

8th International Conference **ORBIT2012**

GLOBAL ASSESSMENT FOR ORGANIC RESOURCES AND WASTE MANAGEMENT

June 12th to 14th, 2012
Rennes, France

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Organised by

Irstea Rennes, France

European Compost Network, ECN, Germany

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ORBIT2012 Topics

Topic 1: EU policies and strategies for sustainable organic resources and waste management

Topic 2: Climate change, waste management assessment and decision tools

Environmental aspects (life cycle analysis, best management practices, carbon sequestration), social aspects (public involvement, education, communication), economical aspects

Topic 3: Collection and local management of organic waste

Separate collection, home and community composting

Topic 4: Energy recovery

Biofuels, biogas, biomethane, hydrogen production

Topic 5: Biological treatments

- **5a. Composting:** Process control, microbial environment, gaseous emissions and odors, modelling
- **5b. Anaerobic digestion:** Process control, quality, efficiency
- **5c. Other biological processes**
- **5d. Substrate characterization**

Topic 6: Mechanical biological treatment

Process control and optimization, microbial environment, environmental and health impacts (including gaseous and odours emissions, hygiene), modeling

Topic 7: Organic fertilisers and soil improvers for agricultural and horticultural issues (including sludge, manures, composts and digestates)

Characterization parameters and methods, benefits for soil productivity (nutrients, organic matter, humus) and phyto-sanitary advantages, risks (pathogens, heavy metals, organic pollutants, gaseous emissions), application criteria

Topic 8: Bioplastics

ORBIT2012 Program in Parallel Sessions - Synthesis

12th of June 2012 - Day 1

Opening Session					
Lunch break					
12 th of June 12 Afternoon	Session 1 (room Archipel) Topic 3 – Home composting	Session 2 (room Australe) Topic 7 – Carbon and nitrogen behaviour in soil	Session 3 (room Pléïade) Topic 2 – Gaseous emissions	Session 4 (room Océane) Topic 5b – AD: quality	Session 5 (room Auditorium) Topic 1 – EU policies and strategies for sustainable organic resources and waste management
	Coffee/tea break				
	Session 6 (room Archipel) Topic 5a – Composting: process control	Session 7 (room Australe) Topic 8 – Bioplastics	Session 8 (room Pléïade) Topic 2 – Climate change, waste management assessment and decision tools		Session 9 (room Auditorium) Topic 4 – Bioethanol and biogas
16.00 – 19.00 h Annual meeting of ECN (internal - Room Bermude)					

13th of June 2012 - Day 2

13 th of June 12 Morning	Session 10 (room Archipel) Topic 1 – EU policies and strategies for sustainable organic resources and waste management	Session 11 (room Australe) Topic 7 – Product quality	Session 12 (room Pléïade) Topic 3 – Local management of waste		ECN Workshop (room Auditorium)
	Coffee/tea break				
	Session 13 (room Archipel) Topic 5b – AD: efficiency	Session 14 (room Australe) Topic 7 – Soil	Session 15 (room Pléïade) Topic 2 – Assessment of anaerobic treatment plant		ECN Workshop (room Auditorium)
Lunch break					
13 th of June 12 Afternoon	Session 16 (room Archipel) Topic 5a – Composting: microbial environment	Session 17 (room Australe) Topic 7 – Fertilisation	Session 18 (room Pléïade) Topic 5c – Other biological processes		ECN Workshop (room Auditorium)
	Coffee/tea break				
	Session 19 (room Archipel) Topic 5a – Composting: gaseous emissions and odors	Session 20 (room Australe) Topic 8 – Bioplastics	Session 21 (room Pléïade) Topic 2 – Assessment tools: LCA		ECN Workshop (room Auditorium)
Gala Dinner at the Château d'Apigné					

14th of June 2012 - Day 3

14th of June 12 Morning	Session 22 (room Archipel) Topic 5a – Composting: gaseous emissions	Session 23 (room Australe) Topic 7 – Product quality	Session 24 (room Pléïade) Topic 5d – Substrate characterisation	Session 25 (room Océane) Topic 6 – Mechanical biological treatment	Session 26 (room Auditorium) Topic 3 – Food waste
	Coffee/tea break				
	Session 27 (room Archipel) Topic 5a – Composting: modelling	Session 28 (room Australe) Topic 7 – Nutrients	Session 29 (room Pléïade) Topic 5d – Substrate characterisation	Session 30 (room Océane) Topic 5b – AD	
Lunch break					
14th of June 12 Afternoon	Session 31 (room Archipel) Topic 5a – Composting	Session 32 (room Australe) Topic 4 – Energy recovery	Session 33 (room Pléïade) Topic 2 – Assessment tools: GIS and LCA	Session 34 (room Océane) Topic 5b – AD: process control	
	Coffee/tea break				
Closing Session					

15th of June 2012 - Day 4 – Study tour

ECN Workshop Program – June 13th, 2012 (room Auditorium)

Key notes

- 9:00 - 9:15 h Welcome by the ECN Chair
Aloys Oechtering
- 9:15 - 9:45 h The European Compost Network ECN- 10 years of successful engagement in biowaste management
Jane Gilbert, Vice-Chair of ECN
- 9:45 - 10:15 h From Waste to Product - End-of-Waste criteria for compost and digestate
Hans Saveyn, Institute for Prospective Technological Studies (IPTS), Joint Research Centre (JRC), EU Commission
- 10:15 - 10:45 h ECN-QAS - European approach for quality assurance of compost and digestate
Stefanie Siebert, Executive Director of ECN
- 10.45 – 11.15 h Coffee/tea Break

Biowaste Management in Europe - Different Strategies

- 11:15 - 11:40 h France - Integrated solutions for biodegradable waste management
Yves Coppin, Veolia Environment France
- 11:40 - 12:05 h Italy - 20 years of experience with separate collection and composting and its importance in local strategies and sustainability
Enzo Favoino, Scuola Agraria del Parco die Monza
- 12:05 - 12:30 h Scandinavia - Successful biowaste management in Northern European Countries
Henrik Lystad, Avfall Norge and Angelika Blom, Avfall Sverige
- 12:30 - 12:55 h Baltic and Eastern Countries - Challenges and problems in starting situations with biodegradable waste management
Mait Kriipsalu, Estonian University of Life Sciences
- 12.55 – 14.00 h Lunch Break

Effective Marketing - Use of Compost and Digestate

- 14:00 - 14:30 h The Netherlands - Combining efficiently separate collection, anaerobic digestion and com-posting
John Van Haeff, Attero
- 14:30 - 15:00 h Germany - Marketing concept for quality products from organic resources
Irmgard Leifert, Reterra
- 15:00 - 15:30 h United Kingdom - Experience with implementing and promoting the quality protocols for compost and digestate
Kiara Zennaro, Afor
- 15:30 - 16:00 h France - Quality expectations of farmers and consumers

ORBIT2012 – Detailed Program

Day 1 - Morning 12th of June 2012

08.15 - 9.30 h Registration

9.30 – 10.20 h Opening of ORBIT2012

- Dr Anne Trémier – Co-chair & Scientific secretary for the ORBIT2012, Irstea Rennes, France
- Mr Oechtering, Chairman of the European Compost Network, Germany
- Mr Bournigal, President of Irstea, France
- Mr Morin, Vice-President of the Council of Région Bretagne, France

