimenez, G. Lucero, A. Quiroga, M. F. Sardella, A. C. Deiana, K. Sapag Valorization of viticultural wastes and their application to water treatment
17.00 - 17.15	Yun Bai Biomass stove for solid waste processing in remote areas
17.15 - 17.30	K.P. Stavropoulos, M. Kornaros Effect of pH on continuous biohydrogen production from a mixture of End-of-Life Dairy Products (EoL-DPs)
17.30 - 17.45	C. Alvarez C., J. C. Higueta V. Evaluation of the PHB production from milk whey as feedstock
17.45 - 18.00	L. Daza, C. A. Cardona Energy Biorefineries for Agricultural Waste Management: The Colombian Case

18.00 - 18.15	C. Raptopoulou, K. Kalaitzidou, A. Tolkou, M. Mitrakas, P.-K. Palasantza, A. Zouboulis Phosphate removal from secondary effluent of wastewater treatment: characterization and potential re-use as fertilizer of recovered precipitates
18.15 - 18.30	V. Oliveira, C. Dias Ferreira Phosphorus release from manure by acid and base extraction
18.30 - 18.45	P. Hlavínek, L. Stříteský, R. Pešoutová, L. Houdková Biogas production from algal biomass
18.45 - 19.00	M. Alagawany, M. E. Abd El-Hack, S. Mahgoub Decreasing Environmental Pollution in Poultry Farm and Increasing Production Performance through Dietary Manipulation combined with biological treatment
	Discussion - Conclusions

ROOM 3

SESSION VI

General Issues

Chair: N. Voulvoulis, D. Damigos

15.00 - 15.15	B. Milutinović, G. Stefanović, S. Milutinović, G. Vojković Evaluation the social acceptance of waste treatment technique using fuzzy set theory
15.15 - 15.30	G. Kontopoulos, V. Andrea Solid Waste Management: Social and economic costs vs environmental compliance
15.30 - 15.45	D. Kallidromitou, K. Korizi, K. Aravosis EU Policy and the National Waste Management Plan in Greece
15.45 - 16.00	H. Kamyab, M. F. Md Din, S. M. Taib, J. S. Lim, C. T. Lee, C. S. Ho Effect of Light/Dark Cycle and Carbon Source for the Production of Lipid by Chlorella pyrenoidosa using Agricultural Waste Water in Malaysia
16.00 - 16.15	A. Severin, K. Krell, R. Kelevska WASTECOSMART - Increasing regional innovation capacities for resources efficiency and integrated waste management through cooperation, research and technological development
16.15 - 16.30	N. Voulvoulis, R. Kirkman, E. Iacovidou, K.N. Petrou Investing in waste infrastructure for sustainability benefits
16.30 - 16.45	D. Damigos, D. Kaliampakos, M. Menegaki How much are people willing to pay for efficient waste management schemes?

16.45 - 17.00	I. Zarkadas, D. Sarigiannis, G. Pilidis Bio-conversion of the OfMSW into energy and organic fertilizer: toward a zero waste society
17.00 - 17.15	B. Milutinović, G. Stefanović, K. Denčić-Mihajlov, P. Djekić, R. Preka Evaluation the economic indicators of waste treatment technologies
17.15 - 17.30	C. Ingrao, D. Rovas, R. Rana, A. Zabaniotou Implementation of agrowaste bioenergy in Mediterranean countries with sustainability
17.30 - 17.45	V. Benavente, A. Fullana How does olive oil affect the production of bioenergy feedstocks from olive mill waste?
17.45 - 18.00	Th. Valkouma Waste management in motorways - The "EGNATIA ODOS" case study
18.00 - 18.15	D. Bajic, G. Trbic, D. Matic, I. Lastric Geographic information management system for review and registration of ecological risks in the environment
18.15 - 18.30	T. Haidakis, D. Skoura Costing-Pricing Methodology of Solid Waste Management Services from Regional Solid Waste Management Bodies in Greece
18.30 - 18.45	K. Valta, M. Alexandropoulou G. Antonopoulou, V. Drosou, V. Panaretou, J. Novakovits, M. Loizidou, G. Lyberatos Assessment of Household Food Waste as a potential source for energy generation
18.45 - 19.00	A. Papathanasoglou, M. Penessi Waste in caves and potholes - Risks and legal & administrative treatment in Greece
	Discussion - Conclusions

