

THURSDAY	09:00	2DO.1 T2.6	4DO.2 T4.3	3DO.3 T3.1	1DV.1 T1.1/1.2/ 1.5	EXHIBITION
	10:30	Break				
	10:45	2DO.4 T2.6	4DO.5 T4.3	3DO.6 T3.3	1DV.2 T1.3/1.4/ 1.6	
	12:15	Lunch Break				
	13:30	3DO.7 T3.4	4DO.8 T4.4	3DO.9 T3.1	IDV.3 Industry	
	15:00	Break				
	15:15	Conference Closing Keynote presentation The highlights of the conference Panel discussion Student awards 2017 - Poster awards 2017 Conclusions				
16:45						

1 Biomass Resources

- T1.1 Biomass potentials and biomass mobilisation
- T1.2 Biomass feedstock, residues and by-products
- T1.3 Biomass crops and energy grasses
- T1.4 Algae production systems
- T1.5 Municipal and industrial wastes
- T1.6 Integrated biomass production for energy purposes

2 Biomass Conversion Technologies for Heating, Cooling and Electricity

- T2.6 Anaerobic digestion for biogas production

3 Biomass Conversion Technologies for fuels, chemicals and materials

- T3.1 Production of thermally treated solid biofuels
- T3.3 Oil-based biofuels
- T3.4 Biomethane

4 Biomass Policies, Markets and Sustainability

- T4.3 Environmental impacts of bioenergy
- T4.4 Resource efficient bioeconomy and social opportunities

I Industry Sessions

- 6.1 Biomass Resources (Crops, SRF, Algae and Organic Waste)
- 6.2 Thermochemical conversion processes
- 6.3 Power & Heat processes and systems
- 6.4 Biochemical Conversion
- 6.5 Policy

09:00 - 10:30

ORAL SESSION 2DO.1

Challenges of Various Biogas Feedstocks

ROOM: K21

CHAIRPERSONS:

Jens Bo HOLM-NIELSEN, Aalborg University, DENMARK

Alessandro AGOSTINI, ENEA Research Centre, ITALY

2DO.1.1

WHEAT STRAW AS A MATERIAL IN CO-DIGESTION WITH OTHER NITROGEN-RICH SUBSTRATE

Swarnima AGNIHOTRI, University of Borås, The Swedish Centre for Resource Recovery, SWEDEN

Co-authors: I.S. Horváth, HB-Högskolan i Borås, Borås, Sweden; M. Castillo, HB-Högskolan i Borås, Uppsala, Sweden

2DO.1.2

CLIMATE AND ECONOMIC PERFORMANCES OF ANAEROBIC DIGESTION OF SECOND CHEESE WHEY. A CASE STUDY

Giuseppe LEMBO, ENEA Research Centre, Biomass and Biotechnology for Energy, ITALY

Co-authors: A. Agostini, A. Signorini, ENEA, Rome, Italy

2DO.1.3

MONO-FERMENTATION OF CHICKEN MANURE: COMPETING WITH AMMONIA INHIBITION AND A HIGH CONTENT OF INORGANIC SOLIDS

Franziska SCHAEFER, DBFZ-German Biomass Research Centre, Biochemical Conversion Dpt., GERMANY

Co-authors: L. Mueller, DBFZ-German Biomass Research Centre, Leipzig, Germany; R. Reiter, A. Himmelstoss, AEV Energy GmbH, Dresden, Germany; J. Proeter, DBFZ Deutsches Biomasseforschungszentrum gemeinnützige GmbH, Leipzig, Germany

2DO.1.4

ENHANCING BIOGAS PRODUCTION FROM SHRIMP PROCESSING WASTE THROUGH ENRICHMENT OF THE MICROBIAL COMMUNITY

Giulia MASSINI, ENEA Research Centre, Biomass and Bioenergy, ITALY

Co-authors: A. Gaetani, G. Dottorini, La Sapienza University - ENEA, Rome, Italy; V. Mazzurco Miritana, G. Lembo, La Tuscia University - ENEA, Rome, Italy; A. Signorini, V. Pignatelli, ENEA, Rome, Italy

2DO.1.5

BIOGAS PRODUCTION FROM ORGANIC WASTES IN KOREA: WASTE CHARACTERISTICS, APPLICABILITY OF ANAEROBIC CO-DIGESTION AND UNDERLYING MICROBIAL POPULATIONS

Seung Gu SHIN, Pohang University of Science and Technology, School of Environmental Science and Engineering, KOREA

Co-authors: G. Han, J. Lee, J.V. Tongco, J. Shin, T. Koo, S. Hwang, J.Y. Lee, Pohang University of Science and Technology, Pohang, Korea

09:00 - 10:30

ORAL SESSION 4DO.2

Ecosystem Services and Soil Impacts of Bioenergy

ROOM: K2

CHAIRPERSONS:

Luisa MARELLI, European Commission, JRC, ITALY

Jan Peter LESSCHEN, Alterra Wageningen UR, THE NETHERLANDS

4DO.2.1

WHERE IS THE ENVIRONMENTAL BREAK-EVEN POINT OF MARGINAL LAND USE FOR BIOMASS PRODUCTION?

Moritz WAGNER, University of Hohenheim, Institute of Crop Science, GERMANY

Co-author: I. Lewandowski, University of Hohenheim (340b), Stuttgart, Germany

4DO.2.2

UNDERSTANDING SOIL CARBON STORAGE ACROSS HETEROGENEOUS LANDSCAPES: CARBON OFFSETS AND SUSTAINABILITY OF TROPICAL BIOMASS PRODUCTION SYSTEMS

Susan E. CROW, University of Hawaii at Manoa, Natural Resources and Environmental Management Dpt., USA

Co-authors: J.M. Wells, J. Deenik, K. Carlson, A. Hashimoto, University of Hawaii at Manoa, Honolulu, Usa; C. Sierra, Max Plank Institute for Biogeochemistry, Jena, Germany

4DO.2.3

CONVERSION AND REVERSIONS: IMPACTS ON SOIL CARBON STOCKS OF LAND USE CHANGE TO AND FROM PERENNIAL BIOENERGY CROPS IN THE UK

Rebecca ROWE, Centre for Ecology and Hydrology, Shore Dpt., UNITED KINGDOM

Co-authors: A.K. Keith, D.M.O. Elias, J. Whitaker, N.P. McNamara, Centre for Ecology & Hydrology, Lancaster, United Kingdom

4DO.2.4

QUANTIFYING THE POTENTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION FROM TEMPORARY CARBON STORAGE IN HYDROCHARS

Mikolaj OWSIANIAK, Technical University of Denmark, Management Engineering Dpt., DENMARK

Co-author: M. Renz, Universitat Politècnica de València, Spain

4DO.2.5

A SPATIALLY EXPLICIT OVERVIEW OF THE IMPACTS OF WOOD PELLET RELATED PINE PLANTATION EXPANSION ON SPECIES RICHNESS IN THE SOUTHEASTERN U.S.