10.20 – 12.45 h Key-note speeches

10.20 - 10.50 h Future of Waste Management, Antonis Mavropoulos, ISWA STC Chair

10.50 – 11.20 h Organic waste recycling - why accepted globally but not implemented locally?, Prof. Werner Bidlingmaier, Dr.-Ing, habil, Bauhaus-Universität Weimar

11.20 – 11.45 h Coffee/tea Break

11.45 - 12.15 h Life-cycle-assessment of waste management: possibilities and challenges, Prof Thomas H. Christensen, PhD, Dr. Agro., Technical University of Denmark

12.15 - 12.45 h Economic aspects of biodegradable waste management, André Le Bozec, Research Director IRSTEA

12.45 - 14.00 h Lunch break

Day 1 - Afternoon 12th of June 2012

	Session 1 (room Archipel) Topic 3 – Home composting	Session 2 (room Australe) Topic 7 – Carbon and nitrogen behaviour in soil	Session 3 (room Pléiade) Topic 2 – Gaseous emissions	Session 4 (room Océane) Topic 5b – AD: quality	Session 5 (room Auditorium) Topic 1 – EU policies and strategies for sustainable organic resources and waste management
14.00 h	<p>Optimization of organic waste home composting (128) B. Adhikari¹, A. Trémier¹ and S. Barrington^{2,3} 1 Irstea UR GERE Rennes, France 2 Consumaj, Canada 3 Université Européenne de Bretagne, France</p>	<p>Modelling the dynamics of organic pollutants in soil following the spreading of sludge-green waste composts (149) C.N. Geng^{1,2}, C.S. Haudin³, G. Lashermes¹, S. Houot¹ and P. Garnier¹ 1 INRA, France 2 Chinese Academy of Sciences, China 3 AgroParisTech, France</p>	<p>Soil N₂O emissions from recovered organic waste applications in Versailles plain (France) (71) P. Laville, J. Michelin, S. Houot, A. Djerrah, J.C. Gueudet, J.N. Rampon, C. Labat and E. Vaudour INRA / AgroParisTech UMR 1091, France</p>	<p>Digestate and compost quality – Case studies at anaerobic digestion plants with the BTA process (11) R. Nimmrichter¹, S. Schulte¹, U. Niefnecker², J. Del'hay³ and P. Bolzano⁴ E.T. Libradilla³ 1 BTA International GmbH, Germany 2 Ganser Umwelt, Germany 3 IVVO, Belgium 4 Biotec Sistemi s.r.l., Italy</p>	<p>The myth of waste avoidance – or – waste does not cause waste (216) A. Grooterhorst Grooterhorst Consulting, Germany</p>
14.20 h	<p>Impact assessment of home composting practices on the quantity of collected waste (131) A. Resse¹, S. Barrington^{2,3}, and A. Trémier¹ 1 Irstea UR GERE Rennes, France 2 Consumaj, Canada 3 Université Européenne de Bretagne, France</p>	<p>Compositional space constraints distort C mineralization models of organic residues (103) L.E. Parent and S.E. Parent Université Laval, Department of Soils and Agrifood Engineering, Quebec, Canada</p>	<p>⁶Es TABoues, a decision tool to assess greenhouse gases of sewage sludge treatment and disposal routes (141) A.L. Reverdy and M. Pradel Irstea UR TSCF Montoldre, France</p>	<p>Experiences with the substrate processing and biogas production from packaged food on such an industrial scale plant in England (233) D.J. Korz Ros Roca envirotec S.L., Germany</p>	<p>End-of-waste criteria for compost: a safeguard for quality? (41) A.M. Andries and M. De Schoemakere OVAM Public Waste Agency Flanders, Belgium</p>
14.40 h	<p>City to soil, a cost effective system for collecting and composting domestic organics (196) G. Gillespie¹ and S. Beavis² 1 Zero Waste Australia, Australia 2 Australian National University, Australia</p>	<p>Carbon sequestration mechanism by using charcoal (biochar) and compost in farmland (25) S. Yoshizawa and S. Tanaka Meisei University, Dept. Interdisciplinary Sci. And Eng., Japan</p>	<p>Carbon flows of waste biomasses applicable to agricultural soils in Finland (226) J. Joon¹, M. Kisma², L. Alakukku¹ and H. Kahiluoto² 1 University of Helsinki, Finland 2 MTT Agrifood Research Finland, Finland</p>	<p>Effect of lignocellulosic waste dry grinding on methanization and microbial populations (138) N. Badalato¹, X. Rouau², L. Mazéas¹, T. Bouchez¹ and A. Bize¹ 1 Irstea UR HBAN Antony, France 2 INRA UMR 1208 IATE, France</p>	<p>Compost quality assessment and EOW processus application to 4 types of compost (191) Y. Decelle¹ and J.L. Martel² 1 SITA Belgium, Belgium 2 SUEZ ENVIRONNEMENT, France</p>
15.00 h	<p>Increase of bio-waste recovery with low-cost technologies in San Carlos city, Philippines (14) J.G. Paul¹, K. Hanuschke², L.C. Sanchez³ and A.A. Batomalaque³ 1 AHT GROUP AG, Philippines 2 Gesellschaft fuer Internationale Zusammenarbeit (GIZ), Germany 3 Local Government Unit San Carlos City, SWM Office, Philippines</p>	<p>Carbo-Pro: a simulation model to manage soil organic matter through compost applications (136) C. Peltre¹, J. Doublet², R. Biquillon², A. Pereira², C. Lhoutellier², M. Angenis-Nevers² and S. Houot¹ 1 INRA UMR EGC Soil, France 2 VEOLIA Environnement R&I, France</p>	<p>Greenhouse gas emissions from home composting in practice (173) E. Ermolaev, A. Johansson, B. Kempe, M. Pell, C. Sundberg and H. Jönsson Swedish University of Agricultural Sciences (SLU), Sweden</p>	<p>Modelling of sprout suppression of <i>Fusarium sp.</i> and DON toxin in anaerobic hydrolysis (56) G. Biró, L. Mézes, A. Nagy, B. Gálya, J. Borbély and J. Tamás University of Debrecen, Institute of Water and Environmental Management, Hungary</p>	<p>Separate collection of biowaste itself in France around the Compost+ Network (70) T. Colin¹, S. Lejal², G. Boucherie³ and G. Pierre³ 1 Compost+ Network, France 2 Cap l'Orient Agglomération, France 3 SMICTOM du Nord de l'Arrondissement de Redon, France</p>

