Status as of 27/04/2018

MONDAY CONFERENCE OPENING
Room: AUDITORIUM 10+11+12

Free admission to the Monday Opening

08:30 WELCOME COFFEE

09:00 - 10:00
SCIENTIFIC OPENING / PLENARY SESSION
Applications of Science in Industry

Chair:
Piotr SZYMANSKI, European Commission, Joint Research Centre, Director of Energy, Transport and Climate

Nicolae SCARLAT, European Commission, Joint Research Centre, Directorate of Energy, Transport and Climate

NO CARBON LEFT BEHIND: RECYCLING CARBON IN THE STEEL INDUSTRY AND BEYOND.
Jennifer HOLMGREN, Lanzatech, Chief Executive Officer, USA

WHY BIOENERGY IS NECESSARY FOR A SUSTAINABLE TRANSPORT SYSTEM - ACHIEVEMENTS OF SCANIA IN DECARBONISING TRANSPORT
Urban WÄSTLJUNG, Scania CV AB, PhD, Senior adviser, Public & Sustainability Affairs, Corporate Relations, CA, Sweden

NEW OPPORTUNITIES IN BIOECONOMY
Marko JANHUNEN, UPM, Director Public Affairs and LSB Chair, Finland

THE LARGEST BIOGAS PLANT OPERATOR AND INVESTOR IN DENMARK
Ole HVELPLUND, NGF (Nature Energy), Chief Executive Officer, Denmark

10:15 – 11:15
OPENING ADDRESSES

Chair:
EUBCE Conference General Chairman,
Michael PERSSON, Danish Bioenergy Association, Head of Secretariat

Lars Chr. LILLEHOLT, The Minister of Energy, Utilities and Climate, Denmark

Jorge SEGURO SANCHES, The Secretary of State for Energy of Portugal

Jeppe KOFOD, Member of European Parliament

Giulio VOLPI, European Commission, Directorate General for Energy, Renewables and CCS Policy Unit

Thomas SCHRØDER, Novozymes, Vice-President Biorefining Commercial

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MONDAY

11:15 – 12:30
MODERATED PANEL DISCUSSION

Topic: The vital role of biomass for climate protection and sustainable development – How to make it happen.

The objective of this panel is to discuss practical steps how to push forward biofuels for long haul transport with stakeholders from finance and industry.

MODERATOR:
Paolo FRANKL, International Energy Agency, Head of Renewable Energy Division, France

PANELLISTS

Dana R. YOUNGER, IFC - International Finance Corporation, Chief Renewable Energy Specialist, Global Infrastructure & Natural Resources Department

Blanka TOUKONIITTY, Neste Corporation, Associate, Dr. Sc. (Tech.) Research & Development, Finland

Paolo CORVO, CLARIANT, Head of Sales & Marketing Biofuels & Derivates, Germany

Dolf GIELEN, IRENA, Director of the Innovation and Technology Center in Bonn

Claus SAUTER, VERBIO, CEO Germany

Renato DOMITH GODINHO, Biofuture Platform alternate focal point for Brazil and interim facilitator Head, Division for New and Renewable Energy Resources – DRN, Ministry of Foreign Affairs – Brazil

LINNEBORN PRIZE

EUBIA AWARD

Status as of 27/04/2018

13:30 - 15:00
ORAL SESSION 1AO.1
Biomass potentials in a changing climate
Room: AUDITORIUM 10

CHAIRPERSONS:
Lorenzo DI LUCIA, Imperial College, UNITED KINGDOM
Evelyne THIFFAULT, Laval University, CANADA

1AO.1.1
CONSOLIDATING THE CURRENT KNOWLEDGE BASE OF THE QUANTITATIVE BIOMASS POTENTIALS FOR EUROPEAN ENERGY SUPPLY
Steven MANDLEY, Utrecht University, Energy & Resources, THE NETHERLANDS
Co-authors: H.M. Junginger, B. Wicke, Utrecht University, The Netherlands

1AO.1.2
ESTIMATION AND GEOGRAPHIC DISTRIBUTION OF MARGINAL AGRICULTURAL LANDS IN SPAIN WITH BIOENERGY POTENTIAL
Carlos Sixto CIRIA RAMOS, CIEMAT, Biomasa Dpt., SPAIN
Co-authors: J. Carrasco, M. Sanz, P. Ciria, CEDER-Ciemat, Soria, Spain

1AO.1.3
MODELLING THE POTENTIAL BIOENERGY PRODUCTION FROM AGRO-FORESTRY CROPS AND RESIDUES IN ANGOLA
Fernando CATIVA, Faculdade de Ciências e Tecnologia, UNL, Departamento de Ciências e Tecnologia da Biomas, PORTUGAL
Co-author: A.L. Fernando, FCT-NOVA, Caparica, Portugal

