

# ORBIT2008 Programme in 5 Parallel Sessions

The programme is subject to changes. Please visit the website for latest updates

## 13<sup>th</sup> of October 2008 - Day 1

<b>Opening Session</b>		Chaired by	L. Rodic-Wiersma			
Lunch break						
13 <sup>th</sup> Oct. 08 Afternoon	<b>Composting Process</b> (Room C222) Chair M. Kranert	<b>Anaerobic digestion</b> (Room C226) Chair J. M. Alvarez	<b>Policy and strategy in the EU</b> (Room C221) Chair E. Favoino	<b>Composting in developing countries</b> (Room C218) Chair L. Diaz	<b>Compost application</b> (Room C217) Chair M. Boegger	
	Coffee/tea break					
	<b>Composting - microbial environment</b> (Room C222) Chair M. de Bertoldi	<b>Anaerobic digestion</b> (Room C226) Chair G. Zeeman	<b>Policy and strategy in the EU</b> (Room C221) Chair M. Kriipsalu	<b>Developing countries issues</b> (Room C218) Chair B. Raninger	<b>New developments</b> (Room C217) Chair H. Jönsson	
18.30 - 21.00 h Annual meeting of ORBIT & ECN (internal)						

## 14<sup>th</sup> of October 2008 - Day 2

14 <sup>th</sup> of Oct. 08 Morning	<b>Composting in developing countries</b> (Room C222) Chair J. v. Buuren	<b>Anaerobic digestion - combined aerobic/anaerobic</b> (Room C226) Chair R. Widmann	<b>Benefits of compost, digestate and sludge use</b> (Room C221) Chair M. Seck	<b>Separate collection - public awareness</b> (Room C218) Chair L. Rodic-Wiersma	<b>Energy recovery from biomass</b> (Room C217) Chair G. Zeeman
	Coffee/tea break				
	<b>Composting</b> (Room C222) Chair K. Lasaridi	<b>Anaerobic digestion - optimisation</b> (Room C226) Chair E. Kraft	<b>Benefits of compost, digestate and sludge use</b> (Room C221) Chair P. Wallace	<b>Separate collection</b> (Room C218) Chair D. Hogg	<b>Sewage sludge - treatment and reuse</b> (Room C217) Chair L. Diaz
Lunch break					
14 <sup>th</sup> of Oct. 08 Afternoon	<b>Composting - process optimisation</b> (Room C222) Chair F. Michel	<b>Greenhouse gas emissions</b> (Room C226) Chair P. Lechner	<b>Soil management</b> (Room C221) Chair F. Amlinger	<b>Renewable energy - biogas</b> (Room C218) Chair J. M. Alvarez	<b>Mechanical biological treatment</b> (Room C217) Chair J. Pickering
	Coffee/tea break				
	<b>Composting process and specific waste streams</b> (Room C222) Chair A. Silveira	<b>Composting - gaseous &amp; odour emissions</b> (Room C226) Chair W. Bidlingmaier	<b>Soil management</b> (Room C221) Chair G. Füleky	<b>Renewable energy - feasibility</b> (Room C218) Chair M. Ott	<b>Residual waste and landfilling</b> (Room C217) Chair F. Adani
Common Dinner in the Hotel WICC					

## 15<sup>th</sup> of October 2008 - Day 3

15 <sup>th</sup> of Oct. 08 Morning	<b>ECN Practitioners Session 1</b> (Room C222) Chair J. Barth	<b>Product quality</b> (Room C226) Chair H. Insam	<b>Life Cycle Assessment LCA</b> (Room C221) Chair R. Widmann	<b>Renewable energy</b> (Room C218) Chair G. Zeeman	<b>Peat replacement</b> (Room C217) Chair P. Wallace
	Coffee/tea break				
	<b>ECN Practitioners Session 2</b> (Room C222) Chair E. Favoino	<b>Product quality</b> (Room C226) Chair P. Sessink	<b>Climate change</b> (Room C221) Chair M. Kranert	<b>Renewable energy - hydrogen production</b> (Room C218) Chair M. de Bertoldi	<b>Facility impact on environment</b> (Room C217) Chair L. Lechner
Lunch break					
After-noon	<b>ECN Practitioners Session 3</b> (Room C222) Chair F. Amlinger	<b>Product quality</b> (Room C226) Chair T. Gea	<b>Risk assessment</b> (Room C221) Chair Rodic-Wiersma	<b>Biobased economy and biorefinery</b> (Room C218) Chair S. W. Moolenaar	<b>Emission reduction from landfills</b> (Room C217) Chair I. Koerner
Coffee/tea break					

## 16<sup>th</sup> of October 2008 - Day 4 - Three Excursions/Study Tours

**Day 1 - Morning 13<sup>th</sup> of October 2008****08.30 - 10.00 h Registration**

10.00 - 10.05 h Opening of ORBIT2008

**10.05 - 11.30 h Welcome speeches**

- Prof. Dr. Werner Bidlingmaier - ORBIT e.V., Weimar, Germany
- Representative of the Rectorate - Wageningen University and Research Centre (WUR), Wageningen, The Netherlands
- Representative of the Dutch Ministry of Agriculture, Den Haag, The Netherlands
- Mr. Morten Broegger, European Compost Network, Weimar, Germany
- Dr. Paul Sessink, Dutch Association of Compost Plants BVOR, Wageningen, The Netherlands

**Key-note speeches by**

11.30 - 11.50 h Nutrient recycling by means of organic residues, Prof. Dr. Marco de Bertoldi, ORBIT e.V, Weimar, Germany

11.50 - 12.10 h The challenge: from ecology to economy, Prof. Dr. Louise E.M. Vet, Director Netherlands Institute of Evolutionary Ecology, Nieuwersluis, The Netherlands

12.10 - 12.30 h Composting and the green house effect: how to support the biological cycle, Prof. Dr. Michael Braungart, EPEA Internat. Umweltforschung GmbH, Hamburg, Germany

12.30 - 12.50 h EU policies and strategies for organic waste, Mr. Bartosz Zambrzyki, EU DG. Environment, Brussels, Belgium

**13.00 - 14.00 h Lunch break**

Day 1 - Afternoon 13 <sup>th</sup> of October 2008					
	Composting process (Room C222) Chair M. Kranert	Anaerobic digestion (Room C226) Chair J. M. Alvarez	Policy and strategy in the EU (Room C221) Chair E. Favoino	Composting in developing countries (Room C218) Chair L. Diaz	Compost application (Room C217) Chair M. Boegger
14.00 h	Evolution of physical properties during the composting process of wastes of different biodegradable organic matter content and their influence on biodegradation kinetics (188) T. Gea <sup>1</sup> and T. L. Richard <sup>2</sup> 1 Universitat Autònoma de Barcelona, Spain 2 Pennsylvania State University, USA	Temperature effect on the anaerobic solubilization of food waste (161) K. Komemoto <sup>1</sup> , N. Nagao <sup>1</sup> , Ch. Niwa <sup>2</sup> and T. Toda <sup>1</sup> 1 Department of Environmental Engineering for Symbiosis, Faculty of Engineering, Soka University, Tokyo, Japan 2 Institute of Technology, SHIMIZU COMPANY, Tokyo, Japan	Past, present and future of composting in the Netherlands (364) G.J. de Jong Dutch Waste Association / De Meerlanden nv, Aalsmeer, the Netherlands	Assessment of composting approaches to enhance waste management systems in rural areas in the Philippines (367) J.G. Paul <sup>1</sup> , M.J. Jarencio <sup>1</sup> , J. Boorsma <sup>2</sup> and E.T. Libradilla <sup>3</sup> 1 AHT GROUP AG, c/o Department of Environment and Natural Resources, GTZ Project Office, Iloilo City, Panay 2 German Development Service, c/o City of Bayawan, City Environment and Natural Resources Office, Bayawan City, Negros Oriental 3 Local Government of Bais City, City Engineering Office, Bais City, Negros Oriental, Philippines	Improving of potato ( <i>Solanum tuberosum</i> L.) production by compost application under the United Arab Emirates conditions (371) M.A. Salem and Wa.A. Al-Zayadneh Department of Aridland Agriculture, College of Food and Agriculture, United Arab Emirates University, United Arab Emirates
14.20 h	Optimisation needs in composting plants on account of 20 years of feedback from the practice (429) W. Bidlingmaier Bauhaus-Universität Weimar, Department of Waste Management, Weimar, Germany	Ammonia emissions subsequent to anaerobic treatment (243) I. Kömer Bioconversion and Emission Control Group, Institute of Environmental Technology and Energy Economics, Hamburg University of Technology, Hamburg, Germany	Compost is a product in Austria (72) H. Müller Austrian Compost Quality Society KGVÖ, Weibern, Austria	History of organic waste management in Kathmandu valley (198) C. Springer and W. Bidlingmaier Bauhaus-Universität Weimar, Department of Waste Management, Weimar, Germany	Safety and agronomic efficiency of compost application on vineyard with respect to its organic micropollutants content (215) D. Patureau <sup>1</sup> , N. Delgenès <sup>1</sup> , J.P. Delgenès <sup>1</sup> , F. Laurent <sup>2</sup> and C. Lhoutellier <sup>3</sup> 1 INRA, UR050, Laboratoire de Biotechnologie de l'Environnement, Narbonne, France 2 INRA, UMR 1089, Xénobiotiques, Toulouse 3 CRPE, VEOLIA Environnement R&D, Limay, France
14.40 h	Extracellular enzyme analysis to assess composting process (139) J. Adams, ETCIC, University of Hull, UK	Improved energy supply, waste management and climate effects by use of biogas technology in South African prison farms (244) K. Soyezi <sup>1</sup> , H.O. Markert <sup>2</sup> , N. Ndumo <sup>3</sup> and J.F.C. Friend <sup>4</sup> 1 Chair on Vegetations Ecology and Nature Conservation, Potsdam University, Germany 2 Ingenieurbüro Dr. Markert, Kaltennordheim, Germany 3 Department of Public Works, Pretoria, South Africa 4 Softchem, Johannesburg, South Africa	Aerobic and anaerobic biological treatment of solid waste in Spain - results of a survey (418) E. Vecino, Dpto. Técnico, ATEGRUS, Spain	Open windrow composting of gardening non-green waste and household fresh green waste of Lamphun city, Thailand (171) L. Wattanachira <sup>1</sup> , T. Janhom <sup>2</sup> and W. Bidlingmaier <sup>3</sup> 1 Department of Civil and Environmental Engineering, Faculty of Engineering, Rajamangala University of Technology Lanna, Chiang Mai, Thailand 2 Department of Environmental Engineering, Faculty of Engineering/National Center of Excellence for Environmental and Hazardous Waste Management (NCE-EHWM), Chiang Mai University, Chiang Mai, Thailand 3 Department of Waste Management, Bauhaus-Universität Weimar, Germany	Input of organic micropollutants in soil through compost application: possible transfer to plants (235) V. Brochier <sup>1</sup> , M. Deschamps <sup>2</sup> and S. Houot <sup>2</sup> 1 CRP, Veolia Environment, R&D, Limay 2 INRA, UMR 1091, "Environment and Arable crops", Thiverval-Grignon, France