Day 1 - Afternoon 12th of June 2012

	Session 1 (room Archipel) Topic 3 – Home composting	Session 2 (room Australe) Topic 7 – Carbon and nitrogen behaviour in soil	Session 3 (room Pléïade) Topic 2 – Gaseous emissions	Session 4 (room Océane) Topic 5b – AD: quality	Session 5 (room Auditorium) Topic 1 – EU policies and strategies for sustainable organic resources and waste management
15.20 h	Anaerobic co-digestion of brown water with kitchen waste in decentralized, source-separation-based sanitation concepts (93) J.W. Lim, R. Rajinikanth, Y. Mao, I. Ho, A. Ahamed and J.Y. Wang Nanyang Technological University, Residues and Resource Reclamation Centre, Singapore	Modelling the impact of urban compost application on nitrogen dynamics in a cultivated soil (169) M. Chalhoub ¹ , P. Garnier ¹ , Y. Coquet ² , J. Doublet ³ and S. Houot ¹ 1 INRA UMR EGC Soil, France 2 AgroParisTech-INRA, France 2 VEOLIA Environnement R&I, France	The Swedish voluntary agreement for control of methane emissions from biogas plant (54) M.A. Holmgren ¹ , H. Hellström ¹ , A. Petersson ¹ and A. Blom ² 1 SP Technical Research Institute of Sweden, Sweden 2 Swedish Waste Management Association	Overview and prediction of eradication of <i>Salmonella</i> Senftenberg W775 during anaerobic digestion and pasteurization processes (221) A. Ceustermans, A.H. Geeraerd, D. Springael and J. Ryckeboer Katholieke Universiteit Leuven, Belgium	Experience of developing a compost quality assurance scheme in Ireland (214) C. McGovern ¹ , A. Cartwright ² , J. O'Neill ³ and M. Prasad ⁴ 1 RX3, Ireland 2 Certification Europe, Ireland 3 Department of the Environment, Community & Local Government, Ireland 4 Compost Research and Advisory Limited, Ireland
15.40 h - 16.10 h Coffee/tea break					

Day 1 - Afternoon 12th of June 2012

	Session 6 (room Archipel) Topic 5a – Composting: process control	Session 7 (room Australe) Topic 8 – Bioplastics	Session 8 (room Pléïade) Topic 2 – Climate change, waste management assessment and decision tools		Session 9 (room Auditorium) Topic 4 – Bioethanol and biogas
16.10 h	Benefit of a good aeration management in composting (50) L. Berthe, P. Zan-Alvarez, M. Chevallier, A. Covez, R. Lecarpentier, M. Jolly, A. Ponthieux and H. Bacheley VEOLIA Environnement R&I, France	Management of organic resources waste in France: Regulations and compostable bags (228) Ch. Doukhi-de-Boissoudy Club Bio-plastiques, France	Import of biomass or using local biomass to reach the renewable energy objectives? (199) A. Braekevelt Public Waste Agency of Flanders, Belgium		Potential of producing bio-ethanol for use as E10 in transportation sector from low cost lignocellulosic green waste in Mauritius (125) P. Jeetah and R. Mohee University of Mauritius, Department of Chemical and Environmental Engineering, Mauritius
16.30 h	Optimisation of the aerobic maturation process of the MSW digestate on Montpellier AMETYST plant (171) J.L. Martel ¹ , O. Garone ¹ , A. Sommain ² and O. Greze ³ 1 Suez Environnement, CIRSEE, France 2 Ametyst, SITA Méditerranée, France 3 SITA France, France	Bioplastics and compost: The Italian approach (227) M. Centemero ¹ , M. Malinconico ² , W. Zanardi ¹ and M. Ricci ¹ 1 Italian Composting Council, Italy 2 Italian Bioplastics Association, Italy 3 IBK Solutions, Germany	Provision of a web tool on bio-waste prevention for local authorities in Europe (224) N. Gaillard ¹ , L. Galon ¹ , A. Trémier ² , N. Euzen ¹ , A. Lopes ³ , B. Chaves ³ , J.-J. Dohogne ⁴ , P. Micheaux Naudet ⁴ , O. De Clercq ⁴ , M. Vanecek ⁵ and J. Cerny ⁵ 1 Rennes Métropole, France 2 Irstea UR GERE, France 3 LIPOR, Portugal 4 ACR+, Belgium 5 City of Brno, Czech Republic		Ethanol production using complex anaerobic inoculums: effect of pH on the fermentation profile of glucose and xylose (155) C.M. Richard ¹ , T. Labatut ¹ , A. Guenne ¹ , C. Madigou ¹ , L. Mazéas ¹ , M. Bouix ² and T. Bouchez ¹ 1 Irstea UR HBAN, France 2 AgroParisTech, UMR Génie et Microbiologie des Procédés alimentaires, France

Day 1 - Afternoon 12th of June 2012

	Session 6 (room Archipel) Topic 5a – Composting: process control	Session 7 (room Australe) Topic 8 – Bioplastics	Session 8 (room Pléïade) Topic 2 – Climate change, waste management assessment and decision tools		Session 9 (room Auditorium) Topic 4 – Bioethanol and biogas
16.50 h	Nitrogen dynamic during aerobic treatment of organic wastes (60) Y. Zeng, P. Dabert, C. Ziebal, S. Le Roux, J. Mognot, F. Junqueira de Macedo and A. De Guardia Irstea UR GERE, France	Bioplastic production by hydrocarbonoclastic bacteria (98) F. Ledezma-Garcia ¹ , M.J. Aguilar-Méndez ¹ , B. Rodríguez-Chávez ¹ , M. Cándido-Mireles ¹ , P. Zárate-Segura ² and D. Ramírez-Sáenz ¹ 1 UPIIG-IPN, Mexico 2 UPIBI-IPN, Mexico	Life cycle assessment as a decision tool in local waste management? A French case study (67) J. Mery ¹ , K. Schlierf ² , L. Aissani ³ , R. Barbier ² and C. Beurois ⁴ 1 Irstea UR HBAN, France 2 ENGEEES, France 3 Irstea UR GERE, France 4 Médiation & Environnement, France		ETAMAX: Driving with biogas from biowaste (195) U.E. Schließmann Fraunhofer-Institute of Interfacial Engineering and Biotechnology, Germany
17.10 h	Compo-Ball: Novel on-line composting monitoring system. First results (217) M. López and X. Martínez-Farré ESAB-DEAB, Universitat Politècnica de Catalunya, Spain	Biodegradation of bioplastics and natural fibers during composting, anaerobic digestion and in soil (113) E. Gomez and F.C. Michel Jr. Department of Food, Agricultural and Biological Engineering, The Ohio State University, USA	The waste management system on Langkawi Island, Malaysia – Options for waste treatment (165) S. Mohd Razi, E. Stentiford and J. Barton University of Leeds, UK		Micro-gas grids – An innovative approach for optimizing energy efficiency from biogas production (160) O. Panic, A. Tan, K. Fischer and M. Kranert University of Stuttgart, ISWA, Germany
17.30 h		How compatible are compostable bags with major industrial composting and digestion technologies? (234) C. Letalik, B. Schmidt and A. Ziermann CARMEN e.V., Germany			
17.50 h End of the day					