Hanneke VAN T VEEN, Universiteit Utrecht, Environmental Biology Dpt., THE NETHERLANDS

Co-authors: A. Duden, P. Verweij, Copernicus Institute of Sustainable Development, Utrecht, The Netherlands

09:00 - 10:30

ORAL SESSION 3DO.3

Thermally Treated Solid Biomass - Fundamentals

ROOM: K1

CHAIRPERSONS:

Capucine DUPONT, CEA, FRANCE

Anders NORDIN, Umeå University, SWEDEN

3DO.3.1

TORREFACTION ANALYSIS OF WOODY BIOMASSES FROM FAST-GROWING PLANTATIONS OF COSTA RICA

Allen PUENTE-URBINA, Costa Rica Institute of Technology, COSTA RICA

Co-authors: R. Moya, A. Rodríguez-Zúñiga, J. Gaitán-Álvarez, Escuela de Ingeniería Forestal, Instituto Tecnológico de Costa Rica., Cartago, Costa Rica

3DO.3.2

CATALYTIC EFFECT OF POTASSIUM CARBONATE ON CONDENSABLE SPECIES RELEASED DURING WOOD TORREFACTION

Jean-Michel COMMANDRE, CIRAD, France

Co-authors: L. Alves de Macedo, P. Rousset, J. Valette, CIRAD, Montpellier, France; M. Pétrissans, Université de Lorraine, Nancy, France

3DO.3.3

THE PRESSURE INFLUENCE ON BIOCARBON YIELD AND QUALITY

Øyvind SKREIBERG, SINTEF Energy Research, Thermal Energy Dpt., NORWAY

Co-authors: L. Wang, SINTEF Energy Research, Trondheim, Norway; M. Grønli, NTNU, Trondheim, Norway

3DO.3.4

VALORIZATION OF SOLID RESIDUES FROM ANAEROBIC DIGESTION THROUGH THERMAL AND HYDROTHERMAL CARBONIZATION PROCESSES

Edoardo MILIOTTI, University of Florence, ITALY

Co-authors: D. Casini, M. Prussi, D. Chiaramonti, L. Bettucci, RE-CORD, Firenze, Italy

3DO.3.5

MICROWAVE PRE-PROCESSING OF BIOMASS PELLETS FOR CLEANER HEAT ENERGY PRODUCTION

Inesa BARMINA, University of Latvia, Institute of Physics, LATVIA

Co-authors: R. Valdmanis, M. Zake, Institute of Physics, University of Latvia, Salaspils, Latvia

09:00 - 10:30

VISUAL PRESENTATIONS 1DV.1

Quantifying Biomass Availability for Bioenergy and Biomass Characterisation Studies. Municipal and Industrial Biowaste Innovations in Processing and Products

ROOM: Poster Area

CHAIRPERSON:

Peter KUIKMAN, Alterra Wageningen UR, THE NETHERLANDS

Gianni FACCIOTTO, CREA- Council for Agricultural Research & Economics, Casale Monferrato, Italy

1DV.1.1

SUSTAINABLE BIOMASS PRODUCTION ON MARGINAL LANDS (SEEMLA)

Wibke BAUMGARTEN, FNR - Agency for Renewable Resources, EU/International Affairs, GERMANY

Co-authors: W. Gerwin, F. Repmann, BTU, Cottbus, Germany; N. Rettenmaier, IFEU, Heidelberg, Germany; F. Kiourtsis, D. Keramitzis, DAMT, Thessaloniki, Greece; S. Galatsidas, N. Gounaris, DUTH, Komotini, Greece; O. Hanzhenko, V. Ivanina, IBC&SB NAAS, Kiev, Ukraine; K. Bogatov, I. Gnap, SALIX, Kiev, Ukraine; F. Barbera, D. Mattioli, Legambiente, Rome, Italy

1DV.1.2

ASSESSMENT OF SHRUB BIOMASS AVAILABILITY AND ENVIRONMENTAL IMPACTS OF ITS HARVESTING FOR ENERGY PURPOSES: A METHODOLOGICAL APPROACH IN THE MEDITERRANEAN

Borja Daniel GONZALEZ-GONZALEZ, INIA, SPAIN

Co-authors: H. Sixto, A. Vajzquez, F. Montes, M Sanchez-Gonzalez, I. Canellas, INIA, Madrid, Spain

1DV.1.3

SHORT ROTATION WOODY CROPS: EXPERIENCES FROM THE EU PROJECT SRCPLUS

Dominik RUTZ, WIP, Biomass Unit, GERMANY

Co-authors: R. Mergner, J.M. Ugalde, WIP, Munich, Germany; R. Janssen, WIP Renewable Energies, Munich, Germany; S. Hinterreiter, Biomassehof Achenal, Grassau, Germany; I. Eleftheriadis, Centre for Renewable Energy Sources and Saving, Athens, Greece; A. Zandeckis, Ekodoma, Riga, Latvia; Z. Fistrek, B. Kulisic, Energy Institute Hrvoje Pozar, Zagreb, Croatia; T. Perutka, Energy Agency of the Zlín region, Zlín, Czech Republic; D. Lazdina, Latvian State Forest Research Institute Silava, Salaspils, Latvia; N. Toskovski, G. Toskovska, Secondary School Car Samoil - Resen, Resen, Macedonia; I. Dimitriou, Swedish University of Agricultural Sciences, Uppsala, Sweden; A. Leplus, J. Bernard, Association d'Initiatives Locales pour l'Energie et l'Environnement, Rennes, France

1DV.1.6

CHARACTERIZATION OF BRAZILIAN SUGARCANE BAGASSE AND SUGARCANE STRAW BASED ON EUROPEAN METHODOLOGIES TO EVALUATE THE POTENTIAL FOR ENERGY CONVERSION

Caroline CARRIEL SCHMITT, Karlsruhe Institute of Technology, IKFT Dpt., GERMANY

Co-authors: R. Moreira, P. Coelho Tambani, A. Hakuu Ushima, Institute for Technological Research, Sao Paulo, Brazil; R. Cruz Neves, Brazilian Bioethanol Science and Technology Laboratory, Sao Paulo, Brazil; A. Funke, K. Raffelt, Karlsruhe Institute of Technology, Karlsruhe, Germany

1DV.1.7

SPATIAL BIOMASS SUPPLY OF FAST-GROWING PLANTATIONS FOR ENERGY

Blas MOLA, University of Eastern Finland, FINLAND

Co-authors: B. Mola-Yudego, UEF/SLU, Joensuu, Finland; I. Dimitriou, SLU, Uppsala, Sweden

1DV.1.8

ASSESSING BIOMASS RESOURCES FROM OLIVE OIL PRODUCTION IN SPAIN

Paloma MANZANARES, CIEMAT, Biofuels Unit, Renewable Energy Division, SPAIN
Co-authors: M.J. Negro, I. Ballesteros, M. Ballesteros, CIEMAT, Madrid, Spain; F.J. Gallego, E. Castro, J.C. Lopez-Linares, E. Ruiz, Universidad de Jaen, Jaen, Spain

1DV.1.14

ENERGY CROPS FOR THE TROPICS AND SUBTROPICS

Andrew HASHIMOTO, University of Hawaii at Manoa, Molecular Biosciences and Bioengineering Dpt., USA
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1DV.1.16

BIOENERGY DEVELOPMENT AS A SUSTAINABLE ENERGY TO COUNTER ENERGY CRISIS IN BANGLADESH

Muntasir MURSHED, North South University, School of Business and Economics, BANGLADESH
Co-author: S.B. Amin, North South University, Dhaka, Bangladesh

1DV.1.21

BIOMASS DEMAND POINT LOCATION ANALYZE AT REGIONAL LEVEL AGENT-BASED SIMULATION

Mika AALTO, Lappeenranta University of Technology, Laboratory of Bioenergy, FINLAND
Co-authors: O.-J. Korpinen, T. Ranta, Lappeenranta University of Technology, Mikkeli, Finland

1DV.1.22

COMPOSTING OF DIFFERENT AGRICULTURAL BY-PRODUCTS WITH RAW DIGESTATE: PRELIMINARY CONSIDERATIONS ABOUT TECHNICAL FEASIBILITY

Massimo BRAMBILLA, Consiglio per la Ricerca in Agricoltura e l'analisi dell'economia Agraria, Unità di Ricerca per l'Ingegneria Agraria, ITALY
Co-authors: D. Boscaro, L. Sartori, A. Pezzuolo, Università degli Studi di Padova, Dipartimento Territorio e Sistemi Agro-Forestali (TESAF), Legnaro, ITALY; A. Chiumenti, F. Da Borso, Università di Udine, Department of Agricultural, Food, Environmental and Animal Sciences (DI4A), Udine, ITALY; C. Bisaglia, Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA), Unità di ricerca, Treviglio, ITALY

1DV.1.25

VACUUM TECHNOLOGY FOR WOODCHIPS DRYING

Vaclav MAREK, University of West Bohemia, Mechanical Engineering Dpt., CZECH REPUBLIC