1AO.1.4
POTENTIAL EFFECTS OF GLOBAL WARMING ON THE SPATIAL DISTRIBUTION AND PRODUCTIVITY OF FIVE TREE SPECIES USED IN THE WOOD ENERGY SUPPLY CHAIN IN FRANCE FOR 2050
Emmanuel GARBOLINO, Mines Paris-tech, CRC - Centre de Recherche sur les Risques et les Crises, FRANCE
Co-authors: W. Daniel, AgroParisTech, Paris, France; G. Hinojos Mendoza, Universidad Autónoma de Chihuahua, Mexico

1AO.1.5
IMPACTS OF CLIMATE CHANGE ON REGIONAL BIOENERGY FEEDSTOCK AVAILABILITIES
Jennifer CRONIN, UCL, Energy Institute, UNITED KINGDOM
Co-author: F. Zabel, LMU, Munich, Germany

13:30 - 15:00
ORAL SESSION 2AO.2
New combustion technologies for a broad fuel spectrum
Room: AUDITORIUM 11+12

CHAIRPERSONS:
Markku PAANANEN, JAMK University of Applied Sciences, FINLAND
Timothée NOCQUET, Groupe UNIPER, FRANCE

2AO.2.1
CO-FIRING OF PELLETIZED CASSAVA RHIZOME AND EUCALYPTUS BARK IN A FLUIDIZED BED: STUDIES ON THE EFFECTS OF CO-FIRING METHODS AND BED MATERIAL TYPE ON THE COMBUSTOR PERFORMANCE AND TIME-RELATED BED BEHAVIOR
Vladimir KUPRIANOV, Thammasat University, Sirindhorn International Institute of Technology, THAILAND
Co-authors: C. Se, Sirindhorn International Institute of Technology, Thammasat University, Pathum Thani, Thailand; P. Ninduangdee, Phetchaburi Rajabhat University, Thailand

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2AO.2.2
UTILIZATION OF VARIOUS NON-WOODY BIOMASS FUELS IN AN INNOVATIVE MULTI-FUEL COMBUSTION CONCEPT
Sabine FELDMEIER, Bioenergy 2020+, AUSTRIA
Co-authors: E. Wopienka, M. Schwarz, BIOENERGY2020+, Wieselburg, Austria; C. Pfeifer, University of Natural Resources and Life Sciences, Vienna, Austria

2AO.2.3
CHARACTERISATION, TESTING AND MODELLING OF A VARIETY OF PULVERISED BIOMASS FUELS BURNT IN AN AXIALLY AIR STAGED SWIRL-STABILISED TEST BURNER FOR AN INDUSTRIAL HEATING APPLICATION
Timothy GRIFFIN, University of Applied Sciences, Northwestern Switzerland, Institute of Biomass and Resource Efficiency, SWITZERLAND
Co-authors: E. G. Engelbrecht, D. Winkler, R Haymoz, A. Marrella, J.-M. Kaiser, D. Weiss, FHNW, Windisch, Switzerland

2AO.2.4
INVESTIGATION ON SYNGAS ASSISTED COMBUSTION FOR LOW EMISSION OPERATION IN GAS BURNER
Rolandas PAULAUSKAS, Lithuanian Energy Institute, Laboratory of Combustion Processes, LITHUANIA
Co-authors: N. Striugas, R. Skvorcinskiene, K. Zakarauskas, Lithuanian Energy Institute, Kaunas, Lithuania

2AO.2.5
UNDERSTANDING THE EFFECTS OF NOZZLE DESIGN AND SPRAY CHARACTERISTICS FOR OPTIMIZING PYROLYSIS LIQUID BIOFUEL IGNITION AND COMBUSTION
Murray THOMSON, University of Toronto, Mechanical and Industrial Engineering, CANADA
Co-author: S. Albert-Green, University of Toronto, Canada

13:30 - 15:00
ORAL SESSION 3AO.3
Oil-based biofuels
Room: 20

CHAIRPERSONS:
Dimitrios SIDIRAS, University of Piraeus, GREECE
Drilona SHTJEFNI, EUBIA, BELGIUM

3AO.3.1
SUPERCRITICAL METHANOLYSIS OF WASTE COOKING OIL FOR BIODIESEL PRODUCTION: EXPERIMENTAL ASSESSMENT FOR EVALUATING THE EFFECT OF FREE FATTY ACIDS CONTENT
Omar ABOELAZAYEM, London South Bank University, Chemical Engineering, UNITED KINGDOM
Co-authors: O. Aboeazayem, M. Gadalla, The British University in Egypt, Cairo, Egypt; B. Saha, London South Bank University, United Kingdom

3AO.3.2
POTENTIAL OF NITRATIREDUCTOR SP. OM-1 TO PRODUCE MORE SHORT-CHAIN ESTERS AND LESS EXCESS SLUDGE DURING WASTEWATER TREATMENT
Yoshiko OKAMURA, Hiroshima University, AdSM, JAPAN
Co-authors: S.Nakai, Y.Noboru, H.Takahashi, T Miura, T.Tajima, T.Aki, Y.Matsumura, Y.Nakashimada, Hiroshima University, Japan