Day 2 – Morning 13th of June 2012

	Session 10 (room Archipel) Topic 1 – EU policies and strategies for sustainable organic resources and waste management	Session 11 (room Australe) Topic 7 – Product quality	Session 12 (room Pléïade) Topic 3 – Local management of waste	ECN Workshop (room Auditorium)
8.45 h	Compost & biogas market in France: current state & trends for organic waste management (133) E. Adler ¹ and N. Fruteau ² 1 Ecole des Ingénieurs de la Ville de Paris, France 2 Poyry Consulting, France	Evaluation of standards and procedures to regulate production and quality of municipal compost in the Philippines (220) K. Soyez ¹ , J. Paul ² and J. Boorsma ² 1 Universität Postdam, Germany 2 AHT Group AG, The Philippines	The Civilisation Biorefinery – Inventories for efficient utilization of local waste and wastewater based bioresources for material and energy generation (8) I. Körner, S. Hertel and H. Adwiraah Hamburg University of Technology, Germany	ECN Workshop
9.05 h	Anaerobic digestion of biogenic residues in Germany (4) D. Wilken German Biogas Association, Germany	Use of compost and digestate in Italy: quality requirements, labelling and use in southern European soils (168) M. Centemero and W. Zanardi CIC, Italian Composting Association, Italy	Valorisation of biomass waste streams in local energy conversion park (36) L. Pelkmans ¹ , N. Devriendt ¹ , R. Guisson ¹ , H. Pieper ¹ , N. Marquez-Luzardo ² , J. Venselaar ² , J. Broeze ³ , M. Van Dael ⁴ , S. Van Passel ⁴ , P. Vollaard ⁵ , P. Reumerman ⁶ and K. Coppoolse ⁷ 1 VITO NV, Belgium 2 AVANS Hogeschool, The Netherlands 3 Wageningen UR, The Netherlands 4 University of Hasselt, Belgium 5 Hogeschool Zeeland, The Netherlands 6 BTG Biomass Technology Group, The Netherlands 7 ERAC, The Netherlands	ECN Workshop
9.25 h	Administrative and economic tools for promoting biodegradable waste diversion from landfill (230) K.E. Lasaridi ¹ , C. Chroni ¹ , K. Heilakis ¹ , A. Zorpas ² and K. Abeliotis ¹ 1 Harokopio University, Greece 2 ENVITECH Limited, Greece	Malagasy urban and livestock waste characterization and modelling of their transformation in soil (92) N. Rabetokotany-Rarivoson ^{1,2} , L. Thuriès ² , M. Pansu ³ , D. Masse ³ and T.M. Razafimbelo ¹ 1 LRI UR Sol et Changements Climatiques, Madagascar – La Réunion 2 CIRAD UR Recyclage et Risque, La Réunion 3 IRD UMR Eco&Sols, Sénégal	Supply of methods and data for municipalities wishing to set collective composting projects (147) C. Sollier ¹ , J.C. Benoist ¹ , A. De Guardia ¹ , A. Trémier ¹ , E. Le Saos ¹ , J.P. Blanquart ¹ , A. Resse ¹ and C. Le Coz ² 1 Irstea UR GERE Rennes, France 2 Rennes Métropole, France	ECN Workshop
9.45 h	Compost and fermentation residues used as litter materials in dairy farming (150) W. Philipp, K. Schwarzkopf and L.E. Hoelzle Institute of Environmental and Animal Hygiene, University of Hohenheim, Germany	Use of a UV-visible spectroscopy method to determine the organic matter concentration in Andisol soils and soils treated with organic amendments of Chile (146) A. Garcia ¹ , R. Ortega ¹ and M. Martinez ² 1 Universidad Técnica Federico Santa Maria, Chile 2 Universidad Técnica Federico Santa Maria, Chile and Germany	Brazilian's beef cattle feedlot manure management: a country report (29) C. Costa Junior ¹ ; T.Z. Albertini ² ; R.S. Goulart ³ , B.J. Feigl ¹ , C.E.P. Cerri ³ , D.P.D. Lanna ³ , M. Bemoux ⁴ and C.C. Cerri ¹ 1 Sao Paulo University, CENA-USP, Brazil 2 EMBRAPA, Brazil 3 Sao Paulo University, ESALQ-USP, Brazil 4 IRD Eco&Sols, France	ECN Workshop

Day 2 – Morning 13th of June 2012

	Session 10 (room Archipel) Topic 1 – EU policies and strategies for sustainable organic resources and waste management	Session 11 (room Australe) Topic 7 – Product quality	Session 12 (room Pléïade) Topic 3 – Local management of waste		ECN Workshop (room Auditorium)
10.05 h	MANEV LIFE+ project for manure management in Europe: composting in the region of Murcia, Spain (170) M.P. Bernal, S. Pérez-Balibrea, J. Lopez-Carratala, M.A. Bustamante and R. Clemente CSIC Murcia, Spain	Predicting urban soil sustainability: impact of organic matter on soil water transfer (27) P. Cannavo ¹ , L. Vidal-Beaudet ¹ , C. Grosbellet ² and V. Forget-Caubel ¹ ¹ Agrocampus Ouest, Centre d'Angers, France ² Union Nationale des Entreprises du Paysage, France	Vegetable wastes characterization for feed production in the Basque country (225) D. San Martin AZTI – Tecnalia Marine and Food Technological Center, Spain		ECN Workshop
10.25 h – 11.00 h Coffee/tea break					

Day 2 – Morning 13th of June 2012

	Session 13 (room Archipel) Topic 5b – AD: efficiency	Session 14 (room Australe) Topic 7 – Soil	Session 15 (room Pléïade) Topic 2 – Assessment of anaerobic treatment plant		ECN Workshop (room Auditorium)
11.00 h	Bio-hydrogen and methane production using dark fermentation (185) M. Stommel, A. Schom, R. Brunstermann and R. Widmann University of Duisburg-Essen, Germany	Influencing the germination of different crops by liquid biogas digestate (13) M. Makádi ¹ , A. Tomócsik ¹ , V. Orosz ¹ , M. Gulyás ² and J. Lengyel ³ ¹ University of Debrecen, Hungary ² Szent Istvan University, Hungary ³ Batortrade Ltd, Hungary	LCA of a collective biogas plant to manage manure in a French intensive farming and agroindustry area (76) L. Aissani, A. Collet and F. Béline Irstea UR GERE, France		ECN Workshop
11.20 h	Can two-stage anaerobic digestion improve energy recovery from biomass? (77) E. Manzini, A. Schievano, S. Lonati and F. Adani University of Milano, Italy	Correlation between phytotoxicity and total and bioavailable heavy metals of composts (84) M.E.F Silva ^{1,2} , I.P.L. Brás ¹ , E.P.C da Silva ¹ , J.F.C. Cameiro ¹ , L. Teixeira de Lemos ¹ , O.C. Nunes ³ , A.C. Cunha-Queda ² ¹ Escola Superior de Tecnologia e Gestão e Viseu, Portugal ² Universidade Técnica de Lisboa, Portugal ³ Faculdade de Engenharia, Universidade do Porto, Portugal	Greenhouse gas monitoring for optimization of process efficiency of biogas plants (47) M. Huber-Humer ¹ , M. Hrad ¹ and M. Piringer ² ¹ BOKU, University of Natural Resources and Life Sciences, Austria ² Central Institute for Meteorology and Geodynamics, Austria		ECN Workshop