1DV.1.27

REGIONAL BIOMASS POTENTIALS FROM AIRBORNE LASER SCANNING DATA, CASE SOUTH-EAST FINLAND

Mika LAIHANEN, Lappeenranta University of Technology, LUT Energy Dpt., FINLAND
Co-authors: A. Karhunen, T. Ranta, Lappeenranta University of Technology, Finland

1DV.1.28

A BI-OBJECTIVE MODEL TO LOCATE SEVERAL BIO-REFINERIES AND OPTIMIZE THEIR SUPPLIES

Nasim ZANDI ATASHBAR, University of Technology of Troyes, FRANCE
Co-authors: N. Labadie, C. Prins, University of Technology of Troyes, Troyes, France

1DV.1.30

COMPARATIVE STUDY OF TIME INVESTMENT ON COOKING ENERGY FUEL TRANSITION IN RURAL INDIA AND NEPAL

Karabee DAS, University of Groningen, IVEM, ESRIG Dpt., THE NETHERLANDS
Co-authors: G. Pradhan, University of Groningen, The Netherlands; M. Hiloidhari, Jawaharlal Nehru University, Delhi, India; D.C. Baruah, Tezpur University, Tezpur, India; S. Nonhebel, University of Groningen, The Netherlands

1DV.1.32

AGRICULTURAL AND FOREST RESIDUES IN PERU: POTENTIAL FOR BIOENERGY USE

Estela ASSUREIRA, Pontificia Universidad Católica del Perú, Engineering Dpt., PERU
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1DV.1.35

EUBCE STUDENT AWARDEE PRESENTATION

HOW TO PRESERVE THE ENERGY POTENTIAL OF ORGANIC RESIDUES DURING STORAGE? FOCUS ON ANAEROBIC DIGESTION

Ruben FRANCO, Université de Lyon, INSA Lyon, DEEP Research Group, FRANCE
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1DV.1.36

VANE TORQUE TESTER FOR FOREST BIOMASS

Mateusz STASIAK, Institute of Agrophysics, Polish Academy of Sciences, POLAND
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1DV.1.38

WOODY BIOMASS FOR ENERGY USE FROM RESIDUES AND WASTE OF FOREST UTILISATIONS AND PRUNING WOODY CROPS IN ITALY

Domenico COALOA, CREA-Council for Agricultural Research and Economics, Trasformazioni Industriali Dpt., ITALY
Co-author: G. Faccioto, Council for Agricultural Research and Economics, Casale Monferrato, Italy

1DV.1.39

MECHANICAL PROPERTIES OF GRANULAR BIOMASS DETERMINED IN VANE TORQUE TESTER

Marek MOLEND, Institute of Agrophysics, Polish Academy of Sciences, POLAND
Co-author: M. Stasiak, Institute of Agrophysics, Polish Academy of Sciences, Lublin, Poland

1DV.1.41

ENERGY-EFFICIENT COLD-AIR VENTILATION OF COARSE WOOD CHIPS FROM SHORT ROTATION COPPIC

Ralf PECENKA, Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB), Post Harvest Dpt., GERMANY
Co-authors: H. Lenz, C. Idler, Leibniz Institute for Agricultural Engineering, Potsdam, Germany

1DV.1.42

MECHANICAL EXTRACTION AND RECOVERY OF ROOTSTOCKS FROM END LIFE ORCHARDS TO PRODUCE BIOENERGY

Luigi PARI, CREA- Council for Agricultural Research and Economics, Unità di Ricerca per l'Ingegneria Agraria - CREA-ING, ITALY
Co-authors: A. Scarfone, V. Alfano, E. Santangelo, A. Suardi, A. Del Giudice, F. Gallucci, CREA-ING, Monterotondo (Rome), Italy

1DV.1.43

A PRELIMINARY ANALYSIS ON THE POTENTIAL BIOENERGY PRODUCTION FROM AGRO-FORESTRY CROPS AND RESIDUES IN ANGOLA

Ana Luisa FERNANDO, Universidade Nova de Lisboa, Ciências e Tecnologia Biomassa Dpt., PORTUGAL

Co-author: F. Cativa, FCT/UNL, Lisbon, Portugal

1DV.1.48

AMBIENT DRYING OF EUCALYPTUS GRANDIS IN HAWAII: EXPERIMENTAL AND MODEL RESULTS

Scott TURN, University of Hawaii, Hawaii Natural Energy Institute, USA

Co-author: D.H. Harris, Hawaii Natural Energy Institute, Honolulu, Usa

1DV.1.50

CONCEPTUAL DESCRIPTION OF INTEGRATED BIOMASS LOGISTICAL CENTRES (IBLCS)

Bert ANNEVELINK, Wageningen Food & Biobased Research, Biorefinery & Sustainable Value Chains Dpt., THE NETHERLANDS

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1DV.1.55

CHARACTERIZATION OF TORREFIED BIOMASS AND CO-FIRING EXPERIMENTAL INVESTIGATION IN PILOT SCALE COMBUSTION SYSTEM

YongWoon LEE, Korea Institute of Industrial Technology, Thermochemical Energy System Group, KOREA

Co-authors: T. Chae, J. Lee, B. Kang, W. Yang, Korea Institute of Industrial Technology, Cheonan-si, Korea; C. Ryu, Sungkyunkwan University, Suwon-si, Korea

1DV.1.58

BENCHMARKING DIFFERENT TREATMENT METHODS FOR ORGANIC MUNICIPAL SOLID WASTE

Dominik RUTZ, WIP, Biomass Unit, GERMANY

Co-authors: R Mergner, R Janssen, WIP, Munich, Germany; B. Ribic, A. Hadzic, G. Mijic, Zagreb City Holding, Zagreb, Croatia; T. Puksec, N. Duic, University of Zagreb (UNIZAG FSB), Zagreb, Croatia; R. Zweiler, C. Doczekal, P. Novakovits, Güssing Energy Technologies, Güssing, Austria; A. Gruevska, G. Antevski, M. Caloski, JSP Skopje, Skopje, Macedonia; D. Mitkovski, K. Petrusevski, E. Cvetkovska, City of Skopje, Skopje, Macedonia; L. Chacón Ladrón de Guevara, Instituto Andaluz de Tecnología, Sevilla, Spain; M. Kazeroni, Observatoire Régional des Déchets d'Île-de-France, Paris, France

1DV.1.59

BIOMASS-CONCEPTS FOR TOURISM AREAS

Gerold HAFNER, University of Stuttgart, ISWA - Institute for Sanitary Engineering, Water Quality and Solid Waste Management Dpt., GERMANY

1DV.1.61

ECONOMIC EVALUATION OF THE PRODUCTION AND UTILIZATION OF BIO-FERTILIZERS FROM ORGANIC WASTE DIGESTATES IN COMPARISON TO MINERAL FERTILIZERS

Felicitas BECHSTEIN, Institut für Agrar- und Stadtökologische Projekte an der Humboldt-Univ. zu Berlin, Food Technology Dpt., GERMANY

Co-authors: C.-L. Ross, K. Sensel-Gunke, V. Wilken, Institute of Agricultural and Urban Ecological Projects affiliated to Berlin Humboldt University (IA, Berlin, Germany)

1DV.1.62

A FOUR-STEP GASIFICATION-COMBUSTION PROCESS FOR THE CLEAN CONVERSION OF MSW

Ruizhi ZHANG, Shanghai Jiao Tong University, Institute of Thermal Energy Engineering, P.R. CHINA

Co-authors: R.H. Yin, Y.H. Luo, Shanghai Jiao Tong University, Shanghai, P.R. China

1DV.1.63

DEMAND-ORIENTED GENERATION OF SEWAGE GAS FROM ORGANIC WASTE MATERIAL BY CO-FERMENTATION OF LIQUID COMPONENTS IN SEWAGE SLUDGE DIGESTERS

Philipp PILSL, University of Stuttgart, Institute for Sanitary Engineering, Water Quality and Solid Waste Management, GERMANY