Poster Presentation

I. S. Buth, M. C. Moraes, A. Frare, C. Beutler, M. Varella, C. Angulski da Luz The valorization of acid blast furnace slag (BFS) In supersulfated cements (SSC)
B. Gracioli, M. Varella, I. S. Buth, C. Angulski da Luz, J. I. Pereira Filho Valorization of galvanic sludge and phosphogypsum in supersulfated cement (CCS)

M. Samoraj, I. Michalak, K. Chojnacka

FTIR analysis and potentiometric titration in identification of functional groups on the surface of new biosorbents – strawberry and raspberry seeds

R. Kulcu

Composting of Chicken and Dairy Manures using Corn Stalk as a Bulking Agent

K. Chatzizacharia, D. Economides, D. Hatzivramidis, S. Papadaki, C. Tsiodra, D. Sidiras

Evaluation of hydrolyzed wheat straw as an adsorbent hydrocarbons

A. Guermouche Mrassi, F. Bensalah, J. Gury, R. Duran

Application of Molecular Methods as a Marker in bacterial classification Studies

S. – I. Limenopoulos, A. Christoforidis

Review on recycling of polymers

V. Inglezakis, A.A. Abirov, N.S. Serikbayev

Pyrolysis of Municipal Solid Waste; Case Study of Astana, Kazakhstan

P. Emmanouil

A Sustainable School in Greece

D. Malamis, C. Theologitis, E. Kapetanios, M. Loizidou

Design of a prototype system for the aerobic treatment of digestate resulting from livestock anaerobic digestion

K. Papaoikonomou, A. Kungolos, C. Emmanouil

Mass concentration of indoor PM10 in a WEEE dismantling treatment plant, Greece

D. Malamis, A. Bourka, E. Stamatopoulou, K. Moustakas, O. Skiadi, M. Loizidou

Study and assessment of segregated biowaste composting in the Attica Region: The case of Athens and Kifissia municipalities

A.G. Gousterova, D.A. Paskaleva, P.E. Stoyanova, E.S. Vasileva-Tonkova

Microbial treatment and characterization of animal waste residues from a slaughterhouse in Bulgaria

E. Pantazopoulou, K. Komnitsas, A. Xenidis, A. Zouboulis

Leaching and EU landfill legislation in Greece

M.V.F. Varela, S. Rubert, C.A. Luz,

Study of different cements and waste ceramic on the process of solidification/stabilization of galvanic sludge

E. Koutra, A. Kopsahelis, C. Zafiri, M. Kornaros, K. Kadena, R. Bratskas, T. Anagnostopoulos, S. Nitodas, J.A. Lopez

DELOS: An e-learning training platform for the operation and management of biogas production plants

K. Assimakopoulou

Recycling and composting in the Municipality of Agios Dimitrios, Athens – the cornerstones of the Local Waste Action Plan

D.-S. Kourkoumpas, G. Kontopoulos, I. Vournas, D. Koulocheris, P. Grammelis, E. Kakaras

Smart recovery of materials and upgrade of organic compost & RDF in existing mechanical biological treatment plants by using NIR technology

P. Vounatsos, J. Vournas, G. Mavrias, P. Grammelis

Integrated system for optimized data collection and processing of end-of-life tires: Case of Greece

P. Vounatsos, D.-S. Kourkoumpas, P. Grammelis

Thermal exploitation of RDF/Greece-China Bilateral R&D Cooperation 2012-2014

Friday, 3 July
2015

08.00 - 9.00

Registration

Keynote Speakers

Chair: M. Loizidou, F. Cecchi

Franco Cecchi, University of Verona

"Anaerobic co-digestion & wastewater treatment"

Stephen Smith, Imperial College

"How MBT can contribute to sustainable solid waste management – a practical and operational analysis"

Antonis Mavropoulos, ISWA STC Chair, CEO & Founder of D-Waste

"Interconnectivity and the future of waste management"

Philip Heylen, Vice mayor of the City of Antwerp

"Circular economy and waste management: the case of Flanders"

Thomas Pretz, Adele Clausen, RWTH Aachen University

"Assessment of MBT Technology based on an modular Model"

Costas Velis, Leeds University

"Solid recovered fuels, refuse derived fuels and circular economy: incompatible or integral part?"