Day 2 – Morning 13th of June 2012

	Session 13 (room Archipel) Topic 5b – AD: efficiency	Session 14 (room Australe) Topic 7 – Soil	Session 15 (room Pléiade) Topic 2 – Assessment of anaerobic treatment plant	ECN Workshop (room Auditorium)
11.40 h	Comparison of batch and semi-continuous acidogenic process of food waste anaerobic digestion (183) S.Y. Xu, A. Selvam and J.W.C. Wong Hong Kong Baptist University, Hong Kong	Fate of soil-applied olive mill wastewater and potential phytotoxicity assessed by two bioassay methods (116) Y. Laor, I. Saadi, M. Raviv, Sh. Berkovich, A. Hanan and I. Aviani Agricultural Research Organization, Israel	China biogas potential and its estimated contribution to climate change mitigation (207) C. Brauner ^{1,2} , R. Raninger ³ , R. Villa ¹ and R. Dong ⁴ 1 Cranfield University, England 2 University of Natural Resources and Life Sciences, Austria 3 GIZ, China 4 China Agricultural University, China	ECN Workshop
12.00 h	Effects of alkaline pretreatment on the anaerobic digestion process of vegetables wastes (2) A. Mudhoo, V.D. Ramdeen and R. Mohee University of Mauritius, Mauritius	Ecotoxicological impacts of biodegradable polymers in agricultural soils (211) P. Chenon, A.L. Badin, N. Nassr, L. Kremer and N. Thevenin RITTMO AgroEnvironnement, France	Leakage control of biogas plants (189) J. Clemens ¹ , S. Kohne ² , S. Neizel ³ and W. Schreier ⁴ 1 Gewrita Ltd, Germany 2 Esders Ltd, Germany 3 Neitzel Systemtechnik Weser-Ems, Germany 4 RUK Umweltanalytik GmbH, Germany	ECN Workshop
12.20 h - 14.00 h Lunch break				

Day 2 - Afternoon 13th of June 2012

	Session 16 (room Archipel) Topic 5a – Composting: microbial environment	Session 17 (room Australe) Topic 7 – Fertilisation	Session 18 (room Pléïade) Topic 5c – Other biological processes	ECN Workshop (room Auditorium)
14.00 h	Composting used as a low cost method for pathogen elimination in sewage sludge (203) D.D. Cabañas-Vargas, E. De los Ríos Ibarra, J. P. Mena – Salas and D.Y. Escalante- Réndiz University Autonomous of Yucatan, Mexico	Production of organic fertilizers from residues of the olive oil processing industry (58) J. Bilbao, M.S. Stoll, N.A. Valarezo, S. Egner and H. Hirth Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Germany	Struvite precipitation as a technology to be integrated in a farm scale anaerobic digestion-composting treatment plant (194) M. Cerrillo ¹ , J.Vicens ² , J. Palatsi ¹ and A. Bonmati ¹ 1 IRTA GIRO Joint Research Unit IRTA-UPC, Spain 2 APERGAS, Spain	ECN Workshop
14.20 h	Combinaison of three new microbial indicators to monitor composting bioaerosols (28) N. Wéry ¹ , O. Le Goff ¹ , H. Bacheley ² , J.P. Steyer ¹ and J.J. Godon ¹ 1 INRA UR50, France 2 Veolia Environnement R&I, France	Fertilization practices on periurban farming system and recyclage organic residual product available in Mahajanga (243) H. Ramahefarison ¹ , D. Masse ² and C. Aubry ³ 1 Université de Mahajanga, Madagascar 2 IRD UMR Eco&Sols, Sénégal 3 INRA UMR SAPAPT, France	First steps in the development of a compostage shoe (178) R. Plana ¹ , E. Rodriguez ² , D. Alves ² , S. Mato ² , E. Segarra ³ , A. del Val ⁴ 1 Organic Wastes Management Consultancy, Spain 2 University of Vigo, Spain 3 Puente Lago Añil, S.L., Spain 4 gea21, S.L., Spain	ECN Workshop
14.40 h	Isolation and screening of thermophilic and psychotrophs bacterial strains used in the composting process (164) J. Li, L.Y. Wang and D.M. Wang China Agricultural University, Beijing, China	MBT scrubber effluent: wastewater or fertiliser? (55) M.J. Sebastião ¹ , D. Catalino ¹ , H. Ribeiro ² and E. Vasconcelos ² 1 AMARSUL SA, Portugal 2 Technical University of Lisbon, Portugal	Microbial degradation of pesticides wastes in rustics devices type biobeds: the Biobacs (205) C. Ponce-Caballero ¹ and J.C. Fournier ² 1 Universidad Autonoma de Yucatan, Mexico 2 INRA, UMR Microbiologie et Géochimie des sols, France	ECN Workshop
15.00 h	Assessing the temperature contact time criteria and turning effect in compost sanitation (101) P. Isobaev, K. Wichuk, D. McCartney and N. Neumann University of Edmonton, Canada	Composted and vermicomposted cattle manure effect nutrient supply and lettuce growth (145) P.R. Warman and A.M. Hammermeister Nova Scotia Agricultural College, Canada	Reducing the environmental impact of biogenic PHAs production using an enzymatic recovery strategy (166) C. Rondel, C.E. Mercato-Romain, V. Dossat-Létisse, D. Lefebvre and E. Girbal-Neuhauser Laboratoire de Biotechnologie Agroalimentaire et Environnemental, Auch, France	ECN Workshop

Day 2 - Afternoon 13th of June 2012

	Session 16 (room Archipel) Topic 5a – Composting: microbial environment	Session 17 (room Australe) Topic 7 – Fertilisation	Session 18 (room Pléiade) Topic 5c – Other biological processes		ECN Workshop (room Auditorium)
15.20 h	Composting of pig faeces with corn stalks in China – Microbiological examinations, hygienic aspects and sanitation capacity (151) R. Eling ¹ , W. Philipp ¹ , L.E. Hoelzle ¹ , M. Wang ² , C. He ² , Y. Ling ² , Y. Liu ² , F. Schuchardt ³ and T. Jiang ² 1 University of Hohenheim, Germany 2 China Agricultural University, China 3 Johann Heinrich von Thünen-Institute (VTI), Germany	Evaluation of treated manure as fertilizer (96) M.S. Stoll ¹ , J.E. Bilbao ¹ , K. Weinfurter ² , S. Egner ¹ and T. Hirth ¹ 1 Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Germany 2 Fraunhofer Institute for Molecular Biology and Applied Ecology (IME), Germany	Production of lipases by solid state fermentation using vegetable oil – Refining wastes (20) A. Santis-Navarro, T. Gea, R. Barrena and A. Sánchez Universitat Autònoma de Barcelona, Spain		ECN Workshop
15.40 h – 16.10 h Coffee/tea break					