Co-authors: C. Maurer, L. Boehme, D. Leverenz, P. Maurer, M. Kranert, University of Stuttgart, Germany

1DV.1.66

TECHNOLOGY OF DRYING AND CHARACTERISTICS OF SOLID REFUSE FUEL FROM ORGANIC WASTES WITH HIGH WATER CONTENTS

Tae-In OHM, Hanbat National University, Civil & Environmental Engineering Dpt., KOREA

Co-authors: J. Chae, S. Kim, S.Y. Kim, Hanbat National University, Deajeon, Korea

1DV.1.68

CHARACTERIZATION OF ASHES FROM MSW INCINERATION PLANTS

Liang WANG, SINTEF Energy Research, Thermal Energy Dpt., NORWAY

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1DV.1.72

ORGANIC WASTE AND RESOURCE MANAGEMENT IN TOURISM AREAS

Dominik LEVERENZ, University Stuttgart, Institute for Sanitary Engineering, Water Quality and Solid Waste Management, GERMANY

Co-authors: G. Hafner, P. Pils, University of Stuttgart, Germany

1DV.1.73

PERFORMANCE AND MICROBIAL DYNAMICS OF FULL-SCALE WASTEWATER TREATMENT PLANT THAT DIVERSIFIED DENITRIFICATION CARBON SOURCE BY USING TWO ORGANIC WASTES

Seokhwan HWANG, Pohang University of Science and Technology, KOREA

Co-authors: E.J. Kim, S.G. Shin, M.A.H. Jannat, J.H. Shin, J.Y. Lee, J.VV. Tongco, Postech, Pohang, Korea

1DV.1.74

COMPARISON OF DIFFERENT METHODS TO DETERMINE THE SOLIDS CONTENT FOR MSW CHARACTERIZATION

Aline RUIZ, Universidade Federal do ABC, BRAZIL

Co-authors: A.R. Santana, D.S. Rodrigues, J.M.G. Rios, K.B.B. Marana, C.A. Silva, G.C. Antonio, J.T.C.L. Toneli, Universidade Federal do ABC, Santo André, Brazil

1DV.1.76

CYCLONE DRYING OF SECONDARY SLUDGE FROM PULP AND PAPER MILLS

Alejandro GRIMM, Swedish University of Agricultural Sciences, Forest Biomaterials and Technology Dpt., SWEDEN

Co-authors: M. Segerström, S.H. Larsson, Swedish University of Agricultural Sciences, Umea, Sweden

1DV.1.79

INTERNAL PELLET DENSITY HETEROGENEITY VIEWED IN 3D USING X-RAY TOMOGRAPHY

Mikael THYREL, Swedish University of Agricultural Sciences, Forest Biomaterials and Technology Dpt., SWEDEN

Co-author: T.A Lestander, Swedish University of Agricultural Sciences, Umeå, Sweden

1DV.1.83

ROLE OF EFFICIENT MICROORGANISMS IN RAPID COMPOSTING OF KITCHEN WASTE

Ritika PATHAK, Indian Institute of Technology, Centre for Rural Development and Technology, INDIA

Co-authors: S. Sharma, R. Prasad, Indian Institute of Technology, Delhi, India

09:00 - 15:00

WORKSHOP

Future Biorefineries from raw materials to bio-products: development and analysis

10:30 - 10:45

BREAK

10:45 - 12:15

ORAL SESSION 2DO.4

Biogas Feedstock Pre-treatment, Process and System Integration
ROOM: K21

CHAIRPERSONS:

Bernhard DROSG, Bioenergy 2020+, AUSTRIA

Tormod BRISEID, NIBIO - Norwegian Institute of Bioeconomy Research, NORWAY

2DO.4.1

SIMULATION OF DEMAND-ORIENTED BIOGAS PRODUCTION BY A SIMPLIFIED KINETIC MODEL

Soeren WEINRICH, DBFZ-German Biomass Research Centre, GERMANY

Co-authors: E. Mauky, DBFZ-German Biomass Research Centre, Leipzig, Germany;

H.F. Jacobi, Hessian State Laboratory, Bad Hersfeld, Germany

2DO.4.2

EFFECTS OF ALKALINE AND BEATING PRETREATMENT ON ANAEROBIC DIGESTION OF DISTILLERY CO-PRODUCTS

Burcu GUNES, Dublin City University, School of Biotechnology, IRELAND

Co-authors: K. Benyounis, J. Stokes, School of Mech. & Manu. Eng. Dublin City University, Dublin, Ireland; P. Davis, School of Business Dublin City University, Dublin, Ireland; C. Connolly, Alltech European Bioscience Centre, Meath, Ireland; J. Lawler, School of Biotechnology, Dublin City University, Dublin, Ireland

2DO.4.3

EFFECTS OF ANAEROBIC DIGESTION AND HOT WATER PRETREATMENT ON LIGNIN

Jon WELLS, University of Hawai at Manoa, Natural Resources and Environmental Management Dpt., USA

Co-authors: S.E. Crow, S.K. Khanal, S.Q. Turn, A. Hashimoto, University of Hawaii at Manoa, Honolulu, Usa

2DO.4.4

HEAD-SPACE GAS PRESSURE DRIVEN ACIDOGENESIS OF FOOD WASTE IN LEACH BED REACTOR

Jonathan WONG, Hong Kong Baptist University, Sino-Forest Applied Research Centre for Pearl River Delta Environment, HONG KONG

2DO.4.5

MODELLING AND PERSPECTIVES OF TWO-STAGE PRESSURIZED FERMENTATION

Katharina BÄR, DVGW-Research Centre at Engler-Bunte-Institute, GERMANY

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10:45 - 12:15

ORAL SESSION 4DO.5

Ecosystems and Water Impacts of Bioenergy

ROOM: K2

CHAIRPERSONS:

Uwe FRITSCHÉ, IINAS, GERMANY

Calliope PANOUTSOU, Imperial College, UNITED KINGDOM

4DO.5.1

EVALUATING THE WATER IMPACTS & BENEFITS OF BIOMASS PRODUCTION FOR BIOENERGY - DEVELOPING A SUSTAINABILITY INDICATOR ANALYSIS METHODOLOGY

Andrew WELFLE, University of Manchester, United Kingdom

4DO.5.2

CAN THE CULTIVATION OF PERENNIAL BIOMASS CROPS ON BUFFER STRIPS BECOME A WIN-WIN STRATEGY? LIFE CYCLE ASSESSMENT AND ENERGY PERFORMANCE.

Alessandro AGOSTINI, ENEA Research Centre, ITALY

Co-authors: P. Serra, A. Ferrarini, S. Amaducci, Università Cattolica del Sacro Cuore, Piacenza, Italy; J. Giuntoli, European Commission, JRC, Petten, The Netherlands

4DO.5.3

BRAZILIAN SUGARCANE EXPANSION AND THE IMPACTS ON WATER RESOURCES: A REVIEW OF THE RECENT RESULTS

Thayse HERNANDES, CTBE - Brazilian Bioethanol Science and Technology Laboratory, Agricultural Division, BRAZIL

Co-authors: T.A. Dourado Hernandez, D. Garbelini Duft, CTBE/UNICAMP, Campinas, Brazil; F. Vale Scarpere, CENA-USP, Piracicaba, Brazil; M. Cristina Araújo Picoli, J. Eugênio Abel Seabra, UNICAMP-FEM, Campinas, Brazil; M. Regis Lima Verde Leal, CTBE, Campinas, Brazil

4DO.5.4

INFLUENCE OF DEVELOPMENT OF FUEL ETHANOL ON WATER RESOURCES

Fangyu DING, Chinese Academy of Sciences, Institute of Geographical Sciences and Natural Resources Research, P.R. CHINA

Co-authors: M. Hao, D. Jiang, J. Fu, M. Hao, Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, P.R. China

4DO.5.5

BIOENERGY AND BIODIVERSITY LOSS: WHAT WE KNOW, WHAT WE DON'T KNOW AND WHAT WE CAN ESTIMATE.