Day 1 - Afternoon 13 <sup>th</sup> of October 2008					
	Composting process (Room C222) Chair M. Kranert	Anaerobic digestion (Room C226) Chair J. M. Alvarez	Policy and strategy in the EU (Room C221) Chair E. Favoino	Composting in developing countries (Room C218) Chair L. Diaz	Compost application (Room C217) Chair M. Broegger
15.00 h	Evidence of mass transfer limitation in the composting process (143) B. Puyuelo, T. Gea, E. Pagans and A. Sánchez GICOM Composting Research Group, Department of Chemical Engineering, Escola Tècnica Superior d'Enginyeria, Universitat Autònoma de Barcelona, Spain	Nutrient recovery from digestates of agricultural biogas plants – adaptation of wastewater treatment processes (327) T. Haupt, J. Alexeeva-Steiniger and J. Londong Urban Water Management and Sanitation, Bauhaus-Universität Weimar, Weimar, Germany	The same wastes, the same directives, two countries (340) A. Silveira <sup>1</sup> , U. Lange <sup>2</sup> , H. Wienold <sup>2</sup> and M. Correia <sup>1</sup> 1 Faculty of Science and Technology, New University of Lisbon, Caparica, Portugal 2 Dresden University of Technology, Dresden, Germany	Demo compost plant in Khulna, Bangladesh: search for acceptable composting technologies (247) Q.H. Bari <sup>1</sup> , M. Alamgir <sup>1</sup> , J. Martens <sup>2</sup> , G. Haedrich <sup>2</sup> and K. M.M. Hassan <sup>1</sup> 1 Department of Civil Engineering, Khulna University of Engineering & Technology (KUET), Khulna, Bangladesh 2 Department of Waste Management, Bauhaus Universität Weimar, Weimar, Germany	Seasonal variation of garden waste composition of Århus waste centre (Denmark) (303) A. Boldrin, J.K. Andersen and T.H. Christensen Department of Environmental Engineering, Technical University of Denmark, Kgs. Lyngby, Denmark
15.20 h - 15.50 h Coffee/tea break					

Day 1 - Afternoon 13 <sup>th</sup> of October 2008					
	Composting - microbial environment (Room C222) Chair M. de Bertoldi	Anaerobic digestion (Room C226) Chair G. Zeeman	Policy and strategy in the EU (Room C221) Chair M. Kriipsalu	Developing countries issues (Room C218) Chair B. Raninger	New developments (Room C217) Chair H. Jönsson
15.50 h	An analysis and compilation of respiration data found in different organic solid wastes (87) R. Barrena, T. Gea, S. Ponsá, L. Ruggieri, A. Artola, X. Font and A. Sánchez Composting Research Group, Department of Chemical Engineering, Escola Tècnica Superior d'Enginyeria, Universitat Autònoma de Barcelona, Cerdanyola, Barcelona, Spain	Improvement of an existing anaerobic digestion plant: technical and economical analysis (251) F. Di Maria <sup>1</sup> , G. Pavesi <sup>1</sup> and S. Leombruni <sup>2</sup> 1 Dipartimento di Ingegneria Industriale, University of Perugia, Perugia, Italy 2 SIA, Perugia, Italy	Sustainable strategies for biomass use in the European context - potentials of residues (233) T. Seidenberger and D. Thrän German Biomass Research Center (DBFZ), Leipzig, Germany	Processing municipal solid waste in Kolkata Metropolitan Area (204) S.S. Dev Society for Direct Initiative for Social and Health Action (DISHA), Kolkata, India	Ecological sanitation projects from around the world and their links with the solid waste sector (142) S. Rüd and E. v. Münch Ecosan Programme, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Eschborn, Germany
16.10 h	Bacterial community succession during a start-up period of large-scale composting reactor (126) K. Watanabe, N. Nagao, T. Toda and N. Kurosawa Department of Environmental Engineering for Symbiosis, Faculty of Engineering, Soka University, Japan	Comparison of low-rate and high-rate anaerobic digestion for septage from Songkhla municipality, Thailand (153) T. Kaosol Environmental Program, Department of Civil Engineering, Faculty of Engineering, Prince of Songkla University, Songkhla, Thailand	Brownfields, biofuels, biofeedstocks, composts and compost like outputs CLOs (353) R.P. Bardos & A.S. Chapman, <sup>r3</sup> Environmental Technology Ltd. UK R. Cameron, P. Hadley & R. Wheeler, School of Horticulture & Landscape, The University of Reading, UK S. Nortcliff & H. O. Bishop, Department of Soil Science, The University of Reading, UK	Application of composting and anaerobic digestion methods in East African municipalities: A critical review (292) G.L. Szanto Environmental Policy Group, Department of Social Sciences, Wageningen University and Research Centre, Wageningen, The Netherlands	The challenges of implementing on-site composting in an industrial manufacturing business (276) J. Biala <sup>1</sup> and C. Smeal <sup>2</sup> 1 The Organic Force, Wynnum, Australia 2 GELITA Australia, Beaudesert, Australia

**Day 1 - Afternoon 13<sup>th</sup> of October 2008**

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16.30 h	<p>Respiration and microbial community succession as compost stability indicators (184)</p> <p>C. Chroni<sup>1</sup>, A. Kyriacou<sup>2</sup>, T. Manios<sup>3</sup> and K. Lasaridi<sup>1</sup></p> <p>1 Department of Geography, Harokopio University, Athens 2 Department of Dietetics and Nutritional Science, Harokopio University, Athens 3 School of Agricultural Technology, Technological Educational Institute of Crete, Greece</p>	<p>Decentralised treatment of slaughterhouse solid waste (257)</p> <p>S. Jayanthi</p> <p>Government College of Technology, Coimbatore, India</p>	<p>Organics recycling in Australia now and in future (425)</p> <p>J. Biala<sup>1</sup> and A. Johnston<sup>2</sup></p> <p>1 The Organic Force, Wynnum, QLD, Australia 2 Compost Australia (WMAA), Burwood, NSW, Australia</p>	<p>Afeasibility study for renewable energy production from organic residues on the Island Phu Quoc, Vietnam (346)</p> <p>M. Wittmaier<sup>1</sup>, A. Karagiannidis<sup>2</sup>, S. Langer<sup>1</sup> and A. Malamakis<sup>2</sup></p> <p>1 University of Applied Sciences, Institut für Kreislaufwirtschaft GmbH, Bremen, Germany 2 Laboratory of Heat Transfer and Environmental Engineering, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece</p>	<p>Requirements for mobile anaerobic digestion units for long distance operations (137)</p> <p>E. Kraft</p> <p>Department of Waste Management, Bauhaus-Universität Weimar, Weimar, Germany</p>
16.50 h	<p>Bacterial community changes during composting and compost curing studied with novel methods (350)</p> <p>H. Insam<sup>1</sup>, M. Danon<sup>3</sup>, Y. Chen<sup>3</sup>, Y. Hadar<sup>3</sup>, B. Knapp<sup>1</sup>, J. Fuchs<sup>2</sup>, I. H. Franke-Whittle<sup>1</sup></p> <p>1 Institute for Microbiology, University of Innsbruck, Innsbruck, Austria 2 Forschungsinstitut für biologischen Landbau (FiBL), Frick, Switzerland 3 Faculty of Agricultural, Food and Environmental Quality Sciences, The Hebrew University of Jerusalem, Rehovot, Israel</p>		<p>Biodegradable waste and by-products from food industry management systems in Lithuania: Analysis, problems and improvement possibilities (358)</p> <p>R. Juškaite-Norbutiene and R. Cesnaitis</p> <p>Institute of Environmental Engineering, Kaunas University of Technology, Kaunas, Lithuania</p>	<p>Managing organic waste in Turkey - the relation between the characterization, the properties and the results (318)</p> <p>G. Akinci, M. Bilgin, D. Guven and E. Erdin</p> <p>Dokuz Eylul University, Faculty of Engineering, Department of Environmental Engineering, Buca, Izmir, Turkey</p>	<p>Decentralised waste and water treatment - Strategies and experiences (406)</p> <p>R. Cossu, and L. Alibardi, Department of Env. Science, Univ. of Padova, Italy</p>
<b>17.10 h End of the day</b>					