10.30 - 11.00



Coffee Break

ROOM 1

Anaerobic Digestion

SESSION VII

Chair: D. Bolzonella, B. Ruffino

11.00 - 11.15

L. Negral, A. Carro, L. Castrillón, E. Marañón, Y. Fernández-Nava, S. Fernández

Inverted phase fermentation as a pretreatment for anaerobic digestion of cattle manure

11.15 - 11.30

V. Paolini, F. Petracchini, E. Guerriero, I. Bientinesi

Anaerobic digestion of olive mill effluents in an automatized baffled reactor and biomethane production by vacuum swing adsorption on natural zeolites from tuffs

11.30 - 11.45

B. Ruffino, G. Campo, M.C. Zanetti, G. Genon, D. Novarino, G. Scibilia, E. Lorenzi

Preliminary technical and economic analysis of alkali and thermo-alkali pretreatments for the anaerobic digestion of waste activated sludge

11.45 - 12.00

S.K. Cho, S.G. Shin, H.S. Shin, J.C. Kwon

Development of upflow multi-layer anaerobic reactor (UMAR) for high solid food waste leachate: performance and bacterial community analysis

12.00 - 12.15	C. Da Ros, C. Cavinato, D. Bolzonella, P. Pavan Performance and kinetic evaluation of different HRT application on complex substrates anaerobic digestion
12.15 - 12.30	S. Jabłoński, M. Sygit, M. Łukaszewicz Valorisation of Jatropha curcas oilcake through anaerobic digestion – experimental and modelling study
12.30 - 12.45	P. Pagliaccia, A. Gallipoli, A. Gianico, D. Montecchio, C.M. Braguglia Impact of thermal pre-treatment of food wastes on anaerobic digestion performances
12.45 - 13.00	E. Karali, Ev. Kapetanios A techno-economic case study of a thermophilic anaerobic digestion plant in Attica Region, Greece
13.00 - 13.15	M. Alexandropoulou, G. Antonopoulou, I. Ntaikou, G. Lyberatos Using Leiostomum xanthurus and Abortiporus biennis for biological pretreatment of willow's awdust for enhancing biogas production
13.15 - 13.30	G. Han, S. Gu Shin, M. Jo, J. Lee, S. Hwang Behavior of bacterial community structures during mesophilic hydrolysis and acidogenesis of food waste recycling wastewater
13.30 - 13.45	D. Kučić, N. Kopčić, M. Vuković Domanovac, F. Briški Anaerobic digestion of agro-industrial waste
13.45 - 14.00	J. Jiménez, E. López-Dávila, G. Guerra, O. Romero-Romero Petrochemical residual clay as enhancer of methane production during the anaerobic co-digestion of manure and agriculture solid wastes
14.00 - 14.15	 Lunch Break