Jacopo GIUNTOLI, European Commission, JRC, Directorate C: Energy, Transport and Climate, THE NETHERLANDS

Co-authors: C. Bulgheroni, L. Marelli, European Commission -Joint Research Centre, Ispra, Italy; A. Agostini, ENEA, Rome, Italy; S. Rocca, European Commission -Joint Research Centre, Petten, The Netherlands

10:45 - 12:15

ORAL SESSION 3DO.6

Oil-based Biofuels

ROOM: K1

CHAIRPERSON:

Dimitrios SIDIRAS, University of Piraeus, GREECE

3DO.6.1

CATALYTIC HYDROPROCESSING OF GROUND COTTONSEEDS IN A COTTONSEED OIL AND I-OCTANE SOLVENT TO PRODUCE RENEWABLE DIESEL

Corneels SCHABORT, North-West University, School of Chemical and Minerals Engineering, SOUTH AFRICA

Co-authors: Z. Broodryk, R. Venter, S. Marx, North-West University, Potchefstroom, South Africa

3DO.6.2

EVALUATION OF GHG EMISSIONS AND ENERGY BALANCES OF INNOVATIVE AVIATION BIOFUEL PATHWAYS

Adrian O'CONNELL, European Commission, JRC, ITALY

Co-authors: M. Kousoulidou, L. Lonza, A. O'Connell, JRC-European Commission, Ispra, Italy

3DO.6.3

UPSCALING AND OPERATION OF A BIOMASS DERIVED FISCHER-TROPSCH PILOT PLANT PRODUCING 1 BARREL PER DAY

Jürgen LOIPERSBÖCK, Bioenergy 2020+, AUSTRIA

Co-authors: G. Weber, R. Rauch, Bioenergy2020+, Güssing, Austria; H. Gruber, P. Groß, H. Hofbauer, TU Wien, Vienna, Austria

3DO.6.4

GREEN DIESEL PRODUCTION FROM THE PALM OIL DEOXYGENATION OVER METAL-BASED NANOCATALYSTS

Kajornsak FAUNGNAWAKIJ, National Science and Technology Development Agency, National Nanotechnology Center, THAILAND

Co-authors: A. Srif, Kyoto University, Kyoto, Japan; R. Keawmeesri, V. Itthibenchapong, National Nanotechnology Center, Pathumthani, Thailand

3DO.6.5

THE EFFECT OF FATTY ACID STRUCTURES ON PRODUCT DISTRIBUTION OF CATALYTIC CRACKING

Verina WARGADALAM, Ministry of Energy and Mineral Resources, P3TKEBTKE Division, INDONESIA

Co-authors: E. Saadudin, D. Nomara, Ministry of Energy and Mineral Resources, Jakarta, Indonesia; B. Budiyanto, S. Subagjo, Institute of Technology Bandung, Bandung, Indonesia

10:45 - 12:15

VISUAL PRESENTATIONS 1DV.2

Dedicated Bioenergy Crops from Planting to Harvesting and Novel Production Systems. Potential and Impact of Algae Production

ROOM: Poster Area

CHAIRPERSONS:

Neeta SHARMA, ENEA Research Centre, ITALY

Scott TURN, University of Hawaii, USA

Luigi PARI, CREA- Council for Agricultural Research and Economics, ITALY

1DV.2.1

GENETIC DIVERSITY OF ELEPHANTGRASS ECOTYPES FOR BIOENERGY PRODUCTION

João DO AMARAL SANTOS DE CARVALHO ROCHA, Federal University of Vicosa, BRAZIL

Co-authors: J.R.A.S.C. Rocha, P.C.S. Carneiro, Universidade Federal de Viçosa, Brazil; R.A.D.C. Ferreira, Universidade Federal de Viçosa, Viçosa, Brazil; J.C. Carneiro, J.C. Machado, Embrapa Gado de Leite, Juiz de Fora, Brazil

1DV.2.2

MOLECULAR MECHANISM OF RESPONSE AND ADAPTATION OF THE ENERGY PLANT JATROPHA CURCAS L. TO COLD STRESS

Ming GONG, Yunnan Normal University, School of Life Sciences, P.R. CHINA

Co-authors: H.B. Wang, Z.R. Zou, Z.G. Li, P.X. Ao, S.S. Wang, Yunnan Normal University, Kunming, P.R. China

1DV.2.3

BREEDING NEW VARIETY OF CAMELINA SATIVA ADAPTED TO TEMPERATE CONTINENTAL CLIMATE

Florentina MATEI, University of Agronomical Sciences, Biotechnologies Dpt., ROMANIA

Co-authors: F. Sauca, M. Ciuca, NARDI Fundulea, Romania; N. Farcas, P. Dobre, B. Matei, C.P. Cornea, UASVM Bucharest, Romania; S. Jurcoane, CBM Biotechgen, Bucharest, Romania

1DV.2.5

DETERMINATION OF IMPORTANT TRAITS FOR SEED OIL OF GARDEN CRESS (LEPIDIUM SATIVUM L.) AS A POTENTIAL FOR BIODIESEL PRODUCTION

Naser SABAGHNIA, University of Maragheh, Plant Breeding Dpt., IRAN

Co-author: M. Mohebodini, University of Maragheh, Iran

1DV.2.6

VEGETATIVE PROPAGATION OF ULMUS PUMILA L. BY STEM CUTTINGS WITH A VIEW TO THE DEVELOPMENT OF BRED LINES FOR WOODY BIOMASS PLANTATIONS

Pedro V. MAURI ABLANQUE, IMIDRA, Investigación Agroambiental Dpt., SPAIN
Co-authors: I. Bautista, P.V. Mauri, A. Plaza, J. Ruiz-Fernandez, M.C. Amoros, IMIDRA, Alcalá de Henares, Spain; M. Sanz, M.D. Curt, ETSIA-UPM, Madrid, Spain

1DV.2.7

ASSESSMENT OF OPTIMAL PLANT DENSITY FOR SWITCHGRASS TRANSPLANTS OBTAINED BY THE FLOAT SYSTEM

Enrico CEOTTO, CREA- Council for Agricultural Research and Economics, ITALY
Co-author: F. Castelli, CREA- Council for Agricultural Research and Economics, Bovolone, Italy

1DV.2.10

POPLAR SHORT-ROTATION COPPICE IN SOUTHERN ITALY

Gianni FACCIOTTO, CREA- Council for Agricultural Research & Economics, Foreste e Legno Dpt., ITALY
Co-authors: G. Nervo, S. Bergante, CREA, Casale Monferrato, Italy

1DV.2.13

PERENNIAL GRASSES: BIOMASS QUALITY AND YIELD COMPARISON OF 12 DIFFERENT SPECIES IN THE NORTHERN GREAT PLAINS OF THE UNITED STATES

Carlos Sixto CIRIA RAMOS, CIEMAT, Biomasa Dpt., SPAIN
Co-authors: M.T. Berti, M. Kazula, A. Peterson, North Dakota State University, Fargo, North Dakota, Usa

1DV.2.15

ENERGY CROPS: HERBACEOUS PERENNIAL IN PRODUCTION WITH DIFFERENT FERTILIZERS IN THE CENTER OF SPAIN

Pedro V. MAURI ABLANQUE, IMIDRA, Investigación Agroambiental Dpt., SPAIN
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1DV.2.16

EVALUATION OF NEW PERENNIAL GRASSES FOR BIOMASS PRODUCTION ITALY

Gianni FACCIOTTO, CREA- Council for Agricultural Research & Economics, Foreste e Legno Dpt., ITALY
Co-author: S. Bergante, CREA, Casale Monferrato, Italy

1DV.2.17

PATH ANALYSIS OF BIOMASS AND SEED YIELD OF GARDEN CRESS FOR HIGH BIODIESEL PRODUCTION

Mehdi MOHEBODINI, University of Mohaghegh Ardabili, Horticultural Science Dpt., IRAN
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1DV.2.18