Day 2 - Afternoon 13th of June 2012

	Session 19 (room Archipel) Topic 5a – Composting: gaseous emissions and odors	Session 20 (room Australe) Topic 8 – Bioplastics	Session 21 (room Pléiade) Topic 2 – Assessment tools: LCA		
16.10 h	Integrated waste management combining anaerobic and aerobic treatment: a case study (188) M.A. Bustamante ¹ , A. Bonmati ² , R. Moral ³ , J. Palatsi ² , C. Paredes ³ , F. Solé-Mauri ⁴ and M.P. Bernal ¹ 1 CEBAS-CSIC, Spain 2 GIRO-CT, Spain 3 Miguel Hernandez University, Spain 4 RosRoca, Spain	The advantages of compostable bags for food waste collection (223) C. Garaffa Novamont Spa, Italy	Environmental burdens associated to different technologies for the biological treatment of OFMSW (10) J. Colón, E. Cadena, M. Pognani, C. Maulini, R. Barrena, A. Sánchez, X. Font and A. Artola Composting Research Group. Chemical Engineering Department. Universitat Autònoma de Barcelona, Spain		
16.30 h	Composting of separated animal slurry solid fraction: effect of bulking agent type and mixing-ratio on gaseous emissions (12) M.A. Chowdhury, A. de Neergaard and L.S. Jensen University of Copenhagen, Department of Agriculture and Ecology, Denmark	Successful pilot project – Compostable Ecovio [®] bio-waste bags for separate organic waste collection (190) F. Schwarz ¹ , T. Grommes ² , G. Kosak ³ and C. Sinkel ⁴ 1 Veolia Environmental Services, Germany 2 GML Abfallwirtschaftsgesellschaft, Germany 3 IBK Solutions, Germany 4 BASF SE, Germany	Local assessment of toxicity for municipal solid waste through life cycle assessment and USEtox (63) M. Marchand ^{1,2} , L. Aissani ^{1,2} , P. Mallard ³ , F. Béline ^{1,2} and J.P. Réveret ⁴ 1 Irstea, UR GERE, France 2 Université Européenne de Bretagne, France 3 DREAL Bretagne, France 4 UQAM, Canada		

Day 2 - Afternoon **13th of June 2012**

	Session 19 (room Archipel) Topic 5a – Composting: gaseous emissions and odors	Session 20 (room Australe) Topic 8 – Bioplastics	Session 21 (room Pléïade) Topic 2 – Assessment tools: LCA		
16.50 h	On-site assessment of methods to measure gaseous emissions from biological treatment of waste (162) I. Zdanevitch ¹ , N. Auvinet ² , P. Mallard ² and O. Bour ¹ 1 INERIS, France 2 Irstea UR GERE, France	Benefits and challenges of compostable plastics: Lessons from San Francisco and beyond in the USA (241) J. Macy City and County of San Francisco, USA	Life cycle assessment of pig slurry treatment technologies (26) M. Ten Hoev ¹ , S. Bruun ¹ , L.S. Jensen ¹ , R. Jensen ² and N.J. Hutchings ² 1 University of Copenhagen, Denmark 2 Aarhus University, Denmark		
17.10 h	Compost pile monitoring with GC-MS, E-nose and olfactometry: comparison of different approaches (9) M.C. Gutiérrez ¹ , A.F. Chica ¹ and A.C. Romain ² 1 University of Cordoba, Spain 2 University of Liège, Belgium	Bio-based polymer products – Opportunities and limitations from a disposal and recycling perspective (235) G. Hädrich ¹ , W. Bidlingmaier ¹ , R. Rinberg ² and C. Werner ³ 1 KNOTEN WEIMAR International Transfer Centre Environmental Technology, Germany 2 Chemnitz University of Technology, Germany 3 AWKD Werner & Kollegen Rechtsanwälte, Germany	Assessing GHG emissions from sludge treatment and disposal routes – the method behind ⁶ E _s TABoues tool (140) M. Pradel and A.L. Reverdy Irstea UR TSCF Montoldre, France		
17.30 h		Compostability of plastics and packaging standards on biodegradability and ecotoxicity (242) F. Degli-Innocenti, F. Farachi and G. Bettas-Ardisson Novamont S.p.A., Italy			

17.50 h End of the day

19.00 h Gala Dinner at the Château d'Apigné (<http://www.chateau-apigne.fr/welcome/index.php>)

Day 3 - Morning 14th of June 2012

	Session 22 (room Archipel) Topic 5a – Composting: gaseous emissions	Session 23 (room Australe) Topic 7 – Product quality	Session 24 (room Pléiade) Topic 5d – Substrate characterisation	Session 25 (room Océane) Topic 6 – Mechanical biological treatment	Session 26 (room Auditorium) Topic 3 – Food waste
9.00 h	Revision of waste treatment industries IED/BREF document – what are implications for MBT operators? (245) M. Kühle-Weidemeier ¹ and J. Clemens ² 1 Wasteconsult International, Germany 2 Gewitra GmbH, Germany	Effects of co-composting of straw and biochar on nutrient availability from animal slurry solids (73) W. Christel, M. A. Chowdhury, S. Bruun and L. S. Jensen University of Copenhagen, Denmark	Abiotic parameters and microbial counts as stability indicators during composting of organic waste (231) C. Chronil, A. Kyriacou and K.E. Lasaridi Harokopio University, Greece	Innovative revamping MBT plants – a Portuguese case study (100) R. Vasquez ¹ , A. Cabeças ¹ and R. Batista ² 1 Empresa Geral do Fomento SA, Portugal 2 Resiestrela SA, Portugal	Preliminary assessment of food waste generation in households in Greece (209) K. Abeliotis, K. Lasaridi, C. Chroni and A. Papakosta Harokopio University, Greece
9.20 h	GHG emissions during the composting process as a function of the aeration strategy (30) B. Puyuelo, C. Maulini, T. Gea and A. Sánchez UAB, Spain	Sugar cane trask as an alternative substrate of bagasse for production of the <i>Pleurotus Sajor Caju</i> muschroom (38) Y. Mihilall and R. Mohee University of Mauritius, Mauritius	Evaluation of compost maturity by hot water extracted (HWP) carbon (122) Gy. Füleky Szent István University, Hungary	Experimental analysis of the aerobic stabilization efficiency of an existing MBT plant (23) F. Di Maria ¹ , A. Sordi ¹ , C. Micale ¹ , F. Castellani ¹ , G. Cirulli ¹ and M. Marionni ² 1 LAR – Dipartimento di Ingegneria Industriale, Italy 2 VUS spa, Italy	Determination of discarded food and proposals for a minimization of food wastage in Germany (157) G. Hafner, J. Barabosz and M. Kranert ISWA, University of Stuttgart, Germany
9.40 h	Influence of aeration rate on composting gaseous emissions with pig slaughterhouse sludge (44) V. Blazy ¹ , M. Daumoin ¹ , J.C. Benoist ¹ , M. Lemasle ² , D. Wolbert ² , S. Barrington ¹ and A. De-Guardia ¹ 1 Irstea UR GERE, France 2 ENSCR, CIP, France	Suitable of composts for an acid-loving plant: highbush blueberry (105) D.M. Sullivan, R.C. Costello, D.R. Bryla, B.C. Strik and J.S. Owen Jr. Oregon State University, USA	Comparison of Sapromat and Oxitop-method for analysing respiration activity (AT ₄) (31) E. Binner, K. Böhm and P. Lechner BOKU Institute of Waste Management, Austria	Mechanical-Biological waste process of municipal solid waste: pilot laboratory project (236) Y. Bernard, M. Daigle, O. Solomatnikova and M.A. St-Pierre CRIQ, Canada	Statistical analysis of residential food waste capture rates in Italy at municipal and regional level (229) M. Giavini ¹ , C. Garaffa ² , M. Centemero ³ and G. Ghiringhelli ¹ 1 Ars Ambiente Srl, Italy 2 Novamont Spa, Italy 3 CIC-Consortio Italiano Compostatori, Italy
10.00 h	Emissions of VOCs during municipal biowaste and sludge composting in pilot scale reactors (53) P. Zan-Alvarez, P. Lavaud, A. Covez, M. Chevallier, R. Lecarpentier, M. Jolly and H. Bacheley Veolia Environnement R&I, France	Effect of composted sewage sludge on heavy metal content of the soil and plants (237) A. Tomócsik ¹ , M. Makádi ¹ , V. Orosz ¹ , T. Aranyos ¹ , J. Mészáros ² and Gy. Füleky ³ 1 Research Institutes of University of Debrecen, Hungary 2 Nyírségvíz Closed Shareholder Group, Hungary 3 Szent István University, Hungary	Effect of operating parameters during compost stability respiration activity tests (201) D. Komilis, D. Kanellos and C. Kletsas Democritus University of Thrace, Greece	Mechanical biological treatment of municipal waste: impact of retention time of the rotary drum reactor (74) A. Bellegarde ¹ , M. Orvain ¹ , Y. Crepel ² , H. Olczyk ¹ , A. Covez ¹ , F. Lebrisse ¹ , R. Lecarpentier ¹ , H. Bacheley ¹ and J.A. Cacho Rivero ¹ 1 Veolia Environnement R&I, France 2 Veolia Propreté, France	Food waste from canteens (175) G. Hafner, H. Schuller, Y. Wong, K. Anastasiou, C. Maurer, A. Hilse and M. Kranert University of Stuttgart (ISWA), Germany
10.20 h		Organic waste composts as potential fertilisers for cereal production in developing market conditions (240) P. Lääniste, S. Vabrit, M. Kriipsalu, H. Rossner and A. Astover Estonian University of Life Sciences, Estonia		Aerobic pre-treatment of mechanical screened MSW: effects on landfill anaerobic biodegradation (21) F. Di Maria ¹ , A. Sordi ¹ , C. Micale ¹ , F. Castellani ¹ , G. Cirulli ¹ , F. Valentin ² and A. Canova ² , GESENU spa 1 LAR, Italy; 2 GENESU spa, Italy	To be confirmed
10.40 h - 11.10 h Coffee/tea break					