**18.30 - 21.00 Annual Meeting of ORBIT and ECN (internal)**

Day 2 – Morning		14 <sup>th</sup> of October 2008			
	<b>Composting in developing countries</b> (Room C222) Chair J. van Buuren	<b>Anaerobic digestion - combined aerobic/anaerobic</b> (Room C226) Chair R. Widmann	<b>Benefits of compost, digestate and sludge use</b> (Room C221) Chair M. Seck	<b>Separate collection – public awareness</b> (Room C218) L. Rodic-Wiersma	<b>Energy recovery from biomass</b> (Room C217) Chair G. Zeeman
9.00 h	<p>Bioconversion of organic waste into organic manure by adopting different technologies (86)</p> <p>P. Mehalingam, A. Rajendran and M. Jayabalan DST-FIST Sponsored Department of Botany, V.H.N.Senthikumara Nadar College, (Affiliated to Madurai Kamaraj University) Virudhunagar, Tamil Nadu, India</p>	<p>Anaerobic digestion plants connected upstream of composting plants – technology, costs and efficiency (328)</p> <p>T. Turk<sup>1</sup> and M. Kern<sup>2</sup> 1 IGW Ingenieurgesellschaft Witzhausen GmbH 2 Witzhausen-Institut für Abfall, Umwelt und Energie GmbH, Germany</p>	<p>Review of state of knowledge on phosphorus availability from composts (174)</p> <p>M. Prasad Compost Research and Advisory, 8A Woodlands, Naas, Co. Kildare. Ireland</p>	<p>Lipor Biowaste Strategy. The importance of separate collection, (225)</p> <p>S. Lopes, LIPOR, Lisboa, Portugal</p>	<p>Feasibility of electricity generation from municipal solid wastes in Ghana - A waste management technology (128)</p> <p>M.Y. Mensah<sup>1</sup>, C. Kotey<sup>2</sup> and E.M. Kwofie<sup>2</sup> <sup>1</sup> Department of Chemical Engineering, College of Engineering, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana <sup>2</sup> Department of Energy Systems Engineering, School of Engineering, Koforidua Polytechnic, Koforidua, Ghana</p>
9.20 h	<p>Composting plant evaluation in Mérida, Mexico (194)</p> <p>D.D. Cabañas-Vargas<sup>1</sup>, M.R. Sauri-Riancho<sup>2</sup>, P. del G. Garrido-Vivas<sup>2</sup>, and E.R. Castillo-Borges<sup>2</sup> 1 Faculty of Chemical Engineering of the Autonomous University of Yucatan, Mexico 2 Faculty of Engineering of the Autonomous University of Yucatan, Mexico</p>	<p>Biological co-treatment of agroindustrial wastes (274)</p> <p>E. Aymerich<sup>1</sup>, J. M. García-Mina<sup>2</sup> and L. Sancho<sup>1,3</sup> 1 CEIT, Environmental Engineering Section, San Sebastian, Spain 2 R&amp;D Department, Inabonos – Roullier Group, Orcoyen 3 University of Navarra (TECNUN), San Sebastian, Spain</p>	<p>Effect of maturation of grease trap compost on plant growth (426)</p> <p>K. Wilkinson Department of Primary Industries, Parkville, Victoria, Australia</p>	<p>Organised source separation of household waste – pilot study of university staff residences in Kumasi, Ghana (78)</p> <p>M.A.D. Asase<sup>1</sup>, M.Y. Mensah<sup>1</sup> and S.K. Amponsah<sup>2</sup> 1 Chemical Engineering Department, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi 2 Mathematics Department, KNUST, Kumasi, Ghana</p>	<p>Situation of energy from public waste in Hungary (98)</p> <p>G. Eörsi-Tóta, G. Kiss and I. Tóth MVM ERBE Zrt., Budapest, Hungary</p>
9.40 h	<p>A comparative trial for co-composting of river reed in Ghana (218)</p> <p>G.N.K. Rockson<sup>1</sup>, E.D. Aklaku<sup>1</sup> and C. Quansah<sup>2</sup> 1 Department of Agricultural Engineering, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi 2 Soil and Crop Science Department, KNUST, Kumasi, Ghana</p>	<p>MODULAARE – integrated modules for wastewater purification, waste treatment and energy recovery in tourist resorts (109)</p> <p>M. Kranert<sup>1</sup>, G. Hafner<sup>1</sup>, D. Antakyali<sup>2</sup>, J. Krampe<sup>2</sup>, A. Schultheis<sup>3</sup> and D. Steinbach<sup>3</sup> 1 ISWA - Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Chair of Waste Management and Emissions, Stuttgart, Germany 2 ISWA - Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Chair of Waste Management and Emissions, Department of Waste Water Technology Stuttgart, Germany 3 AT-Verband (Association for the Promotion of Socially and Environmentally Appropriate Technologies), Stuttgart, Germany</p>	<p>Use of composted communal sewage sludge in agriculture (195)</p> <p>A. Tomócsik<sup>1</sup>, M. Makádi<sup>1</sup>, J. Mészáros<sup>2</sup>, Gy. Tóth<sup>2</sup> and Á. Márton<sup>1</sup> 1 Research Centre of CASE of University of Debrecen, Hungary 2 Nyírsévíz Closed Shareholder Group, Debrecen, Hungary</p>	<p>Behaviour and attitudes changes needed to improve biological treatment of organic waste in Latin American communities (331)</p> <p>N. Jean Baptiste Waste Management Department, Faculty of Engineering, Bauhaus-Universität, Weimar, Germany</p>	<p>Combined heat and composting (205)</p> <p>E.A.N. Winship<sup>1</sup>, D. Holmes<sup>2</sup> and D. Notton<sup>3</sup> 1 Alpheco Composting Ltd., Sandcliff, Waldringfield, Ipswich, UK 2 Carbon Plan Ltd., Haringey, London, UK 3 Jacobs Engineering (UK) Ltd, Cardiff, UK</p>

Day 2 – Morning		14 <sup>th</sup> of October 2008			
	Composting in developing countries (Room C222) Chair J. van Buuren	Anaerobic digestion - combined aerobic/anaerobic (Room C226) Chair R. Widmann	Benefits of compost, digestate and sludge use (Room C221) Chair M. Seck	Separate collection – public awareness (Room C218) L. Rodic-Wiersma	Energy recovery from biomass (Room C217) Chair G. Zeeman
10.00 h			Residual effect of digested and co-digested pig slurry in maize N-nutrition (344) S.O. Pires, C.M. d S Cordovil, L. Ferreira and T. Teixeira Instituto Superior de Agronomia, Dep Química Agrícola e Ambiental, Lisboa, Portugal	Evaluation of the initiatives taken in an urban area of Bangladesh to increase the level of MSW collection and public awareness (245) J. Akter <sup>1</sup> , M. Alamgir <sup>1</sup> , G. Haedrich <sup>2</sup> , E. Kraft <sup>2</sup> and I.M. Rafizul <sup>1</sup> <sup>1</sup> Department of Civil Engineering, Khulna University of Engineering & Technology (KUET), Khulna, Bangladesh <sup>2</sup> Waste Management Division, Bauhaus University Weimar, Weimar, Germany	Biodegradability and methane potential of carrot waste by anaerobic sequential batch reactor (ASBR) (258) S. Jayanthi <sup>1,2</sup> <sup>1</sup> Laboratoire de Biotechnologie de l'Environnement, INRA, Narbonne, France <sup>2</sup> Government College of Technology, Coimbatore, India
10.20 h – 10.50 h Coffee/tea break					

Day 2 – Morning		14 <sup>th</sup> of October 2008			
	Composting (Room C222) Chair K. Lasaridi	Anaerobic digestion – optimisation (Room C226) Chair E. Kraft	Benefits of compost, digestate and sludge use (Room C221) Chair P. Wallace	Separate collection (Room C218) Chair D. Hogg	Sewage sludge - treatment and reuse (Room C217) Chair L. Diaz
10.50 h	Pig slurry management through composting (208) F. Sole-Mauri <sup>1</sup> , J. Capdevila <sup>2</sup> and M. Oromi <sup>2</sup> <sup>1</sup> Ros Roca IMA, Tarrega, Lleida, Spain <sup>2</sup> Enercor, Tarrega, Lleida, Spain	Modelling and control for anaerobic co-digestion of agricultural waste (101) C. Cimadoribus and M. Kranert, Universität Stuttgart, Stuttgart, Germany	Birch bark bioactive compounds in designer composts (290) I. Menzler-Hokkanen, H.M.T Hokkanen Division of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Helsinki, Finland	Cost analysis for the separate collection and treatment of bio-waste (338) G. Becker and D. Oelgemöller, Institut für Abfall, Abwasser und Infrastruktur-Management GmbH (INFA), Ahlen, Germany	Stabilisation and sanitisation of waste water solids during composting (197) K. Lasaridi <sup>1</sup> , S. Stamatidis <sup>2</sup> and A. Kyriacou <sup>3</sup> <sup>1</sup> Department of Geography, Harokopio University, Athens <sup>2</sup> Goulandris Natural History Museum, Athens <sup>3</sup> Department of Dietetics and Nutritional Science, Harokopio University, Athens, Greece
11.20 h	Addition of grape stalks improves the physico-chemical properties of two-phase olive mill waste compost (192) M.L. Cayuela, M.A. Sánchez-Monedero and A. Roig Department of Soil and Water Conservation and Waste Management. Centro de Edafología y Biología Aplicada del Segura (CEBAS)-CSIC. Campus Universitario de Espinardo, Murcia, Spain	Electroporation for enhances methane yield from municipal solid waste (288) M. Carlsson <sup>1</sup> and A. Lagerkvist <sup>2</sup> <sup>1</sup> AnoxKaldnes AB, Sweden <sup>2</sup> LTU, Sweden	Reutilisation of green waste - a comparison of its recycling for energy generation purposes versus composting and peat replacement, with particular consideration of the CO <sub>2</sub> Balance (134) R. Gottschall <sup>1</sup> , M. Kranert <sup>2</sup> , C. Bruns <sup>1</sup> , G. Hafner <sup>2</sup> , O. Schiere <sup>2</sup> and C. Seibel <sup>1</sup> <sup>1</sup> Humus & Erden Kontor GmbH, Witzhausen, Germany <sup>2</sup> Universität Stuttgart – Institut für Siedlungswasserbau, Wassergüte- u. Abfallwirtschaft, Stuttgart, Germany	Municipal handbook on door-to-door separate waste collection in Catalonia (347) I. Puig, E. Coll, J. Colomer, F. Giró, P. Martín and C. Salvans Associació de municipis catalans per la recollida selectiva porta a porta, Barcelona, Spain	Effect of ozone, thermal and ultrasound pre-treatment on anaerobic digestion of primary and secondary sewage sludge (206) J. Mata-Álvarez, T. Benabdallah El Hadj, E. Franchini and J. Dosta Department of Chemical Engineering, University of Barcelona, Spain