EVALUATION OF BIOMASS QUALITY OF ENDEMIC PLANTS OF CAPE VERDE AIMING ITS POSSIBLE USE FOR FIBER AND ENERGY PRODUCTION

Maria Paula DUARTE, Universidade NOVA de Lisboa, Ciências e Tecnologia da Biomassa Dpt., PORTUGAL
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1DV.2.21

COMBINING HARVEST DATE AND CUTTING HEIGHT TO OPTIMIZE THE SUSTAINABILITY OF MISCANTHUS PRODUCTION FOR ENERGY IN THE MEDITERRANEAN REGION

Ana Luisa FERNANDO, Universidade Nova de Lisboa, Ciências e Tecnologia Biomassa Dpt., PORTUGAL

1DV.2.22

RESPONSE OF THE ENERGY GRASS GIANT REED TO THREE HARVEST STRATEGIES: CROP GROWTH RATE AND DRY MATTER YIELD

Enrico CEOTTO, CREA- Council for Agricultural Research and Economics, ITALY
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1DV.2.23

USE OF A FLEXIBLE BAR IN STONY SOIL

Luigi PARI, CREA- Council for Agricultural Research and Economics, Unità di Ricerca per l'Ingegneria Agraria - CREA-ING, ITALY
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1DV.2.24

PROTOTYPE FOR UNLOADING FRESH BIOMASS FROM SILO-BAGS

Alberto ASSIRELLI, CRA - Agricultural Research Council, ITALY
Co-authors: G. Caracciolo, CREA, Forlì, Italy; E. Santangelo, CREA, Roma, Italy

1DV.2.25

INNOVATIVE SYSTEM FOR INDUSTRIAL HEMP HARVESTING

Alberto ASSIRELLI, CRA - Agricultural Research Council, ITALY
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1DV.2.26

JATROPHA CURCAS L. HARVESTING METHODS: AN ECONOMIC ASSESSMENT

Luigi PARI, CREA- Council for Agricultural Research and Economics, Unità di Ricerca per l'Ingegneria Agraria - CREA-ING, ITALY
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1DV.2.32

EFFECT OF BLUE LIGHT ON GROWTH AND OIL ACCUMULATION IN THE MODEL GREEN MICROALGA CHLAMYDOMONAS REINHARDTII

Ioannis ZARKADAS, Aristotle University of Thessaloniki, Chemical Engineering Dpt., GREECE
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1DV.2.35

OPTIMIZATION OF MICROALGAE CULTURE CONDITIONS FOR BETTER QUALITY BIODIESEL PRODUCTION

Xiaoling MIAO, Shanghai Jiao Tong University, School of Life Sciences & Biotechnology, P.R. CHINA

1DV.2.37

MICROALGAE AS A WATER TREATMENT SYSTEM FOR RECIRCULATING FISH WATER POOL

Katariina LAHTI, Helsinki University, Environmental Sciences Dpt., FINLAND
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1DV.2.41

AQUATIC WEEDS AS BIOMASS SOURCE: THE HARVESTING TECHNIQUE IN NORTH ITALY

Luigi PARI, CREA- Council for Agricultural Research and Economics, Unità di Ricerca per l'Ingegneria Agraria - CREA-ING, ITALY
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1DV.2.42

SALTGAE: ALGAL TREATMENT OF SALINE WASTE WATER COUPLED WITH BIOGAS PRODUCTION AND BIOMASS VALORISATION

Giuliano GRASSI, Secretary General, European Biomass Industry Association, BELGIUM
Co-authors: R. Reinhardt, AlgEn, Liubjana, Slovenia Republic; F. Englund, SP Technical Research Institute of Sweden, Stockholm, Sweden

1DV.2.44

ENVIRONMENTAL IMPACTS ASSESSMENT OF ALTERNATIVE MICROALGAL BIOFUELS SYSTEMS

Jacopo GIUNTOLI, European Commission, JRC, Directorate C: Energy, Transport and Climate, THE NETHERLANDS
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1DV.2.46

ALGAL BIOPROSPECTING TO FEEDSTOCK PRODUCTION: THE TRINIDAD AND TOBAGO CASE STUDY

Trina HALFHIDE, University of the West Indies, Life Sciences, TRINIDAD AND TOBAGO REPUBLIC
Co-author: A. Mohammed, University of the West Indies, St Augustine, Trinidad And Tobago Republic

1DV.2.50

ENHANCING THE QUALITY AND QUANTITY OF PANICUM MAXIMUM JACQ. BIOMASS BY EMPLOYING BENEFICIAL ACC DEAMINASE PRODUCING RHIZOBACTERIA UNDER ABIOTIC STRESS CONDITION FOR BIOENERGY APPLICATIONS

Garima TIWARI, Indian Institute of Technology, Centre For Rural Development And Technology, INDIA
Co-authors: P. Hariprasad, S. Sharma, R. Prasad, Indian Institute of Technology, New Delhi, India

1DV.2.51

PERFORMANCE OF COW DUNG MIXED WITH GROUND EUCALYPTUS SPECIES LEAVES AS ENERGY IN RURAL WESTERN KENYA

David WANGA, Egerto University, KENYA
Co-author: R. Wambua, Egerto University, Nakuru, Kenya

1DV.2.52

COST AND PROFITABILITY FOR ROTATIONAL GRASS/CLOVER AS BIOGAS FEEDSTOCK: A SWEDISH SCENARIO STUDY

Carina GUNNARSSON, SP Technical Research Institute of Sweden, Food and Bioscience Dpt., SWEDEN

Co-authors: P. Tidaker, SP Technical Research Institute of Sweden, Uppsala, Sweden; H. Rosenqvist, Consultant, Billeberga, Sweden

1DV.2.56

SIMPLIFICATION OF OIL PRODUCTION PROCEDURES THROUGH MEDIATION OF FENTON REACTION AND ELECTRO-COAGULATION-FLOTATION (ECF)

Ahream YANG, Korea Advanced Institute of Science and Technology, Chemical & Biomolecular Engineering Dpt., KOREA

Co-authors: J.I. Han, Y.K. Chang, Korea Advanced Institute of Science and Technology, Daejeon, Korea

1DV.2.58

EFFECT OF SERIAL SUBCULTURING ON THE ADAPTIVE POTENTIAL OF DUNALIELLA SALINA STRAIN KU11

Wipawee DEJTISAKDI, King Mongkut's Institute of Technology Ladkrabang, Biology Dpt., THAILAND

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1DV.2.59

CONTINUOUS CULTIVATION OF MICROALGAE AS AN EFFICIENT METHOD TO IMPROVE CARBOHYDRATE PRODUCTIVITY AND BIOCHEMICAL STABILITY

Carlos Eduardo DE FARIAS SILVA, University of Padua, Industrial Engineering Dpt., ITALY

Co-authors: E. Sforza, A. Bertucco, University of Padova, Italy

1DV.2.60

MARGINAL LAND FOR GROWING INDUSTRIAL CROPS: TURNING A BURDEN INTO AN OPPORTUNITY

Efthymia ALEXOPOULOU, Center for Renewable Energy Sources, Biomass Dpt., GREECE

Co-authors: M. Christou, I. Papamichael, K. Tsiotas, I. Eleftheriadis, CRES, Athens, Greece

1DV.2.61

POTENTIAL USE OF NON-FOOD CROPS IN HEAVY METAL (-LOIDS) PHYTOEXTRACTION

Eleni KOUKOUNA, Agricultural University of Athens, Crop Science Dpt., GREECE

Co-author: E.G Papazoglou, Agricultural University of Athens, Greece

1DV.2.63

MICROALGAE BIOMASS PRODUCTION FROM ANAEROBIC EFFLUENT

Marcos Vinicius NOGUEIRA LAVAGNOLI PEREIRA, UFES - Federal University of Espírito Santo, Environmental Engineering Dpt., BRAZIL