Day 3 - Morning 14th of June 2012

	Session 27 (room Archipel) Topic 5a – Composting: modelling	Session 28 (room Australe) Topic 7 – Nutrients	Session 29 (room Pléiade) Topic 5d – Substrate characterisation	Session 30 (room Océane) Topic 5b – AD	
11.10 h	<p>Study of thermal conductivity in organic solid wastes before composting (62) J. Huet¹, C. Druilhe¹ and G. Debenest² 1 Irstea UR GERE, France 2 IMFT, France</p>	<p>Compost pelletization increases the phytoavailability of phosphorus in compost (51) Y. Arakawa NARO Kyushu Okinawa Agricultural Research Center, Japan</p>	<p>An innovative assay to measure anaerobic biodegradability of organic wastes in two days (43) N. Pautremat and Y. Dudal ENVOLURE, France</p>	<p>Optimization of cow manure and sewage sludge co-digestion using disintegration technologies (86) R. Cano¹, A. Nielfa¹, M. Fdz-Polanco¹, A. Pérez² and L. Bouchy² 1 University of Valladolid, Spain 2 CETaqua, Water Technology Centre, Spain</p>	
11.30 h	<p>External influences on the energy efficiency of composting plants (85) D. Meyer and E. Kraft Bauhaus-Universität Weimar, Germany</p>	<p>Plant available nitrogen and phosphorus from composted waste materials (213) A. Lee^{1,2}, M. Prasad³, J. Cassidy¹ and M.T. Gaffney² 1 Dublin Institute of Technology, Ireland 2 Teagasc Research Centre, Ireland 3 Compost Consultancy, Ireland</p>	<p>Re-evaluation the parameters in composting and anaerobic digestion (108) K. Hänninen University of Jyväskylä, Finland</p>	<p>Rumen content and anaerobic sludge co-inoculated of in cellulose fed anaerobic batch digesters (210) O. Chapleur, A. Bize, T. Serain, L. Mazeas and T. Bouchez Irstea UR HBAN, France</p>	
11.50 h	<p>Large scale composting model (72) F. Hénon^{1,2}, G. Debenest^{1,2}, A. Trémier³, M. Quintard^{1,2}, J. L. Martel⁴ and G. Duchalais⁵ 1 Université de Toulouse, France 2 CNRS Toulouse, France 3 Irstea UR GERE, France 4 Suez-Environnement, France 5 Terralys, France</p>	<p>Testing N and P availability from organic fertilizer products for approval purposes (193) T. Tontti, T. Salo and P. Kapuinen MTT Agrifood Research Finland, Finland</p>	<p>Monitoring biodegradability of lignocellulosic biomass during anaerobic digestion (123) P.C. Benito, N.N. Sibisi-Beierlein and M. Greger University of Luxembourg, Luxembourg</p>	<p>Agricultural and industrial wastes co-digestion: feedstock study and mass balance evaluation (148) M. Rouez¹, J.L. Martel¹, J.F. Yapo¹, D. Tristant², B. De Franssu², G. Villemain³ and A. Lepine³ 1 CIRSEE Suez Environnement, France 2 AgroParisTech, France 3 SITA, France</p>	
12.10 h	<p>Multi-component heat and mass transport model for composting process : experimental validation (88) A. Pujol^{1,2}, S. Pommier³, G. Debenest², M. Quintard² and D. Chenu¹ 1 Veolia Environnement R&I, France 2 IMFT, CNRS, France 3 INSA Toulouse, INRA, CNRS, France 3 Irstea UR GERE, France 4 Suez-Environnement, France 5 Terralys, France</p>	<p>Composting for increasing the fertilizer value of chicken manure: effects of feedstock on P availability (64) B. Vandecasteele¹, B. Reubens¹, K. Willekens¹, A. Beeckman², L. Delanote² and S. De Neve³ 1 Institute for Agricultural and Fisheries Research (ILVO), Belgium 2 Inagro, Belgium 3 Ghent University, Belgium</p>	<p>Predicting the biochemical methane potential of organic waste by near infrared spectroscopy (134) J. Doublet, C. Laroche, A. Ponthieux, M. Poitrenaud and J. Cacho-Rivero Veolia Environnement R&I, France</p>	<p>Kinetic study of the mesophilic and thermophilic sewage sludge anaerobic digestion (112) M. Peces, S. Astals and J. Mata-Alvarez University of Barcelona, Department of Chemical Engineering, Spain</p>	
12.30 h - 14.00 h Lunch break					