ROOM 2

SESSION VIII

Tools in the field of waste management

Chair: A. Mavropoulos, A. Clausen

11.00 - 11.15	Y. Zorzios, A. Migiakis, K. Valta, P. Damala, M. Kasidoni, V. Panaretou, K. Moustakas, D. Malamis, N. Markatos, M. Loizidou Promotion of symbiotic networks for industrial waste through the use of a developed platform
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11.15 - 11.30	J-A. Cox, A. Druckman, D.A. Jesson, S. Strickland, T. Beagan Municipal Solid Waste as a Resource: A multi-criteria decision model case study from Surrey, UK
11.30 - 11.45	I. Ristovski, O. Micevska, T. Mitev, A. Pavlov, I. Stefanovska Estimating GHG emissions from illegal landfilling in developing countries
11.45 - 12.00	M. Jofra Sora, I. García Vega, A. Anthouli, I. Koukosia Designing an intelligent waste collection system that reduces GHG emissions and involves citizens
12.00 - 12.15	S.N. Dunovic, Lj.M. Vukic, G.D. Trbic A method for optimizing collection, transfer and transport routes of waste using OSGeo software
12.15 - 12.30	A. Mavropoulos, M. Skarvelakis, H. Kamariotakis, M. Tsakona, I. Koukosia, P. Paparrigopoulos Raise Awareness and Recycling Rates through ICT tools in Greece: the GRE-cycle case study
12.30 - 12.45	V. Apostolidis, K. Digkas, K. Dimitraki, E. Dimopoulou, A. Karkaletsou, G. Kefalas, R.S. Lorilla, A. Matala, G. Mavrokefalou, A. Psarogiannis, S. Sofianopoulos, E. Stamellou, N. Stathopoulos, G. Voutos, K. Kalogeropoulos, S. Roumelis, C. Chalkias A GIS – based model for solid waste collection management: The case of Heraklion city, Greece
12.45 - 13.00	A. Bonoli, S. Bamonti, A. Chianca LCA approach as a tool for decision: the management of an industrial obsolete warehouse
13.00 - 13.15	J. Kalina, J. Hřebíček Decision support tools in the waste management field. Conceptual modelling of mixed municipal waste generation and treatment in the Czech Republic
13.15 - 13.30	M. Kumar Goyal, K. Ranganathan Carbon footprint evaluation of municipal solid waste
13.30 - 13.45	A. T. Ahmed, MD. Shafiquzzaman Approximated Life Cycle Assessment Model and Management Options of Municipal Solid Waste in Developing Regions
13.45 - 14.00	L. Megido, Y. Fernández-Nava, E. Marañón, L. Castrillón, L. Negral, P. Ormaechea Optimization of biogas upgrading by absorption of CO ₂ into a monoethanolamine solution
14.00 - 14.15	D.-S. Kourkoumpas, G. Papageorgiou, S. Karellas, P. Grammelis, E. Kakaras Waste refinery: A novel approach to municipal solid waste management through Life Cycle Analysis principles

14.15 - 14.30

K. Aravossis, E. Nikolaidou, C. Fountzoula
Solid Waste Management through a modern innovative PAYT system

Discussion - Conclusions

ROOM 3

SESSION IX

Waste Treatment

Chair: A. Zabaniotou, V. Papadakis

11.00 - 11.15

C. De La Paz
The LIFE Programme: Over 20 years of improving waste management in the EU

11.15 - 11.30

D.V. Lopes, J. Lobo, R.C. Martins, M.J. Quina, L.M. Gando-Ferreira, C. Dias-Ferreira, R.M. Quinta Ferreira
Treatment of olive mill solid wastes by chemical processes enhanced with iron rich materials

11.30 - 11.45

N. Antoniou, A. Zabaniotou
Towards an integrated depolymerisation option of End of Life Tyres into carbon materials by means of the DEPOTEC LIFE+ concept

11.45 - 12.00

J. Jiménez, E. López-Dávila, G. Guerra, O. Romero-Romero
Petrochemical residual clay as enhancer of methane production during the anaerobic co-digestion of manure and agriculture solid wastes

12.00 - 12.15

N. Đurišić-Mladenović, A. Zabaniotou, B. Škrbić
Comparison of syngases produced under different biomass gasification conditions by principal component analysis

12.15 - 12.30

P. Gikas, E. Ventafrintas, M. Farazaki
Potential for gasification and electric energy production from biosolids

12.30 - 12.45

N.D. Charisiou, V.G. Papadakis, M.A. Goula
Syngas production from biogas reforming over La-promoted Ni/Al₂O₃ catalyst

12.45 - 13.00

P. Fetsis
The LIFE Programme: Over 20 years supporting waste to energy in the EU

13.00 - 13.15

S. Vakalis, A. Sotiropoulos, K. Moustakas, D. Malamis, M. Baratieri
Utilization of char from biomass gasification for onsite energy production - Introduction and modelling of a secondary reactor

13.15 - 13.30 L. Leverette
Market research for use in commercialization and development of new technologies in the waste and wastewater sector

13.30 - 13.45 A. Godio
Project Life+ - BioLea.R - "Full scale use of liquid injection, for innovative control of waste moisture to enhance biogas production in pre treated waste landfill" (LIFE09 -ENV/IT/000101)

13.45 - 14.00 D. Poulou, C. Chroni, K. Abeliotis, K. Lasaridi
WEEE recycling in Greece: estimate of critical metals and toxic compounds flows