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1DV.2.65

QUANTITATIVE AND QUALITATIVE BIOMASS PRODUCTION POTENTIAL OF GIANT REED MUTANTS UNDER RAINFED AND IRRIGATED CONDITIONS

Walter ZEGADA-LIZARAZU, University of Bologna, Department of Agricultural Science, ITALY

Co-authors: S. Salvi, G. Di Girolamo, A. Monti, University of Bologna, Bologna, Italy

1DV.2.66

FORAGE BIOMASS: A THERMAL ENERGY SOURCE IN THE CEMENT MANUFACTURING PROCESS

Marcelo AYRES CARVALHO, Embrapa - Brazilian Agriculture Research Corporation, Cerrados Research Center, BRAZIL

Co-authors: M. Mitiko Onoyama, J. Dilcio Rocha, D. Keiji Nakai, E. Santos Silva, J.M. Cabral de Sousa Dias, Embrapa - Brazilian Agriculture Research Corporation, Brasilia, Brazil; S. Susuki, InterCement, São Paulo, Brazil

12:15 - 13:30

LUNCH

13:30 - 15:00

ORAL SESSION 3DO.7

Processes for Biomethane Production

ROOM: K21

CHAIRPERSONS:

Eric BILLIG, Umweltforschungszentrum UFZ, GERMANY

David BAXTER, Former European Commission, Joint Research Centre, UNITED KINGDOM

3DO.7.1

THE BIOMETHANE MAP - RESEARCH COORDINATION FOR A LOW-COST BIOMETHANE PRODUCTION AT SMALL AND MEDIUM SCALE APPLICATIONS

Kathrin BIENERT, DBFZ-German Biomass Research Centre, GERMANY

Co-authors: E. Fischer, B. Schumacher, DBFZ-German Biomass Research Centre, Leipzig, Germany; G. Rogstrand, M. Blom, JTI - Swedish Institute of Agricultural and Environmental Engineering, Uppsala, Sweden; M. Marcin, M. Marcin, University of Warmia and Mazury in Olsztyn, Olsztyn, Poland

3DO.7.2

EFFICIENT SMALL-SCALE PLANTS UPGRADING BIOGAS - POTENTIAL ANALYSIS AND ECONOMIC ASSESSMENT

Jaqueline DANIEL-GROMKE, DBFZ-German Biomass Research Centre, Biochemical Conversion Dpt., GERMANY

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3DO.7.3

COMPARED PERFORMANCE OF TRICKLE-BED AND FLUIDIZED BED BIOREACTORS FOR SYNGAS BIO-UPGRADING INTO RNG

Ruxandra ALBU CIMPOIA, National Research Council Canada, Energy, Mining and Environment Dpt., CANADA

Co-authors: S.R. Guiot, C.D. Dubé, G. Bruant, M.J. Lévesque, National Research Council Canada, Montreal, Canada

3DO.7.4

EXPERIMENTAL OPTIMIZATION OF AN INNOVATIVE BIOGAS UPGRADING PROCESS ADAPTED TO THE AGRICULTURAL CONTEXT

Valentin FOUGERIT, CentraleSupélec, FRANCE

Co-authors: J. Lemaire, M.-A. Theoleyre, M. Stambouli, CentraleSupélec, Pomacle, France

3DO.7.5

IS BIO-P2G TECHNOLOGICALLY ATTRACTIVE AS CONTRIBUTION TOWARDS BALANCING THE SUPPLY AND DEMAND OF RENEWABLE ENERGY?

Gert HOFSTEDE, Hanze University of Applied Sciences, iLST Dpt., THE NETHERLANDS

Co-authors: F. Faber, J.P.H. Nap, M.E.F. Apol, R. Wedema, Hanze University of Applied Sciences, Groningen, The Netherlands

13:30 - 15:00

ORAL SESSION 4DO.8

Future Insights to Resource Efficient Value Chains

ROOM: K2

CHAIRPERSONS:

Rocio DIAZ-CHAVEZ, Imperial College, UNITED KINGDOM

Marc LONDO, Energy Research Centre of the Netherlands, THE NETHERLANDS

4DO.8.1

BIOMASS POTENTIALS AND THE SDGS: ADDING A FOOD SECURITY, SUSTAINABILITY AND DISTRIBUTIVE JUSTICE PERSPECTIVE

Tina BEUCHELT, University of Bonn, Center for Development Research, GERMANY

Co-author: M. Nassl, Center for Development Research (ZEF), Bonn, Germany

4DO.8.2

A SUSTAINABLE BIOECONOMY FOR EUROPE: KEY RESULTS FROM THE EU FP7 PROJECT S2BIOM

Uwe FRITSCHKE, IINAS, Scientific Director, GERMANY

Co-authors: C. Panoutsou, Imperial College, London, United Kingdom; B. Elbersen, I. Straritsky, Alterra/WUR, Wageningen, The Netherlands; L. Wenzelides, FNR, Güstrow, Germany; M. Dees, ALU-FR, Freiburg, Germany; N. Forsell, IIASA, Laxenburg, Austria; M. Lindner, J. Fitzgerald, EFI, Joensuu, Finland; L. Pelkmans, VITO, Mol, Belgium; R. Janssen, WIP, Munich, Germany; P. Canciani, CEI, Trieste, Italy; E. Alakangas, VTT, Jyväskylä, Finland; L. Iriarte, IINAS, Madrid, Spain; M. Londo, Energy Research Centre of the Netherlands, Amsterdam, The Netherlands; B. Kavalov, European Commission, JRC, Ispra, Italy; P. Anttila, LUKE, Helsinki, Finland; J. van Stralen, Energy Research Centre of the Netherlands, Petten, The Netherlands; T. Lammens, M. Vis, BTG, Enschede, The Netherlands

4DO.8.3

THE PARIS -LIFESTYLE - ANALYSIS AND ASSESSMENT OF BIOMASS USE FOR LOW CARBON LIFESTYLES TO REACH THE CLIMATE TARGETS 2050

Gerfried JUNGMEIER, Joanneum Research Forschungsgesellschaft, Research Centre for Climate, Energy and Environment, AUSTRIA

Co-authors: G. Lettmayer, N. Bird, S. Schwarzinger, Joanneum Research, Graz, Austria

4DO.8.4

THE BALANCE BETWEEN FUTURE INCREASED POTENTIAL SUPPLY AND DEMAND OF SUSTAINABLE BIOMASS -THE CASE STUDY OF SWEDEN

Pål BÖRJESSON, Lund University, Environmental and Energy Systems Studies Dpt., SWEDEN

Co-authors: J. Hansson, IVL Swedish Environmental Research Institute, Stockholm, Sweden; G. Berndes, Chalmers University of Technology, Göteborg, Sweden

4DO.8.5

BIOBUILDER - CREATE A BIOBASED VALUE CHAIN FROM A-TO-Z

Ruben GUISSON, VITO - Flemish Institute Technological Research, Biomass Sustainable Transition Dpt., BELGIUM

Co-author: M. Van Dael, VITO/UHasselt, Mol/Hasselt, Belgium

13:30 - 15:00

ORAL SESSION 3DO.9

Thermally Treated Solid Biomass - Processes and Biochar Applications

ROOM: K1

CHAIRPERSONS:

Jaap KIEL, Energy Research Centre of the Netherlands, THE NETHERLANDS

Corneels SCHABORT, North-West University, SOUTH AFRICA

3DO.9.1

PERFORMANCE ASSESSMENT OF A PILOT AUTOTHERMAL CARBONIZATION UNIT

Andrea Maria RIZZO, University of Florence, Industrial Engineering Dpt., ITALY

Co-authors: M. Pettorali, R. Nistri, D. Chiamonti, RE-CORD/University of Florence, Florence, Italy