Day 3 Afternoon 14th of June 2012

	Session 31 (room Archipel) Topic 5a – Composting	Session 32 (room Australe) Topic 4 – Energy recovery	Session 33 (room Pléiade) Topic 2 – Assessment tools: GIS and LCA	Session 34 (room Océane) Topic 5b – AD: process control	
14.00 h	<p>Industrial potato peel composting: blend formulation using mixture design analysis (200)</p> <p>M.A.R. Soares¹, M.M.J. Quina² and R. Quinta-Ferreira²</p> <p>1 Polytechnic Institute of Coimbra, Portugal 2 University of Coimbra, Portugal</p>	<p>Key European players and potential application of microalgae in WWTPs (82)</p> <p>E. Marzo¹, A. Gali¹, N. Landes², L. Constans³ and L. Bouchy¹</p> <p>1 CETaqua, Spain 2 Degremont North American R&D Center, US 3 CIRSEE, France</p>	<p>Bioresources inventory – GIS-based identification, quantification and characterisation methods (114)</p> <p>H. Adwiraah, S. Oldenburg, I. Koerner and R. Stegmann</p> <p>Hamburg University of Technology, Germany</p>	<p>Automatic process control for anaerobic digestion (16)</p> <p>D. Löffler, K. Fischer and M. Kranert</p> <p>ISWA, University of Stuttgart, Germany</p>	
14.20 h	<p>Long-term persistence of Aminocyclopyrachlor and Clopyralid during the composting of yard trimmings (197)</p> <p>S.K. Grewal, Y.M. Li and F.C. Michel</p> <p>FABE, The Ohio State University, USA</p>	<p>Use of headspace and substrate composition to steer fermentation processes (39)</p> <p>D. Arslan^{1,2}, K.J.J. Steinbusch², H. De Wever¹, B.H.V.M. Hamelers², L. Diels¹ and C.J.N. Buisman²</p> <p>1 Flemish Institute for Technological Research (VITO), Belgium 2 Wageningen University, The Netherlands</p>	<p>A GIS-based approach for optimizing the development of collective biogas plants (117)</p> <p>T. Bioteau¹, F. Boret², O. Tretyakov², F. Béline¹, M. Balyńska³ and R. Girault¹</p> <p>1 Irstea UR GERE, France 2 Université Rennes 2 Haute Bretagne, France 3 Kharkiv Karazin National University, Ukraine</p>	<p>Effect of ammoniacal nitrogen on methanogenic metabolic pathways during MSW anaerobic digestion (154)</p> <p>J. Grossin-Debattista¹, J. Epissard¹, M. Lemunier², H. Budzinski³, T. Bouchez¹ and L. Mazéas¹</p> <p>1 Irstea UR HBAN, France 2 Suez Environnement, France 3 ISM, University of Bordeaux, France</p>	
14.40 h	<p>Evolution of microbial populations, humic and flavic acids on compost from grape pomace (180)</p> <p>A.B Torres Geraldo¹, M.M Martínez Salgado² and R. Ortega Blu¹</p> <p>1 Universidad Técnica Federico Santa María, Chile 2 INRES Bonn Universität, Germany</p>	<p>Catalytic pyrolysis of biomass for oxygen removal from bio-oil (3)</p> <p>F.L. Mendes¹, A.R. Pinho¹ and M.A.G Figueiredo²</p> <p>1 Petrobras S.A., Brazil 2 State University of Rio de Janeiro, Brazil</p>	<p>Evaluation framework to compare the sustainability of different applications of biomass waste (35)</p> <p>S. Manshoven, I. Vanderreydt, N. Devriendt, L. Pelkmans, K. Vanbroekhoven and M. Uytendaele</p> <p>VITO NV, Belgium</p>	<p>Operation strategy of grease and municipal sewage sludge co-digestion: results of continuous trials (87)</p> <p>A. Pérez¹, R. Cano², A. Nielfa², M. Fdz-Polanco², P. Camacho³ and L. Bouchy¹</p> <p>1 CETaqua, Water Technology Center, Spain 2 University of Valladolid, Spain 3 Suez Environnement – CIRSEE, France</p>	
15.00 h	<p>Stabilization of the solid fraction of a digestate by composting and vermicomposting (239)</p> <p>R. Rodríguez^{1,2}, C. Lazcano², E. Rodríguez¹, S. Mato¹ and J. Taboada²</p> <p>1 Facultad de Biología, Universidad de Vigo, Spain 2 Centro Tecnológico del Mar - Fundación CETMAR, Spain</p>	<p>Optimization of batch bio-H₂ and methane production from raw cheese whey (68)</p> <p>M. Orive and M. Cebrian</p> <p>Azti-Tecnalia, Spain</p>	<p>LCA of waste management systems with MBT: analysis of results for monetization (75)</p> <p>M.E. Mollaret and L. Aissani</p> <p>Irstea UR GERE, France</p>	<p>Removal of azo dye from textile wastewaters using anaerobic biomass: optimization and experimental design (181)</p> <p>M. Sarioglu and M. Askal</p> <p>Cumhuriyet University, Engineering Faculty, Turkey</p>	

Day 3 Afternoon 14th of June 2012

	Session 31 (room Archipel) Topic 5a – Composting	Session 32 (room Australe) Topic 4 – Energy recovery	Session 33 (room Pléïade) Topic 2 – Assessment tools: GIS and LCA	Session 34 (room Océane) Topic 5b – AD: process control	
15.20 h		Sewage sludge gasification. Dolomite performance under different operating conditions (17) J.M. de Andrés, E. Roche, A. Narros and M.E. Rodríguez Universidad Politécnica de Madrid, Spain	Municipal solid waste organic fraction management: a multicriteria analysis for societal performance (99) A.L. Gautier and Ph. Wavrer BRGM, France		

15.40 h - 16.15 h Coffee/tea break

16.15 – 17.15 h Closing session (room Auditorium)

Posters Presentations

- (6) **MUNICIPAL SOLID WASTE COMPOST AND FERTILIZER EFFECTS SOIL FERTILITY AND SWEET CORN GROWTH** P.R. Warman, A.V. Rodd
- (7) **DEGRADATION AND BIOGAS-PRODUCTION OF OLIVE-MILL SOLID WASTES FROM SPAIN BY ANAEROBIC CO-DIGESTION** Y. A. Sterr, A. Barbi, and D. Bryniok
- (15) **ENHANCEMENT OF MUNICIPAL COMPOST WITH APPLICATION OF VERMICULTURES IN ILOILO CITY, PHILIPPINES** Johannes G. Paul, Lilibeth M. Cadiz, Maricar S. Tombocon, Neil G. Ravena
- (22) **ENERGY AND ORGANIC FERTILIZER FROM THE ORGANIC FRACTION OF MSW SOLID STATE AD: A REAL CASE STUDY** Francesco Di Maria, Giovanni Gigliotti, Alessio Sordi, Caterina Micale, Daniela Pezzolla, Mirko Cucina
- (24) **EFFECT OF CHARCOAL (BIOCHAR) AND COMPOST USAGE IN FARMLAND ON SOIL MICROORGANISMS AND PLANT GROWTH** Shuji Yoshizawa, Satoko Tanaka
- (48) **PROBLEMS OF OIL CONTAMINATED SOILS IN THE NIGER DELTA REGION OF NIGERIA** C. Nwankwo, E. Stentiford, L. Fletcher
- (49) **UTILIZATION OF CHITIN AS IMMOBILIZING MATRIX FOR NATIVE CONSORTIA TO DEGRADE HYDROCARBONS IN SEAWATER** A. Corona-Cruz, K. García-Uitz, E. Uicab-Campos, C. Ponce-Caballero
- (57) **FUZZY SYSTEM TO OPTIMIZE THE ANAEROBIC DIGESTION IN BIOGAS REACTORS** J. Tamás, L. Mézes, Gy. Biró, M. Nyírcsák, J. Borbély
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