Discussion - Conclusions

ROOM 4

SESSION X

Management of hospital waste

Chair: C. Dias-Ferreira, C. Costa

11.00 - 11.15 T. Manoloudis, T. Kasampalis, L. Karagiannidis, S. Crossett, G. Perkoulidis, N. Moussiopoulos
Developing an EU Standardised Approach to Vocational Qualifications in Healthcare Waste Management

11.15 - 11.30 A. N. Efaq, Adel A. S. Al-Gheethi
Management of Clinical Solid Wastes Generated from Healthcare Facilities in Yemen

11.30 - 11.45 G. Giorgianni, M. Sepielli
The Management of Medical and Industrial Radioactive Solid Waste: The Italian Scenario

11.45 - 12.00 S. C. da Silva André, A. M. Magosso Takayanagui
Generation of medical waste in hospitals in interior of Sao Paulo - Brazil

12.00 - 12.15 P. Halazonitis
Hospital waste in Greece: Legal framework and management issues

12.15 - 12.30 N.A. Pantelidou, C.P. Theologides, C. N. Costa
An alternative process for catalytic elimination of the ecotoxicity of pharmaceutical residues in water media

12.30 - 12.45 J.M. Vaz, S. Valente, C. Dias-Ferreira
Pharmaceutical waste disposal from Portuguese households

12.45 - 13.00 S. Carla da Silva André, A. M. Magosso Takayanagui
Analysis of the plans of management of medical waste of hospitals of Sao Paulo - Brazil

Discussion - Conclusions

ROOM 1

SESSION XI

Waste Treatment Technologies

Chair: C.A. Cardona, F. Omil, T. Manios

15.00 - 15.15	WASTE2BIO paper
15.15 - 15.30	G. Antonopoulou, H.N.Gavala, I.V. Skiadas,, G. Lyberatos Does aqueous ammonia soaking pretreatment influence the fermentative processes of bioethanol and biohydrogen production, from different lignocellulosic feedstocks?
15.30 - 15.45	M. Samoraj, Ł. Tuhy, K. Chojnacka New bench scale plant for biosorption
15.45 - 16.00	J. Vlackey, P. Champagne, B. Peppley Use of Wastewater Treatment Plant Biogas for the Operation of Solid Oxide Fuel Cells (SOFCs)
16.00 - 16.15	I. Matino, T.A. Branca, E. Alcamisi, V.Colla, L. Romaniello Evaluation of a BOF Slag Recovery Treatment combining Experimental and Simulation Studies
16.15 - 16.30	K. Krell, A. Severin, R. Kelevska SEPARATE - Enabling high-quality recycling of bio-waste through innovative waste separation technologies
16.30 - 16.45	S. Gómez-Cuervo, J. Hernández, F. Omil Abatement of methane present in diffuse emissions by biotrickling filtration using polyurethane foam as carrier
16.45 - 17.00	A. Elnaas, A. Belherazem, W. Müller, A. Nassour, M. Nelles Biodrying for Mechanical Biological Treatment of mixed municipal solid waste and potential for RDF production
17.00 - 17.15	C. Navas, D. Granados, M. Reboredo Agro-industrial wastes: drying kinetics
17.15 - 17.30	C. Hornsby, C. Vassillo, S. Ulgiati Cross-cultural stakeholder consultancy. The case of the MARSS technology to convert municipal solid waste into a biomass renewable fuel
17.30 - 17.45	C. A. García, V. Aristizabal, C. A. Cardona Stand-alone and Biorefinery ways to produce bioenergy from solid biodiesel wastes in Colombia

17.45 - 18.00	C. A. García, C. A. Cardona Hydrogen production by gasification and dark fermentation from woody wastes: Energy and Environmental Analysis
18.00 - 18.15	Yifei Sun, Xiaolan Zeng, Zhijie Wang, Lina Liu Biogas Conversion using Dielectric Barrier Discharge Non-Thermal Plasma
18.15 - 18.30	K.N. Papageridis, G. Siakavelas, N.D. Charisiou, M.A. Goula Effect of the active metal supported on SiO ₂ to the selective hydrogen production on the glycerol steam reforming reaction
18.30 - 18.45	A. Maragkaki, F. Galliou, N. Markakis, G. Sabathianakis, C. Tsompanidis, G. Mavrogiannis, G. Koukakis, T. Manios Solar drying of olive oil by-products for the production of solid biofuels
18.45 - 19.00	R. Wilk, K. Chojnacka, H. Górecki, H. Górecka New Technology of production Biostimulants with chelated form of micronutrient for plant nutrition
19.00 - 19.15	A.V. Lalitha, B. Deepthi, B. Sarada, D. Sarvamangala Application of Response surface methodology for the Production of PHB from Cupriavidus necator Using Annona reticulata extracts as carbon source
CLOSING SESSION	Chair: M. Loizidou, G. Kremlis, F. Amlinger, S. Smith, F. Cecchi, G. Lyberatos, A. Zabaniotou, A. Zouboulis, D. Bolzonella, N. Voulvoulis
19.15 - 19.30	Synopsis of the TINOS 2015 conclusions with the active participation of all Chair Persons