**Day 2 – Morning**                      **14<sup>th</sup> of October 2008**

	<b>Composting</b> (Room C222) Chair K. Lasaridi	<b>Anaerobic digestion – optimisation</b> (Room C226) Chair E. Kraft	<b>Benefits of compost, digestate and sludge use</b> (Room C221) Chair P. Wallace	<b>Separate collection</b> (Room C218) Chair D. Hogg	<b>Sewage sludge - treatment and reuse</b> (Room C217) Chair L. Diaz
11.40 h	<p><b>Composting and horticultural value of composted olive mill wastes (240)</b> M. Raviv<sup>1</sup>, Sh. Medina<sup>1</sup>, A. Krassnovsky<sup>1</sup>, Y. Laor<sup>2</sup> and I. Aviani<sup>1</sup> 1 Institute of Plant Sciences, Newe Ya'ar Research Center, Agricultural Research Organization, Ministry of Agriculture 2 Institute of Soil, Water and Environmental Sciences, Newe Ya'ar Research Center, Agricultural Research Organization, Ministry of Agriculture, Israel</p>	<p><b>A new approach to obtain energy from wet organic wastes (319)</b> G. Akinci, M. Bilgin, G. Gok, E. Erdin Dokuz Eylul University, Engineering Faculty, Department of Environmental Engineering, Kaynaklar Campus, Buca, Izmir, Turkey</p>	<p><b>Problems and successes of digestate utilisation on crops (190)</b> M. Makádi<sup>1</sup>, A. Tomócsik<sup>1</sup>, J. Lengyel<sup>2</sup> and Á. Márton<sup>1</sup> 1 Research Center of CASE of University of Debrecen 2 Bátorcoop Ltd., Debrecen, Hungary</p>	<p><b>The PRU-BMW project - 134 weeks pilot source separation of bioorganic municipal waste in Shenyang, China (178)</b> L. Maia<sup>1</sup>, B. Raninger<sup>2</sup>, W. Bidlingmaier<sup>1</sup>, R. Li<sup>3</sup>, X. Luo<sup>3</sup> and Z. Hailian<sup>3</sup> 1 Waste Management Department, Bauhaus Universität Weimar, Weimar, Germany 2 CIM/GTZ expert at ICEEE Shenyang, Hangkong University, CIM Frankfurt Germany; Mining University Leoben, Austria 3 Institute of Clean Energy &amp; Environmental Engineering (ICEEE), Liaoning Key Laboratory for Clean Energy, Hangkong University, Shenyang, China</p>	<p><b>Sewage sludge composting: influence of the bulking material on compost organic matter, consequences on C and N mineralization in soil (237)</b> J. Doublet<sup>1,2</sup>, C. Francou<sup>2</sup>, M. Poitrenaud<sup>2</sup> and S. Houot<sup>1</sup> 1 INRA Environment and Arable Crop Research Unit, Thiverval-Grignon 2 VEOLIA Environnement R &amp; D, Environmental Services Research Center, Limay, France</p>
12.00 h	<p><b>Automanagement of organic waste from a small community composting by composting. The experience of Val Minor, Galicia, Spain (193)</b> E. Romero<sup>1</sup>, D. Pérez<sup>1</sup>, L. Santos<sup>2</sup>, J. Domínguez<sup>1</sup> and S. Mato<sup>1</sup> 1 Environmental Biotechnology Department, University of Vigo, Vigo, Galicia 2 Mancomunidad de Montes de Val Miñor, Galicia, Spain</p>	<p><b>Influence of Cr inhibitor on the H<sub>2</sub>S formation and biogas production volume using industrial sludge waste source with sulphur reduction bacteria addition (273)</b> S.R. Juliastuti and Nanik A. Rahman, Chemical Engineering Department, Faculty of Industrial Technology, Institute of Technology Sepuluh Nopember Surabaya, Indonesia</p>	<p><b>An evaluation of fertiliser requirement during establishment of Salix cv. Tora hardwood rods in WDOS and a 'brownfield' spoil (68)</b> R.S. Wheeler<sup>1</sup>, R.W.C. Cameron<sup>1</sup>, H.O. Bishop<sup>2</sup>, S. Nortcliff<sup>2</sup>, P. Hadley<sup>1</sup>, P. Bardos<sup>3</sup>, A. Chapman<sup>3</sup>, G. Percival<sup>4</sup> 1 Centre for Horticulture and Landscape, Plant Science Laboratories, School of Biological Sciences, University of Reading 2 Department of Soil Science, University of Reading 3 R3 Environmental Technologies Ltd, Earley Gate, University of Reading 4 F. A. Bartlett Tree Expert Company Ltd, Earley Gate, University of Reading, Reading, Berkshire, England, UK</p>	<p><b>Quality of separately collected bioorganic municipal waste and BMW compost of Shenyang, China (210)</b> M.J. Gehring<sup>1</sup>, Feng Lei<sup>2</sup>, B. Raninger<sup>3</sup> and Li Rundong<sup>2</sup> 1 CIM Frankfurt a. Main, Germany 2 Institute for Clean Energy &amp; Environmental Engineering (ICEEE) &amp; Liaoning Key Laboratory for Clean Energy and Environmental Engineering (LNKLCE), Shenyang Institute of Aeronautical Engineering, Hangkong University, Shenyang, PR China 3 CIM Frankfurt a. Main, Germany; Mining University of Leoben, Waste Management and Landfill Technology Department, Leoben, Austria</p>	<p><b>Sludge composting: influence of the waste physical preparation on initial free air space, air permeability and specific surface (73)</b> C. Druihe, J.C. Benoist, P. Radigois, C. Teglia and A. Trémier Cemagref, UR GERE, France</p>
12.20 h	<p><b>Technical adaptations of a tunnel composting plant for the treatment of organic kitchen waste in Nordic countries (382)</b> C. Gareis, YTV Waste Management, Helsinki, Finland</p>	<p><b>Development of quality criteria and product certification for the output of anaerobic digestion of source segregated biodegradable waste in the UK (415)</b> N. Sweet, Waste and Resources Action Programme, Banbury WRAP, Banbury, UK</p>	<p><b>Is aerobic composting capable of degrading pharmaceuticals and other xenobiotics in sewage sludge? (369)</b> M. Andersen<sup>1</sup>, L. Clowes<sup>2</sup>, P.H. Petersen<sup>2</sup> and J. Kirkeby<sup>2</sup> 1 KomTek Solution ApS, 2 Ramboll Denmark A/S, Denmark.</p>	<p><b>Citizens' willingness to segregate waste at source</b> L. Rodic-Wiersma<sup>1</sup> and K. Gjoka<sup>2</sup> 1 Wageningen University and Research Centre, Wageningen, The Netherlands 2 Co-PLAN Institute for Habitat Development, Tirana, Albania</p>	<p><b>GMF-Gouda paddle dryer for thermal treatment of dewatered sludge, (120)</b> R. van Heijningen GMF Gouda bv, Waddinxveen, The Netherlands</p>
<b>12.40 h - 14.00 h Lunch break</b>					

Day 2 - Afternoon 14 <sup>th</sup> of October 2008					
	<b>Composting - process optimisation</b> (Room C222) Chair F. Michel	<b>Greenhouse gas emissions</b> (Room C226) Chair P. Lechner	<b>Soil management</b> (Room C221) Chair F. Amlinger	<b>Renewable energy - biogas</b> (Room C218) Chair J. M. Alvarez	<b>Mechanical biological treatment</b> (Room C217) Chair J. Pickering
14.00 h	<p>An integrated monitoring system for optimisation of biophile composting (289)</p> <p>M. Kriipsalu<sup>1</sup>, D. Nammari, M. Marques<sup>2</sup> and W. Hogland<sup>2</sup></p> <p>1 Estonian University of Life Sciences, Tallin, Estonia</p> <p>2 University of Kalmar, Sweden</p>	<p>Control of gas emissions during composting of municipal solid waste, municipal biowaste and industrial biowaste (271)</p> <p>H. Bacheley, C. Francou, M. Chevallier and M. Poitrenaud</p> <p>Veolia Environmental Services Research Center, Limay, France</p>	<p>Soilification: man-made-soil as new resource for agriculture, reforestation and landscaping (70)</p> <p>O. Pollmann, L. van Rensburg, Ch. Lange, and N. Engel,</p> <p>School of Environmental Science and Development, North-West University, Potchefstroom, South Africa</p>	<p>Estimating the nutrient degradation in biogas-batch processes (315)</p> <p>D. Banemann<sup>1</sup>, N. Engler<sup>1</sup>, M. Nelles<sup>1</sup>, L. Grosse<sup>2</sup>, F. Scholwin<sup>2</sup>, B. Fritsche<sup>2</sup>, J. Pröter<sup>2</sup> and M. Müller<sup>2</sup></p> <p>1 Department Waste Management, Institute of Environmental Engineering, Faculty of Agricultural and Environmental Sciences, University of Rostock, Rostock, Germany</p> <p>2 Department Biogas Technology, German Biomass Research Centre (Non-profit research company), Leipzig, Germany</p>	<p>Energy efficiency of mechanical biological treatment (330)</p> <p>W. Müller, R. Wallmann, K. Fricke and J. Hake Poyry Environment GmbH, Department IGW, Witzenhausen, Germany</p>
14.20 h	<p>Use of a gas tracing method to diagnose the effectiveness of the aeration system in a large scale composting process (148)</p> <p>A. Tremier<sup>1</sup>, F. Hénon<sup>1</sup>, G. Debenes<sup>2</sup>, J.L. Martel<sup>3</sup> and M. Quintard<sup>4</sup></p> <p>1 Cemagref, UR GERE, Rennes, France</p> <p>2 IMFT, Toulouse, France</p> <p>3 Suez-Environnement CIRSEE, Le Pecq, France</p> <p>4 IMFT, France</p>	<p>The situation with greenhouse gases from composting and digestion plants for biowaste (320)</p> <p>C. Cuhls, Gewitra Ingenieurgesellschaft für Wissenstransfer mbH, Hannover, Germany</p>	<p>Tracing compost amendment to soils by PTR-MS detection of volatile organic compounds (VOCs) (349)</p> <p>M. Seewald<sup>1</sup>, R. Schnitzhofer<sup>2</sup>, W. Singer<sup>2</sup>, M. Bonfanti<sup>1</sup>, A. Hansel<sup>2</sup>, H. Insam<sup>1</sup></p> <p>1 Universität Innsbruck Institut für Mikrobiologie, Working Group Microbial Ecology, Innsbruck, Austria.</p> <p>2 Ionimed Analytik GmbH, Innsbruck, Austria.</p>	<p>The synergies of co-digesting diverse waste streams and upgrading biogas for natural gas use in the Stavanger region in Norway (89)</p> <p>O. Tornes, IVAR IKS, Stavanger, Norway</p>	<p>Start-up and operation of aerobic and anaerobic biological waste treatment plants: biodegradation, methane production and operational safety (343)</p> <p>K. Kanning</p> <p>iba - Ingenieurbüro für Abfallwirtschaft und Energietechnik, Hannover, Germany</p>
14.40 h	<p>Design and construction of a replicated composting system at laboratory scale: technical characteristics and first homogeneity test (74)</p> <p>D. Pérez, I. Villar, S. Mato, I. Armesto and J.C. García</p> <p>Departamento de Ecología y Biología Animal, Facultad de Ciencias, Universidad de Vigo, Vigo, Spain</p>	<p>Greenhouse gas emissions during composting of lignocellulosic materials with different animal by-products (189)</p> <p>M.L.Cayuela<sup>1,2</sup>, T. Sinicco<sup>2</sup> and C. Mondini<sup>2</sup></p> <p>1 CEBAS-CSIC, Campus Universitario de Espinardo, Espinardo, Murcia, Spain</p> <p>2 CRA - RPS, Gorizia, Italy</p>	<p>Organic residue compost application for soil nutrient improvement in water-saving cultivation of the crops after rice (226)</p> <p>P. Chongpraditnun<sup>1</sup>, M. Chino<sup>2</sup>, M. Oda<sup>3</sup>, K. Nakamura<sup>3</sup> and O. Ito<sup>3</sup></p> <p>1 Soil Science Research Group, Agricultural Production Sciences Research and Development Office, Department of Agriculture, Bangkok, Thailand</p> <p>2 Retired Professor of Tokyo University and Akita Prefectural University, Japan</p> <p>3 Japan International Research Center for Agricultural Sciences, Tsukuba, Ibaraki, Japan</p>	<p>Solid-state fermentation of renewable resources in batch-operated systems – limitations and potentials (325)</p> <p>T. Haupt and E. Kraft,</p> <p>Chair of Biotechnology in Waste Management, Bauhaus-Universität Weimar, Germany</p>	<p>Vacuum-heat-drying for residual waste and biomasses (242)</p> <p>T. Bahr<sup>1</sup>, K. Ávila<sup>1</sup>, K. Fricke<sup>1</sup> and C. Widmer<sup>2</sup></p> <p>1 Leitweiß-Institute, Department of Waste and Resource Management, Technical University of Braunschweig, Germany</p> <p>2 AFAG Engineering GmbH, Basel, Switzerland</p>