3DO.9.2

THE INFLUENCE AND IMPLICATIONS OF RECYCLING HYDROTHERMAL PROCESS WATERS ON HYDROCHAR COMBUSTION CHEMISTRY

Aidan SMITH, University of Leeds, Energy Research Institute, UNITED KINGDOM

Co-author: A.B. Ross, University of Leeds, Leeds, United Kingdom

3DO.9.3

CARBOWERT: LIFE CYCLE ASSESSMENT OF DIFFERENT HYDROTHERMAL CARBONIZATION CONCEPTS PRODUCING COAL FOR ENERGETIC AND MATERIAL USE

Kathleen MEISEL, DBFZ-German Biomass Research Centre, Bioenergy Systems Dpt., GERMANY

Co-authors: A. Clemens, DBFZ-German Biomass Research Centre, Leipzig, Germany; E. Schulz, UFZ, Halle, Germany; C. Fühner, UFZ, Leipzig, Germany

3DO.9.4

TECHNICAL AND ECONOMIC FEASIBILITY OF COMBUSTING BIOCARBON IN SMALL SCALE PELLET BOILERS

Pietro BARTOCCI, University of Perugia, Biomass Research Centre, ITALY

Co-authors: R.S. Kempegowda, Ø. Skreiberg, SINTEF Energy Research, Trondheim, Norway; F. Liberti, G. Bidini, F. Fantozzi, University Perugia, Italy

3DO.9.5

BIOCHARS AS SOURCE OF ANODES FOR NA-ION BATTERIES: FEASIBILITY STUDY BASED ON VARIOUS BIOMASS TYPES

Capucine DUPONT, CEA, FRANCE

Co-authors: C. Del Mar Saavedra Rios, V. Simone, L. Simonin, CEA, Grenoble, France

13:30 - 15:00

VISUAL PRESENTATIONS IDV.3

Industrial Innovations in Feedstock Production, Power, Biogas and Advanced Biofuels Generation

ROOM: Poster Area

CHAIRPERSON:

Enrico CEOTTO, CREA- Council for Agricultural Research and Economics, ITALY

IDV.3.4

QUALITY GUIDELINES OF WOOD CHIPS AND HOG FUELS - APPLYING INTERNATIONAL SOLID BIOFUELS STANDARDS

Eija ALAKANGAS, VTT Technical Research Centre of Finland, Renewable Energy Processes Dpt., FINLAND

IDV.3.6

PREDICTING BIOMASS YIELDS OF CORN STOVER FROM SATELLITE IMAGING IN EASTERN CANADA

Charles LALONDE, Ontario Federation of Agriculture, CANADA

Co-authors: M. Wellisch, J. Lui, J. Shang, T. Huffman, A. Davidson, Agriculture and AgriFood Canada, Ottawa, Canada

IDV.3.8

FOREST PLANTATION AND HARVESTING SYSTEMS FOR EUCALYPTUS BIOMASS INVESTMENTS IN FLORIDA USA

Tom WILLIAMS, Harvest Logistics, USA

Co-author: J. Wright, Durania, Boone NC, Usa

IDV.3.9

SELF-PROPELLED BIOMASS HARVESTER MACHINE FOR PRUNING RESIDUES REMOVAL AND PRE-PROCESSING IN ORCHARDS AND VINEYARDS

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IDV.3.10

OPERATIONAL AND DESIGN PARAMETERS OF MICROALGAE CULTIVATION SYSTEMS FOR ITS APPLICATION IN INDUSTRIAL SCALE

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IDV.3.12

BUSH ENCROACHMENT IN NAMIBIA - TURNING AN ENVIRONMENTAL HAZARD INTO A SOCIO-ECONOMIC OPPORTUNITY

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IDV.3.13

BIOHYDROGAS. A NEW TECHNOLOGY FOR PRODUCING H₂

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IDV.3.14

EFFICIENT WAY TO PRODUCE BIOFUELS FROM MUNICIPAL SOLID WASTES

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IDV.3.21

REMOTE CONDITION MONITORING OF AUTOMATED BIOMASS POWER STATIONS

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IDV.3.22

INNOVATIVE APPROACH AND TECHNICAL DEVELOPMENT ABOUT SOLID BIOMASS UTILIZATION FOR POWER PLANT BOILERS IN IHI

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IDV.3.24

EXPERIMENTAL AND NUMERICAL STUDY ON TWO-STAGE COMBUSTION PROCESS OF SYNGAS FUELS WITH HIGH CONTENT OF NITROGEN BOUNDED COMPOUNDS

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IDV.3.26

AN EFFICIENT PAPER SLUDGE HYDROLYSIS METHOD USING WHOLE CELL BIOCATALYSTS, RENDERING PAPER SLUDGE IDEAL FOR BIOGAS PRODUCTION.

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IDV.3.31

BIOETHANOL PRODUCTION BY CRUDE GLYCEROL FERMENTATION

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IDV.3.34

CHALLENGES IN SCALING UP AN NON-ENZYMATIC PROCESS FOR THE PRODUCTION OF SECOND GENERATION SUGARS

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IDV.3.35

BIORESCUE: ENHANCED BIOCONVERSION OF AGRICULTURAL RESIDUES THROUGH CASCADING USE

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IDV.3.36

PAVING THE WAY FOR A NEXT GENERATION BIOBUTANOL (BUTANEXT)

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IDV.3.37

TECHNICAL PRODUCTION PROCESS FOR INNOVATIVE ANTIOXIDANTS USING NOVEL ENZYMES AS BIOCATALYST

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IDV.3.39

CONCEPT STUDY FOR "MANURE-TO-ELECTRICITY" AT SMALL-SCALE FARMS: THE SWISS CASE

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IDV.3.41

NOVEL ENZYME ACTIVITY SCREENING ON COMPLEX BIOMASS STRUCTURES

Julia SCHÜCKEL, GlycoSpot, DENMARK

IDV.3.46

LIFE CYCLE ASSESSMENT OF HYDROTHERMAL CARBONIZATION OF FOUR WET BIOMASS WASTE STREAMS AT INDUSTRY-RELEVANT SCALES

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IDV.3.48

THE NEW EUROPEAN TECHNOLOGY AND INNOVATION PLATFORM FOR BIOENERGY: PROMOTING THE MARKET UPTAKE OF COST-COMPETITIVE INNOVATIVE BIOENERGY AND BIOFUELS VALUE CHAINS

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IDV.3.49

WEALTH FROM BIO ECONOMY - NATIONAL ECONOMY PERSPECTIVE ON INTEGRATED BIO- AND LOW CARBON TECHNOLOGIES

Antti ARASTO, VTT Technical Research Centre of Finland, FINLAND

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IDV.3.50

AUTOMATED MOISTURE, VOLATILE AND ASH DETERMINATION WITH A TGA SYSTEM.

Michael JAKOB, LECO, GERMANY

IDV.3.54

THE QUANTITATIVE AND QUALITATIVE ANALYSIS OF ALTERNATIVE AND RENEWABLE SOLID BIOFUELS - DEVELOPMENT AND VALIDATION

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IDV.3.55

BIOMASS FOR RESIDENTIAL AND COMMERCIAL HEATING IN A REMOTE CANADIAN ABORIGINAL COMMUNITY

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IDV.3.58

IEA BIOENERGY: POLICIES AND STATUS OF IMPLEMENTATION

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15:00 - 15:15

BREAK

15:15 - 16:45

CLOSING SESSION

Room: Auditorium

Chaired by:

Dr. Nicolae SCARLAT, Technical Programme Chairman

European Commission, Joint Research Centre, Directorate for Energy, Transport and Climate

Welcome to the Closing Session

Highlights of the Conference

Dr. Nicolae SCARLAT, Technical Programme Chairman

European Commission, Joint Research Centre, Directorate for Energy, Transport and Climate

Ceremony of the Poster Awards

Dr. Nicolae SCARLAT, Technical Programme Chairman

European Commission, Joint Research Centre, Directorate for Energy, Transport and Climate

Dimitrios SIDIRAS, EUBCE Poster Awards Coordinator, University of Piraeus, Greece

Ceremony of the Student Awards

Jean-François DALLEMAND, EUBCE Students Awards Coordinator,

European Commission, DG JRC Institute Energy and Transport