ROOM 2

SESSION XII

Case Studies

Chair: K. Riley, J. Hřebíček, S. Malamis

15.00 - 15.15	E. Katsou, S. Malamis, L. Lijó, S. González-García, M.T. Moreira, F. Fatone Integrated management of wastewater and domestic organic waste in small communities
15.15 - 15.30	K. Riley Applying an Island Mentality on Waste
15.30 - 15.45	S. Swapna, A. Singh, S. Prasad, S. Hemstock Municipal solid waste (MSW) as a source for energy and biogas production in the PICs

15.45 - 16.00	G. Asimakopoulou, M. Maniati, P. Karakasis A feasibility study carried out for the island of HYDRA – Greece
16.00 - 16.15	G. Boonzaaijer Reversed Waste Collection system stimulates households to separate waste. Very good results in city of Arnhem (Netherlands)
16.15 - 16.30	M. Elhag, J. A. Bahrawi Consideration of Geo-Statistical Analyst in Soil Pollutions Assessment Caused by Leachate Breakout in the Municipality of Thermi, Greece
16.30 - 16.45	E. Karali, Ev. Kapetanios Biogas from source-sorted organic municipal waste: The case study of Athens, Greece
16.45 - 17.00	J. Soukopová, J. Hřebíček Factors Influencing the Effectiveness of Municipal Waste Management Expenses: Are municipal decisions effective? Case study in the Czech Republic
17.00 - 17.15	S. Bamonti, A. Bonoli, D. Vivarelli Waste Management Criteria in the Regional Plans of North Italy
17.15 - 17.30	V. Apostolidis, K. Digkas, G. Kefalas, R.S. Lorilla, G. Mavrokefalou, A. Salonikidi, A. Psarogiannis, S. Sofianopoulos, N. Stathopoulos, G. Voutos, K. Kalogeropoulos, S. Roumelis, C. Chalkias Siting of sanitary landfills using GIS modelling: Empirical analysis in Tinos Island, Greece
17.30 - 17.45	C. Ruscescu Iordan, L.-V. Balanescu Preparation of alternative fuels from waste: Case Study
17.45 - 18.00	C. Ingrao, G. Pellegrini, C. Tricase, F. Contò Socio-economic and environmental sustainability of agricultural biomass residues management: The case of the Apulia Region
18.00 - 18.15	M.-C. Belciu, G. Genon, S. Fiore, V. Nedeff Evaluation of actual and future residual fluxes from a large MSW landfill
18.15 - 18.30	Z. Horsák, J. Hřebíček, J. Kalina, J. Soukopová EU policies and strategies for municipal waste management: Case study: South Moravia region of the Czech Republic
18.30 - 18.45	A.O Adelopo, P.I. Haris, B. Alo, K. Huddersman, R.O. Jenkins Seasonal variations in landfill moisture content with depth: active and closed landfills in Lagos, Nigeria

18.45 - 19.00 Md. Moshir Rahman, T. Jakia
Solid Waste Management of Rajshahi City in Bangladesh and its impacts on human health and environment

Discussion - Conclusions

ROOM 3

Waste Prevention & Recycling

SESSION XIII

Chair: S. Smith, K. Lasaridi, K. Abeliotis

15.00 - 15.15 T. Prastitou Merdi
2014 Proposal for a Directive amending EU waste policy and regulation: A progressive step towards effective waste management?