Day 2 - Afternoon 14 <sup>th</sup> of October 2008					
	Composting - process optimisation (Room C222) Chair F. Michel	Greenhouse gas emissions (Room C226) Chair P. Lechner	Soil management (Room C221) Chair F. Amlinger	Renewable energy - biogas (Room C218) Chair J. M. Alvarez	Mechanical biological treatment (Room C217) Chair J. Pickering
15.00 h	Trace metal mass transfer during thermophilic composting (287) S. Yu <sup>1</sup> , D.M. McCartney <sup>1</sup> , W. Chen <sup>1</sup> , L. Zhou <sup>1</sup> and S. Abboud <sup>2</sup> 1 Department of Civil and Environmental Engineering, University of Alberta, Edmonton, Alberta, Canada 2 Alberta Research Council, Canada	Olive-mill waste management and greenhouse gases: a LCA of carbon emissions (90) I. Dimitriou <sup>1</sup> , M.A. Sánchez-Monedero <sup>2</sup> and E.I. Stentiford <sup>1</sup> 1 The School of Civil Engineering, The University of Leeds, Leeds, UK 2 CEBAS-CSIC, Campus Universitario de Espinardo, Murcia, Spain	The use of ground bark and wood chips from a short rotation plantation for on-farm composting: effect of tree species on the micronutrient content (313) B. Vandecasteele <sup>1</sup> , K. Willekens <sup>1</sup> , G. Du Laing <sup>2</sup> , A. De Vliegher <sup>1</sup> , F.M.G. Tack <sup>2</sup> and L. Carlier <sup>1</sup> 1 Institute for Agricultural and Fisheries Research (ILVO), Plant, Crop Husbandry and Environment, Merelbeke 2 Ghent University, Department of Applied Analytical and Physical Chemistry, Ghent, Belgium	The use of non-conventional biomasses in enhancing biogas production and reducing costs of AD plants at farm scale (183) A. Schievano, G. D'Imporzano and F. Adani Dipartimento di Produzione Vegetale, Università degli Studi di Milano, Milano, Italy	
15.20 h – 15.50 h Coffee/tea break					

Day 2 - Afternoon 14 <sup>th</sup> of October 2008					
	Composting process control and specific waste streams (Room C222) Chair A. Silveira	Composting - gaseous & odour emissions from (Room C226) Chair W. Bidlingmaier	Soil management (Room C221) Chair G. Füleky	Renewable energy - feasibility (Room C218) Chair M. Ott	Residual waste and landfilling (Room C217) Chair F. Adani
15.50 h	Investigation of the microbial population dynamics during the waste treatment, for the evaluation of the biological degradability by means of impedance analytics (130) D. Weichgrebe and P. Stopp Leibniz University of Hannover, Institute of Water Quality and Waste Management (ISAH), Hannover, Germany	Development of a model for forecasting the odour emissions from composting plants (141) K. Harba and W. Bidlingmaier Waste Management, Bauhaus-Universität Weimar, Germany	Effect of urban sewage sludge compost on soil bacterial biodiversity and enzymatic activities (182) M. Rodríguez-Díaz <sup>1</sup> , E. Robles <sup>1</sup> , A.L. Pérez-Lomas <sup>2</sup> , M. Molina-Muñoz, C. Cortés-Lorenzo <sup>1</sup> , J. González-López <sup>1</sup> , University of Granada 1 Water Research Institute, University of Granada, Spain 2 Department for Edaphology, University of Granada, Spain	Feasibility study for a biohydrogen production plant (254) R. Brunstermann <sup>1</sup> and M. Krupp <sup>2</sup> 1 University of Duisburg-Essen, Campus Essen, Essen, Germany 2 FZ Jülich, PT ETN, Germany	Combustion characteristics of RDF derived from source separated MSW in Shenyang, China (298) R. Li <sup>1</sup> , B. Raninger <sup>1,2</sup> , M. Sun <sup>1</sup> , M. Gehring <sup>1,3</sup> , Lei Feng <sup>1</sup> , Y. Li <sup>1</sup> 1 Institute for Clean Energy and Environmental Engineering (ICEEE) & Liaoning Key Laboratory of Clean Energy & Environmental Engineering (LNKLCE), Shenyang Institute of Aeronautical Engineering (Hangkong University), P.R. China 2 CIM, Frankfurt a. Main, Germany & Mining University of Leoben, Waste Management and Landfill Technology Department, Leoben, Austria 3 CIM, Frankfurt a. Main, Germany

**Day 2 - Afternoon      14<sup>th</sup> of October 2008**

	<b>Composting process control and specific waste streams</b> (Room C222) Chair A. Silveira	<b>Composting - gaseous &amp; odour emissions from</b> (Room C226) Chair W. Bidlingmaier	<b>Soil management</b> (Room C221) Chair G. Füleky	<b>Renewable energy – feasibility</b> (Room C218) Chair M. Ott	<b>Residual waste and landfilling</b> (Room C217) Chair F. Adani
16.10 h	<p>Recycling and upgrading of bone meal for environmentally friendly crop protection and phosphate fertilisation (219)</p> <p>J. Postma<sup>1</sup>, E. Nijhuis<sup>1</sup>, F. Clematis<sup>1,2</sup> and E. Someus<sup>3</sup></p> <p>1 Plant Research International, Wageningen, the Netherlands 2 University of Turin, Centre of Competence for the innovation in the Agro-environmental sector, Grugliasco, Italy 3 Terra Humana Clean Technology Development, Engineering and Manufacturing Ltd., Budapest, Hungary</p>	<p>Air emissions from composting facilities in California (280)</p> <p>G. M. Savage and L. F. Diaz CalRecovery, Inc., USA</p>	<p>Changes in soil microbial community composition using cellular markers (PLFA) in soils amended with olive-mill waste composts (200)</p> <p>M.A. Sánchez-Monedero<sup>1</sup>, D. Elhottová<sup>2,3</sup>, A. Roig<sup>1</sup> and M. Šimek<sup>2,3</sup></p> <p>1 CEBAS-CSIC, Campus Universitario de Espinardo, Murcia, Spain 2 The Biology Centre of the Academy of Sciences of the Czech Republic, Institute of Soil Biology, České Budějovice 3 Faculty of Biological Sciences, University of South Bohemia, České Budějovice, Czech Republic</p>	<p>Oregon anaerobic digester development (82)</p> <p>D. Foor, ECOregon, Eugene, OR, USA</p>	<p>Reduction of greenhouse gas emissions by aerobic treatment of old landfills (333)</p> <p>G. Rettenberger, Ingenieurgruppe RUK, Trier, Germany</p>
16.30 h	<p>Variation in Ligninocellulolytic activities in dual and mixed cultures involving <i>Pleurotus eous</i> and <i>pleurotus citrinopileatus</i> on cotton stalk (383)</p> <p>Balaji, P.<sup>1</sup>, V. Rajapandy<sup>2</sup> and M. Eyini<sup>1</sup></p> <p>1 Research Centre in Botany, Thiagarajar College (Autonomous), Madurai – 625 009, Tamil Nadu, India 2 The Head (R &amp; D), Microbiology Division, K.S. Agrochemicals, Bangalore, Karnataka, India.</p>	<p>Methods for quantifying gaseous emissions from full-scale windrow composting of garden waste (88)</p> <p>J.K. Andersen, A. Boldrin, Th. H. Christensen and Ch. Scheutz Department of Environmental Engineering, DTU, Technical University of Denmark, Lyngby, Denmark</p>	<p>Assessment of the agronomic value of a sewage sludge compost applied on wine-growing soils (224)</p> <p>L. Gontier<sup>1</sup>, D. Caboulet<sup>1</sup>, C. Lhoutellier<sup>2</sup> and B. Goral<sup>3</sup></p> <p>1 Institut Français de la Vigne et du Vin, Domaine de l'Espiguette, Le Grau du Roi 2 CRPE – VEOLIA Environnement R&amp;D, Limay 3 VEOLIA Eau, Montpellier, France</p>	<p>Guidelines on feasibility assessment of generating renewable energy from organic waste and biomass in developing countries (355)</p> <p>A. Karagiannis<sup>1</sup>, M. Wittmaier<sup>2</sup>, S. Langer<sup>2</sup> and A. Malamakis<sup>1</sup></p> <p>1 Laboratory of Heat Transfer and Environmental Engineering, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece 2 University of Applied Sciences, Institut für Kreislaufwirtschaft GmbH, Bremen, Germany</p>	<p>Does mechanical biological pre-treatment aid compliance with EU and UK waste reduction targets and facilitate low environmental impact landfills? (428)</p> <p>J. Pickering<sup>1</sup>,* W.Müller<sup>2</sup></p> <p>1 Organic Resource Agency Ltd., Malvern, Worcestershire, UK 2 IGW – Ingenieurgesellschaft Witzenhausen Fricke &amp; Turk GmbH, Witzenhausen, Germany</p>
16.50 h	<p>Composting of vegetal residues in areas affected by civil works (221)</p> <p>J. Ainchil<sup>1</sup>, J. Dosta<sup>2</sup>, J. Mata-Álvarez<sup>2</sup></p> <p>1 FCC Construcción, Barcelona, Spain 2 Department of Chemical Engineering, University of Barcelona, Barcelona, Spain</p>	<p>Reducing odour by process control in composting of food waste with low pH (199)</p> <p>C. Sundberg<sup>1</sup>, M. Romantshuk<sup>2</sup>, H. Jönsson<sup>1</sup>, S. Kauppi<sup>2</sup>, E. Norgaard<sup>3</sup> and S. Smårs<sup>1</sup></p> <p>1 Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden 2 Dept. Ecological and Environmental Sci., University of Helsinki, Finland 3 Norsk Jordforbedring AS, Norway</p>	<p>An easy incubation method for measuring nitrogen mineralization from soils and organic residues (354)</p> <p>T. Teixeira<sup>1</sup>, C.M d S Cordovil<sup>1</sup> and A. Kokkonen<sup>2</sup></p> <p>1 Inst. Sup Agronomia, Dep. Química Agrícola e Ambiental, Lisboa, Portugal 2 MTT Agrifood Research Finland, Plant Production Research, Soil and Plant Nutrition, Jokioinen, Finland</p>		<p>A review on emission characteristics from refuse-derived fuel incineration (111)</p> <p>Gongming Zhou, Zhenzhen Guan, Tongji University, China</p>

**17.10 End of the day**

**18.00 h Common Dinner at the WICC Hotel in Wageningen (www.wicc.nl)**

## Day 3 - Morning

15<sup>th</sup> of October 2008

	<b>ECN Practitioners Session Part 1</b> (Room C222) Chair J. Barth	<b>Product quality</b> (Room C226) Chair H. Insam	<b>Life cycle assessment LCA</b> (Room C221) Chair R. Widmann	<b>Renewable energy</b> (Room C218) Chair G. Zeeman	<b>Peat replacement</b> (Room C217) Chair P. Wallace
9.00 h	Implementation of the Landfill Directive and EU waste policy by means of proper management of biowaste: trends, experiences and regulatory aspects (421) E. Favoino, Scuola Agraria del Parco di Monza, Italy	PCR quantification of Antibiotic resistance genes in composted and liquid stored manures (231) F.C. Michel Jr. <sup>1</sup> , Jing Chen <sup>2</sup> , Lingling Wang <sup>2</sup> , S. Sreevatsan <sup>3</sup> , M. Morrison <sup>2,4</sup> and Zhongtang Yu <sup>2</sup> 1 Departments of Food, Agricultural & Biological Engineering, The Ohio State University, Ohio Agricultural Research And Development Center (OARDC), Wooster, OH, USA 2 Department of Animal Sciences, The Ohio State University, Ohio Agricultural Research And Development Center (OARDC), Wooster, OH, USA 3 Department of Veterinary Population Medicine, University of Minnesota, Center For Animal Health And Food Safety, St. Paul, MN, USA 4 CSIRO Livestock Industries, St. Lucia, Queensland, Australia	Biogenic carbon accounting in LCA modelling: comparison of different criteria (311) Th. H. Christensen <sup>1</sup> , E. Gentil <sup>1</sup> , A. Boldrin <sup>1</sup> , A.W. Larsen <sup>1</sup> and M.Z. Hauschild <sup>2</sup> 1 Department of Environmental Engineering, Technical University of Denmark, Kgs. Lyngby, Denmark 2 Department of Management Engineering, Technical University of Denmark, Kongens Lyngby, Denmark	An integrated innovative project for sustainable production of bioethanol, methane and compost from sweet potatoes (417) M. de Bertoldi, and W. Bidlingmaier 1 Department of Industrial Microbiology, University of Udine, Italy 2 Prof. Dr., Bauhaus-Universität Weimar, Germany	Application of high density digestate of pig manure in peat mixtures for use as potting soil (159) C. Blok <sup>1</sup> and J. Broeze <sup>2</sup> 1 Wageningen University and Research Centre, Greenhouse Horticulture, Bleiswijk, Wageningen, The Netherlands 2 Wageningen University and Research Centre, Agrotechnology & Food Sciences Group, Wageningen, The Netherlands
9.20 h	Choosing the right option for the treatment of biowaste: decision tools (423) K. Schleiss, Umwelt- und Kompostberatung, Grenchen, Switzerland	Faecal indicators and pathogenic bacteria in USA market ready green composts and relation to management parameters (106) W. F. Brinton <sup>1</sup> , Craig Blewett <sup>2</sup> 1 Woods End Laboratories, Inc. USA 2 Dow AgroSciences LLC, USA	LCA-modelling (EASE-WASTE) of growth media preparation: comparison between peat and compost (306) A. Boldrin and Th. H. Christensen Department of Environmental Engineering, Technical University of Denmark, Kgs. Lyngby, Denmark	Biogas power plants and organic waste for energy regulating (291) M. Tigges, J. Bendfeld, M. Splett and J. Voss Department of Sustainable Energy Concepts, University of Paderborn, Paderborn, Germany	Research leads to building of 100,000 tonne compost facility for peat reduction (211) M. Prasad <sup>1</sup> , W. R. Carille <sup>1</sup> and M. J. Maher <sup>2</sup> 1 Bord na Mona Research and Development Centre 2 Kinsealy Research Centre, Ireland
9.40 h	Climate Change - can soil make a difference? (422) E. Favoino Scuola Agraria del Parco di Monza, Italy	Regulation (EU) No 1774/2002: practical experiences with process validation of biowaste composting and anaerobic digestion in the Netherlands (368) W. Elsinga, Elsinga Policyplanning and Innovation, Ermelo, The Netherlands	Life Cycle Assessment of use cascades for animal fat and used cooking oil (278) R. Bock, T. Dettmer, G. Öhlschläger, A. Zein and Ch. Herrmann Institute of Machine Tools and Production Technology, Technical University Braunschweig, Braunschweig, Germany	Developing a sustainable landfilling framework for Greece: assessment of the bio-methane potential from sanitary landfills (351) A. Karagiannidis and T. Tsatsarelis Laboratory of Heat Transfer and Environmental Engineering, Department of Mechanical Engineering, Aristotle University, Thessaloniki, Greece	Torrefied grass fibres as a substitute for peat in potting soil (214) R. Trifonova <sup>1</sup> , J. Postma <sup>1</sup> , J.J.M.H. Ketelaars <sup>1</sup> and J.D. van Elsas <sup>2</sup> 1 Plant Research International, Wageningen, The Netherlands 2 Microbial Ecology Department, Rijksuniversiteit Groningen, Haren, The Netherlands
10.00 h	Status and trends of biowaste composting in Europe (405) M. Broegger and J. Barth 1 Solum Group, Hedehusene, Denmark 2 European Compost Network ECN/ORBIT e.V., Weimar, Germany	Improvement of the quality of MSW compost (272) M. Kallassy <sup>1</sup> , C. Francou <sup>2</sup> , B. Efrementko <sup>1</sup> , M. Le Villio-Poitrenaud <sup>2</sup> 1 VEOLIA Environmental Services, Nanterre 2 VEOLIA Environment – Research Centre for Waste and Energy, Limay, France	LC-CO <sub>2</sub> evaluation of integrated anaerobic digestion process for food waste treatment in Japan (165) K. Fukushima <sup>1</sup> , N. Nagao <sup>1</sup> , Ch. Niwa <sup>2</sup> and T. Toda <sup>1</sup> 1 Department of Environmental Engineering for Symbiosis, Faculty of Engineering, Soka University, Tokyo, Japan 2 Institute of Technology, SHIMIZU COMPANY, Tokyo, Japan	Anaerobic digestion, biogas and biofuels - background, situation and potential in Germany (414) M. Ott <sup>1</sup> , C. da Costa Gomez <sup>2</sup> 1 BTA International GmbH, Pfaffenhofen, Germany 2 German Biogas Association, Freising, Germany*	Potential peat replacement by vermicompost as by-product of the earthworm industry (110) L. Campos-Mota <sup>1</sup> and C. Blok <sup>2</sup> 1 Colegio de Postgraduados, Córdoba, Spain 2 Wageningen University and Research Centre, Greenhouse Horticulture, Bleiswijk, The Netherlands

**Day 3 - Morning 15<sup>th</sup> of October 2008**

	<b>ECN Practitioners Session Part 1</b> (Room C222) Chair J. Barth	<b>Product quality</b> (Room C226) Chair H. Insam	<b>Life cycle assessment LCA</b> (Room C221) Chair R. Widmann	<b>Renewable energy</b> (Room C218) Chair G. Zeeman	<b>Peat replacement</b> (Room C217) Chair P. Wallace
10.20 h	Anaerobic digestion in Europe - state-of-the-art 2008 (410) L. De Baere and B. Mattheeuws, Organic Waste Systems OWS n.v., Gent, Belgium	Development of quality assurance and quality characteristics of compost and digestate in Germany (241) S. Siebert, M. Thelen-Jüngling and B. Kehres Bundesgütegemeinschaft Kompost e.V., Köln, Germany	Environmental analysis of digestion of vegetable, fruit and garden VFG waste (380) H. van Ewijk IVAM, The Netherlands	Investigating the possibility of using waste cooking oil from the university student's dining facilities as an energy source (105) J. Pumwa, Mechanical Engineering Department, The Papua New Guinea University of Technology, Papua New Guinea	Compost as peat and bark substitute: parameters for successful application (107) W. F. Brinton Woods End Laboratories, Inc., USA
<b>10.40 h - 11.10 h Coffee/tea break</b>					