15.15 - 15.30 M. Gharfalkar, Z. Ali, G. Hillier
Clarifying the definitions of various reuse options for effective recovery of resources from waste streams

15.30 - 15.45 K. E. Borboudaki, I. Giakoumaki, O. Christou
Waste Prevention Project of United Association of Solid Waste Management in Crete (ESDAK)

15.45 - 16.00 I. Papachristou, K. Lasaridi, K. Abeliotis
Public perceptions and environmental burdens of waste prevention behaviours in Greece

16.00 - 16.15 K. Lasaridi, C. Chroni, T. Kritikou, S. Konstantoulas, K. Abeliotis
Waste prevention in the context of Local Waste Action Plans: prospects and constraints

16.15 - 16.30 O. Christou
Food waste prevention – an experiential approach

16.30 - 16.45 K. Liolios, F. Tsagas, A. Paschalidis
Specific waste generation rate of recyclable materials in households:
Time-series of eighteenth (18) months for three (3) households in Greece

16.45 - 17.00 D. Xevgenos, M. Kasidoni, D. Malamis, K. Moustakas, M. Loizidou
Implementation of innovative ecological portable waste compressors for in-house recycling of paper, plastic and metal packaging waste in the Municipalities of Amaroussion and Mandras-Eidyllias

17.00 - 17.15 F. A. López, M. I. Martín, F. J. Alguacil, O. Rodríguez Largo, I. García Díaz, E. Escudero
Recovery of Tin from Wave Solder Slags generated from PCB Manufacturing

17.15 - 17.30	M. Renderos, F. Girot, I. Tabernero, E. Ukar, A. Lamikiz Metallic powder particles recycling for laser material deposition process
17.30 - 17.45	O. Ukar, S. Roperro, S. Barba, A. del Caso A case study of collecting and segregation plan of post-consumption PET containers
17.45 - 18.00	A. Jiménez Rivero, A. de Guzmán Báez, J. García Navarro Plasterboard waste recycling best practice indicators
18.00 - 18.15	H. Rigby, S. Acker, A. Dowding, A. Fernandes, D. Humphries, S. Petch, R. Rautiu, C.K. Reynolds, M. Rose, S.R. Smith Investigation of the Potential Transfer and Uptake of Contaminants into Food Arising from the use of Recycled Waste in Agriculture
18.15 - 18.30	M. Gfrerer, Reuse-Reduce-Refuse: Analysis of the Growth of Consumption Products in European Emerging Countries in View of Solid Waste Management of Consumption Products' Packing
18.30 - 18.45	M. Rahmaninia, A. Khosravani Using Nanotechnology in Recycling Process of Old Corrugated Container Waste Papers
18.45 - 19.00	M. Tsakona, Al. Mavropoulos Zero Waste Hotels: Challenges & Opportunities: The Greek Case
19.00 - 19.15	Bushra Hamid Ahmed Environmental and socioeconomic impacts of informal recycling in Khartoum State
19.15 - 19.30	A.N. Apergis The total recycling of urban, rural and industrial waste in traditional village of Pyrgos at Tinos Island until the first half of the 20th century
19.30 - 19.45	Ebikapade Amasuomo Analysing the rate of public participation in the waste recycling programs of Lagos, Nigeria
	Discussions - Conclusions

Friday, 3 July 2015

ROOM 4

SESSION IVX

Master-class on Horizon 2020: How to win funds for your innovative research projects?

Praxi Network, National Contact Point for H2020

Chair: P. Ignatiadis

15.00 - 15.30	H2020: General Introduction
15.30 - 16.00	Legal & Financial Rules
16.00 - 16.15	Fast Track Innovation, SME Instrument, H2020 Prizes, Climate Change and Environment
16.30 - 16.45	Participant's Portal, Consortium Agreements and Partner Search Facilities

Publishing



The best papers of the TINOS 2015 Conference will be published after review in 'Waste Management & Research', 'Environmental Management' and 'Waste & Biomass Valorization'.



2 - 4 July 2015: 3rd INTERNATIONAL CONFERENCE on
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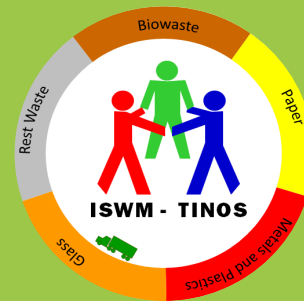
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Waste Management for Tinos in
line with the Waste Framework
Directive**