**Day 3 - Morning 15<sup>th</sup> of October 2008**

	<b>ECN Practitioners Session Part 2</b> (Room C222) Chair E. Favoino	<b>Product quality</b> (Room C226) Chair P. Sessink	<b>Climate change</b> (Room C221) Chair M. Kranert	<b>Renewable energy – hydrogen production</b> (Room C218) Chair M. de Bertoldi	<b>Facility impact on environment</b> (Room C217) Chair P. Lechner
11.10 h	Mechanical biological treatment MBT and its role in Europe (420) W. Müller, Poyry Environment GmbH, Department IGW, Witzenhausen, Germany	Effects of compost and digestate on environment and plant production – results of two research projects (335) J.G. Fuchs <sup>1</sup> and K. Schleiss <sup>2</sup> 1 Forschungsinstitut für biologischen Landbau (FiBL), Frick, Switzerland 2 Umwelt- und Kompostberatung, Grenchen, Switzerland	Climate change and its impact: present and future (407) A.J.H. van Vliet Environmental Systems Analysis Group, Wageningen University and Research Centre, Wageningen, The Netherlands	Anaerobic fermentation of dairy wastewater for biological hydrogen production (166) Seung Gun Won and A. Lau Department of Chemical and Biological Engineering, University of British Columbia, Vancouver, BC, Canada	An analysis of employee exposure to organic dust at large-scale composting facilities (337) P Sykes, J A Allen, J D Wildsmith and K P Jones University of Wales Institute Cardiff (UWIC), Cardiff School of Health Sciences, Cardiff, UK
11.30 h	Greenhouse gas emissions from backyard and windrow composting (401) F. Amlinger and S. Peyr KEB Compost - Consulting & Development, Perchtoldsdorf, Austria	Sludge and refuse compost quality: influence of the composting and maturation processes on the convenience of the final end product with the French new quality standards (202) J.-L. Martel <sup>1</sup> , N. Moretti <sup>1</sup> , M. Allain <sup>1</sup> , A. Budka <sup>2</sup> and J.P. Harry <sup>3</sup> 1 CIRSEE, Research Centre of Suez Environment, Le Pecq 2 SITA France, Nanterre 3 TERRALYS, Gargenville, France	Biomass conversion from selected collected municipal waste – CO <sub>2</sub> potential of VFG waste (76) J. van Haeff, Essent Milieu, Haelen, The Netherlands	Evaluation of text set-up for combined bio-hydrogen and methane production by dark fermentation at mesophilic conditions (285) R. Brunstermann and R. Widmann University of Duisburg-Essen, Campus Essen, Germany	Landfill water treatment plants permeates v EU Directive 2000/60/CE: a case study of PAHs (71) V. Lebrun, O. le Bussy, A. Kheffi, C. Collart, Th. Laloux and V. Salpéteur ISSEP - Institut Scientifique du Service Public, Waste department, Liège, Belgium

**Day 3 - Morning      15<sup>th</sup> of October 2008**

	<b>ECN Practitioners Session Part 2</b> (Room C222) Chair E. Favoino	<b>Product quality</b> (Room C226) Chair P. Sessink	<b>Climate change</b> (Room C221) Chair M. Kranert	<b>Renewable energy – hydrogen production</b> (Room C218) Chair M. de Bertoldi	<b>Facility impact on environment</b> (Room C217) Chair P. Lechner
11.50 h	<p>Implementation of the Animal By-products Regulation EU 1774 in the Member States (402)</p> <p>F. Amlinger<sup>1</sup> and P. Foster<sup>2</sup></p> <p>1 KEB Compost - Consulting &amp; Development, Perchtoldsdorf, Austria</p> <p>2 CRE Composting Association of Ireland Teo, Sligo, Ireland</p>	<p>Influence of organics amendments on quality of poultry manure compost (113)</p> <p>M.E. Silva<sup>1</sup>, L.T. Lemos<sup>1</sup>, A.C. Cunha-Queda<sup>2</sup> and O.C. Nunes<sup>3</sup></p> <p>1 Departamento de Ambiente, Escola Superior de Tecnologia de Viseu, Portugal</p> <p>2 Departamento de Química Agrícola e Ambiental, Instituto Superior de Agronomia, Universidade Técnica de Lisboa, Portugal</p> <p>3 LEPAE-Departamento de Engenharia Química, Faculdade de Engenharia, Universidade do Porto, Portugal</p>	<p>Increasing CO<sub>2</sub>-reductions related to source separation of municipal biowaste in the Netherlands (65)</p> <p>W. Elsinga</p> <p>Elsinga Policyplanning and Innovation, Ermelo, The Netherlands</p>	<p>Organic solid waste conversion into hydrogen (203)</p> <p>D. Ramirez-Saenz, C. Guerrero-Barajas and I. Garcia-Peña</p> <p>Unidad Profesional Interdisciplinaria de Biología y Tecnología - Instituto Politécnico Nacional, Col. Barrio la Laguna Ticomán, México</p>	<p>Determining whether estimated spore release rates for <i>Aspergillus fumigatus</i> are compatible with their measured growth rates in composting systems (118)</p> <p>L.A. Fletcher<sup>1</sup>, E.I. Stentiford<sup>1</sup> and A.A. Kemp<sup>2</sup></p> <p>1 School of Civil Engineering, University of Leeds, Leeds, UK</p> <p>2 The Rolton Group Ltd, Higham Ferrers, Northants, UK</p>
12.10 h	<p>Separate collection for biowaste: tools and cost-effective strategies for operational and economical optimisation (411)</p> <p>D. Hogg<sup>1</sup> and E. Favoino<sup>2</sup></p> <p>1 Eunomia Research &amp; Consulting, Bristol, UK</p> <p>2 Scuola Agraria del Parco di Monza, Italy</p>	<p>Physical structure is more important in determining leachate properties of waste-derived organic matter than 'total' contents (249)</p> <p>H.O. Bishop<sup>1</sup>, R. Wheeler<sup>2</sup>, S. Nortcliff<sup>1</sup> and R. Cameron<sup>2</sup></p> <p>1 Department of Soil Science, School of Human and Environmental Sciences, University of Reading, Whiteknights, Reading</p> <p>2 Centre for Horticulture and Landscape, School of Biological Sciences, University of Reading, Whiteknights, Reading, UK</p>	<p>Greenhouse gas savings from biological treatment and application of compost (334)</p> <p>K. Schleiss, Umwelt- und Kompostberatung, Grenchen, Switzerland</p>	<p>Enhancement of biohydrogen production by brewery waste yeast addition through dark fermentation (228)</p> <p>A. Supasinsathit and C. Kositanon</p> <p>Inter-department of Environmental Science, Graduate School, Chulalongkorn University, Bangkok, Thailand</p>	<p>Evaluating the interaction of transport mechanisms through dairy manure to determine the effects on ammonia and greenhouse gas emissions (314)</p> <p>M.K. Williams, T.L. Richard and E.F. Wheeler</p> <p>Department of Agricultural and Biological Engineering, Pennsylvania State University University Park, PA, USA</p>
12.30 h	<p>Quality assurance for compost and digestate in Europe - Essentials, standardisation and the ECN European approach (413)</p> <p>S. Siebert<sup>1,2</sup> J. Barth<sup>2</sup>,</p> <p>1 Bundesgütegemeinschaft Kompost BGK, Köln, Germany</p> <p>2 European Compost Network ECN/ORBIT e.V., Weimar, Germany</p>	<p>Long-term UK field trials and the manipulation of composts to reduce potential negative impact (252)</p> <p>P. Wallace, Enviro Consulting Limited, London, UK</p>		<p>Sewage enriched by kitchen waste: potential for hydrogen production by bioprocesses (332)</p> <p>D. Arslan, B. Baeyens, B. Calli, H. De Wever, L. Diels and K. Vanbroekhoven,</p> <p>VITO, Mol, Belgium</p>	<p>Enhancement of biohydrogen production by brewery waste yeast addition through anaerobic fermentation (228)</p> <p>SUPASINSATHIT, A. and KOSITANON, C.</p> <p>Inter-department of Environmental Science, Graduate School, Chulalongkorn University, Bangkok, Thailand</p>
<b>12.40 h - 14.00 h Lunch break</b>					

**Day 3 Afternoon 15<sup>th</sup> of October 2008**

	<b>ECN Practitioners Session Part 3 (Room C222) Chair F. Amlinger</b>	<b>Product quality (Room C226) Chair T. Gea</b>	<b>Risk assessment (Room C221) Chair L.Rodic-Wiersma</b>	<b>Biobased economy and biorefinery (Room C218) Chair S. Moolenaar</b>	<b>Emission reduction from landfills (Room C217) Chair I. Körner</b>
14.10 h	Necessary additional tools to close the organics recycling route - the successful example of UK (416) N. Sweet, Waste and Resources Action Programme WRAP, Banbury, UK	Properties of compost and liquid compost making from fresh-cut vegetable residues (201) s. Phoolphundh, K. Kaosalniratisai, P. Lipimongkol and S. Choomuang Department of Microbiology, Faculty of Science, King Mongkut's University of Technology Thonburi, Thailand	The biosecurity of on-farm mortality composting (339) K. Wilkinson <sup>1</sup> , T.D. Glanville <sup>2</sup> , K. Stanford <sup>3</sup> and J. Biala <sup>4</sup> 1 Department of Primary Industries, Parkville, Victoria, Australia 2 Department of Agricultural and Biosystems Engineering, Iowa State University, USA 3 Alberta Agriculture and Rural Development, Lethbridge, Alberta, Canada 4 The Organic Force, Wynnum, Queensland, Australia	Secondary chemical building blocks from novel biorefining of agrifood wastes for future sustainable bio-based industrial chemistry (279) D. Zanichelli, E. Ansaloni and L. Setti Department of Industrial Chemistry and Materials, Bologna University, Bologna, Italy	Future prospects of Clean Development Mechanism CDM framework to develop a sustainable landfill system in Bangladesh to replace open dumping (246) M. Alamgir <sup>1</sup> , W. Bidlingmaier <sup>2</sup> , Q.S. Hossain <sup>1</sup> , K.M. Mohiuddin <sup>1</sup> and M.R. Islam <sup>1</sup> 1 Department of Civil Engineering, Khulna University of Engineering & Technology (KUET), Khulna, Bangladesh 2 Waste Management Division, Bauhaus University Weimar, Weimar, Germany
14.30 h	End-of-waste standards for compost as a legal tool of the EU to promote recycling markets - methodology and status (403) J. Barth and F. Amlinger 1 European Compost Network ECN/ORBIT e.V., Weimar, German 2 KEB Compost - Consulting & Development, Perchtoldsdorf, Austria	Maturity index of a household waste compost: intensity of in vitro residual phytotoxicity on tomato ( <i>Solanum aetiopicum</i> ) (95) M.A. Seck <sup>1</sup> and C. Lo <sup>2</sup> 1 Ecole Supérieure Polytechnique, Université Cheikh Anta Diop, Dakar-Fann, Dakar, Sénégal 2 Centre pour le Développement de l'Horticulture, CDH / ISRA, Dakar, Sénégal	Batch system for study of Cr(VI) biosorption by dried waste activated sludge (262) M. Farzadkia <sup>1</sup> , M. Gholami <sup>1</sup> , R. Darvishi Cheshmeh Soltani <sup>1</sup> , K. Yaghmaeian <sup>2</sup> and Gh. Shams Khorramabadi <sup>3</sup> 1 University of Medical Sciences, Tehran 2 Semnan University of medical sciences 3 Lorestan University of Medical Sciences, Tehran, Iran	Selective inhibition of methanogens for increasing ethanol production from acetic acid by mixed cultures (127) K.J.J. Steinbusch, H.V.M. Hamelers and T. Arvaniti Sub-department of Environmental Technology, Wageningen University and Research Centre, Wageningen, The Netherlands	Degradation of MSW during landfilling in China and its impact on GHG Emission Reduction (175) B. Raninger <sup>1</sup> , Rundong Li <sup>2</sup> , Lei Feng <sup>2</sup> , Hai-lian Zhang <sup>2</sup> 1 CIM Frankfurt a. Main, Germany; Mining University of Leoben, Waste Management and Landfill Technology Department, Leoben, Austria 2 Institute for Clean Energy & Environmental Engineering (ICEEE) & Liaoning Key Laboratory for Clean Energy and Environmental Engineering (LNKLE), Shenyang Institute of Aeronautical Engineering, Hangkong Univ., Shenyang, China
14.50 h	The manufacture of peat-reduced compost products in the day-to-day practice of a composting plant (419) M. Bieker, Humus & Erdenkontor GmbH, Witzenhausen, Germany	Lime amendment on organic matter decomposition and odour emission during food waste composting (323) J. W. C. Wong, Z. Y. Zhao, and S.M. Lam, Hong Kong Baptist University, China	Comparative study on performance of anaerobic digestion of infectious biomedical waste and co-digestion of infectious bio-medical waste with organic fractions of municipal solid waste (259) S. Jayanthi <sup>1</sup> , E. Sarojini <sup>2</sup> , S.Jothi Venkatraman <sup>3</sup> and K.Prashanthini <sup>4</sup> 1 Department of Civil Engineering, Government College of Technology, Coimbatore, 2 Department of Civil Engineering, Sri Ramakrishna Engineering College, Coimbatore 3 Department of Civil Engineering, Erode Sengunthar College of Technology, Erode 4 Consultant, Biomedical waste Management in Mumbai Hospitals, Mumbai, India	Comparative analysis of the effect of catalyst on biodiesel production (151) M.Y. Mensah <sup>1</sup> , E.M. Kwofie <sup>2</sup> and C. Kotey <sup>2</sup> 1 Department of Chemical Engineering, college of engineering, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana 2 Department of Energy Systems Engineering, School of Engineering, Koforidua Polytechnic, Koforidua, Ghana	Air monitoring around MSW sanitary landfills in Wallonia: Feedback of ten years field measurements (69) C. Collart <sup>1</sup> , V. Lebrun <sup>1</sup> , S. Fays <sup>1</sup> , V. Salpêtre <sup>1</sup> , J. Nicolas <sup>2</sup> and A.-C. Romain <sup>2</sup> 1 ISSeP - Institut Scientifique du Service Public, Waste department, Liège, Belgium 2 University of Liège, Research Group Environmental Monitoring, Arlon, Belgium

**Day 3 Afternoon 15<sup>th</sup> of October 2008**

	<b>ECN Practitioners Session Part 3</b> (Room C222) Chair F. Amlinger	<b>Product quality</b> (Room C226) Chair T. Gea	<b>Risk assessment</b> (Room C221) Chair L.Rodic-Wiersma	<b>Biobased economy and biorefinery</b> (Room C218) Chair S. Moolenaar	<b>Emission reduction from landfills</b> (Room C217) Chair I. Körner
15.10 h	Markets for compost and digestate in Europe - situation, requirements, future developments (409) J. Barth, European Compost Network ECN/ORBIT e.V.; Weimar, Germany	Status of the European Standardisation on analytical methods for the characterization of compost quality (404) A. Baumgarten, Agency for Health and Food Safety, Vienna, Austria		Towards a bio-based economy: co-digestion within the North Sea Bio Energy project (308) H.J. van Dooren <sup>1</sup> , H. de Boer <sup>1</sup> , G. Knobbe <sup>2</sup> , D. Durksz <sup>3</sup> , M. Boekhoff <sup>1</sup> and G. Meijer <sup>1</sup> 1 Animal Sciences Group (ASG), Wageningen University and Research Centre 2 Province of Fryslân 3 Nij Bosma Zathe, ASG, Wageningen University and research Centre, Wageningen, The Netherlands	Implementation criteria for biocover construction of landfills (424) M. Huber-Humer and P. Lechner Institute of Waste Management, BOKU-University, Vienna, Austria

**15.30 h - 16.00 h Coffee/tea break**

**16.00 – 17.00 h Plenary session with experts about "The Future of Organic Waste as a Resource" - Facilitator: Prof. Dr. W. Bidlingmaier**

# ORBIT 2008 Conference Proceedings

Arranged by presentation numbers of the programme.

	Presentation title	Sessions
001	Key Note Speake Prof. Marco de Bertoldi - Receycling of nutrients the receycling of nutrients by mean of organic residues	Opening Session
002	Key Note Speaker Louise E.M. Vet - The challenge: from ecology to economy	Opening Session
003	Key Note Speaker Michael Braungart - 'Composting and the Green House Effect: How to Support the Biological Cycle'	Opening Session
004	Key Note Speaker Bartosz Zambrzycki - EU policies and strategies for EU policies and strategies for organic waste	Opening Session
065	Increasing CO2-reductions related to source separation of municipal biowaste in the Netherlands	<u>Climate change</u>
068	An evaluation of fertiliser requirement during establishment of Salix cv. Tora hardwood rods in WDOS and a brownfield spoil	<u>Benefits of compost, digestate and sludge use</u>
069	Air monitoring around MSW sanitary landfills in Wallonia: Feedback of ten years field measurements	<u>Emission reduction from landfills</u>
070	Soilification: man-made-soil as new resource for agriculture, reforestation and landscaping	<u>Soil management</u>
071	Landfill water treatment plants permeates v EU Directive 2000/60/CE: a case study of PAHs	<u>Facility impact on environment</u>
072	Compost is a product in Austria	<u>Policy and strategy in the EU</u>
073	Sludge composting: influence of the waste physical preparation on initial free air space, air permeability and specific surface	<u>Sewage sludge - treatment and reuse</u>
074	Design and construction of a replicated composting system at laboratory scale: technical characteristics and first homogeneity test	<u>Composting - process optimisation</u>
076	Biomass conversion from selected collected municipal waste CO2 potential of VFG waste	<u>Climate change</u>
078	Organised source separation of household waste pilot study of university staff residences in Kumasi, Ghana	<u>Separate collection – public awareness</u>
082	Oregon anaerobic digester development	<u>Renewable energy – feasibility</u>
086	Bioconversion of organic waste into organic manure by adopting different technologies	<u>Composting in developing countries</u>
087	An analysis and compilation of respiration data found in different organic solid wastes	<u>Composting - microbial environment</u>
088	Methods for quantifying gaseous emissions from full-scale windrow composting of garden waste	<u>Composting- gaseous &amp; odour emissions</u>
089	The synergies of co-digesting diverse waste streams and upgrading biogas for natural gas use in the Stavanger region in Norway	<u>Renewable energy - biogas</u>
090	Olive-mill waste management and greenhouse gases: a LCA of carbon emissions	<u>Greenhouse gas emissions</u>
095	Maturity index of a household waste compost: intensity of in vitro residual phytotoxicity on tomato (Solanum aetiopicum)	<u>Product quality</u>
098	Situation of energy from public waste in Hungary	<u>Energy recovery from biomass</u>
101	Modelling and control for anaerobic co-digestion of agricultural waste	<u>Anaerobic digestion – optimisation</u>
105	Investigating the possibility of using waste cooking oil from the university student s dining facilities as an energy source	<u>Renewable energy</u>
106	Faecal indicators and pathogenic bacteria in USA market ready green composts and relation to management parameters	<u>Product quality</u>
107	Compost as peat and bark substitute: parameters for succesful application	<u>Peat replacement</u>
109	MODULAARE integrated modules for wastewater purification, waste treatment and energy recovery in tourist resorts	<u>Anaerobic digestion - combined aerobic/anaerobic</u>
110	Potential peat replacement by vermicompost as by-product of the earthworm industry	<u>Peat replacement</u>
113	Influence of organics amendments on quality of poultry manure	<u>Product quality</u>

	compost	
118	Determining whether estimated spore release rates for <i>Aspergillus fumigatus</i> are compatible with their measured growth rates in composting systems	<u>Facility impact on environment</u>
120	GMF-Gouda paddle dryer for thermal treatment of dewatered sludge	<u>Sewage sludge - treatment and reuse</u>
126	Bacterial community succession during a start-up period of large-scale composting reactor	<u>Composting - microbial environment</u>
127	Selective inhibition of methanogens for increasing ethanol production from acetic acid by mixed cultures	<u>Biobased economy and biorefinery</u>
128	Feasibility of electricity generation from municipal solid wastes in Ghana - A waste management technology	<u>Energy recovery from biomass</u>
130	Investigation of the microbial population dynamics during the waste treatment, for the evaluation of the biological degradability by means of impedance analytic	<u>Composting process control and specific waste streams</u>
131	Optimization of an anaerobic/aerobic composting process in a pilot plant	<u>Poster</u>
134	Reutilisation of green waste - a comparison of its recycling for energy generation purposes versus composting and peat replacement, with particular consideration of the CO <sub>2</sub> Balance	<u>Benefits of compost, digestate and sludge use</u>
137	Requirements for mobile anaerobic digestion units for long distance operations	<u>New developments</u>
139	Extracellular enzyme analysis to assess composting processes	<u>Composting process</u>
141	Development of a model for forecasting the odour emissions from composting plants	<u>Composting - gaseous &amp; odour emissions</u>
142	Ecological sanitation projects from around the world and their links with the solid waste sector	<u>New developments</u>
143	Evidence of mass transfer limitation in the composting process	<u>Composting process</u>
148	Use of a gas tracing method to diagnose the effectiveness of the aeration system in a large scale composting process	<u>Composting - process optimisation</u>
151	Comparative analysis of the effect of catalyst on biodiesel production	<u>Biobased economy and biorefinery</u>
153	Comparison of low-rate and highrate anaerobic digestion for septage from Songkhla municipality, Thailand	<u>Anaerobic digestion</u>
159	Application of high density digestate of pig manure in peat mixtures for use as potting soil	<u>Peat replacement</u>
161	Temperature effect on the anaerobic solubilization of food waste	<u>Anaerobic digestion</u>
165	LC-CO <sub>2</sub> evaluation of integrated anaerobic digestion process for food waste treatment in Japan	<u>Life cycle assessment LCA</u>
166	Anaerobic fermentation of dairy wastewater for biological hydrogen production	<u>Renewable energy – hydrogen production</u>
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