3AO.3.3
REDUCTION OF GREENHOUSE GAS EMISSIONS IN BIOMASS PRODUCTION BY USING PLANT OIL FUEL IN TRACTORS
Klaus THUNEKE, Technology and Support Centre in the Centre of Excellence for Renewable Resources, Liquid Biofuels, Biolubricants and Process Materials, GERMANY
Co-authors: J. Ettl, D. Dressler, E. Remmele, Technology and Support Centre, Straubing, Germany

Status as of 27/04/2018

3AO.3.4
WASTE OFFICE PAPER: A POTENTIAL BIOREFINERY FEEDSTOCK FOR MICROBIAL LIPIDS FOR BIO-DIESEL PRODUCTION
Anu SADASIVAN NAIR, Sultan Qaboos university, Biology, OMAN
Co-authors: A. Neelamegam, S. Nallusamy, Sultan Qaboos University, Muscat, Oman

3AO.3.5
ALTERNATIVE JET FUEL PRODUCTION FROM TROPICAL BIOMASS RESOURCES
Scott TURN, University of Hawaii, Hawaii Natural Energy Institute, USA
Co-author: T.Morgan, Hawaii Natural Energy Institute, University of Hawaii, Honolulu, Usa

13:30 - 15:00
VISUAL PRESENTATIONS 4AV.1
Biomass strategies and policies
See page 50

13:30 - 15:00
VISUAL PRESENTATIONS 1AV.2
Waste valorization
See page 51

14:30 - 18:00
DANISH BIOENERGY SOLUTIONS AND DENMARK AS TESTING GROUND
See page 96

14:30 - 17:00
WORKSHOP
EU POLICY AND INDUSTRY PERSPECTIVES ON BIOFUELS IN A GLOBAL CONTEXT
See page 101

15:00 - 15:15 **BREAK**

15:15 - 16:45
ORAL SESSION 1AO.4
Biomass mobilisation - meeting future biomass demand
Room: AUDITORIUM 10

CHAIRPERSONS:
Jean-Francois DALLEMAND, European Commission, JRC, ITALY
Birka WICKE, Utrecht University, THE NETHERLANDS

1AO.4.1
REVEALING BIOENERGY POTENTIALS: MAPPING MARGINAL LANDS IN EUROPE - THE SEEMLA GIS-TOOL
Spyridon GALATSIDAS, Democritus University of Thrace, Department of Forestry and Management of the Environment and Natural Resources, GREECE
Co-authors: N. Gounaris, D. Vlachaki, E. Dimitriadis, Department of Forestry and Management of the Environment and Natural Resources, Democritus Universit, Orestiada, Greece; F. Kiourtsis, Decentralised Administration of Macedonia & Thrace, Thessaloniki, Greece; D. Keramitzis, Decentralised Administration of Macedonia & Thrace, Komotini, Greece; W. Gerwin, F. Repmann, Brandenburg Technical University (BTU) Cottbus, Germany; N. Rettenmaier, G. Reinhardt, IFEU Heidelberg, Germany; V. Ivanina, O. Hanzhenko, Institute for Bioenergy Crops and Sugar Beet, Kyiv, Ukraine; I. Gnap, K. Bogatov, Salix Energy., Kyiv, Ukraine; F. Barbera, D. Mattioli, Legambiente Onlus, Rome, Italy; C. Volkmann, W. Baumgarten, Agency for Renewable Resources (FNR e.V.), Guelzow-Pruezen, Germany

1AO.4.2
ELBA: A NATIONAL REFERENCE TOOL FOR AGRICULTURAL BIOMASS RESOURCE ASSESSMENT
Sylvain MARSAC, ARVALIS - Institut du Végétal, R&D - Agronomy Economy Environment Dpt., FRANCE
Co-authors: M. Heredia, GIE GAO, Montardon, France; F. Labalette, N. Delaye, GIE GAO, Paris, France; P. Levasseur, IFIP, Le Rheu, France; J. Capdeville, IDELE, Castanet Tolosan, France; P. Ponchant, ITAVI, Ploufragran, France

1AO.4.3
MOBILISATION OF UNLOVED WOODS FOR BIOENERGY AT THE HEART OF QUEBEC COMMUNITIES
Evelyne THIFFAULT, Laval University, Wood and Forest Science, CANADA
Co-authors: A. Achim, M. Béland, L. Bouthillier, A-A Côté-Jinchereau, C. Durocher, C. Krolik, B. Kulisic, Laval University, Quebec City, Canada; J. Barrette, Canadian Forest Service, Quebec City, Canada; W. Mabee, Queen's University, Kingston, Canada

1AO.4.4
SPATIALLY EXPLICIT ASSESSMENT OF THE THEORETICAL, TECHNICAL, ECONOMIC, ENVIRONMENTAL AND SUSTAINABLE POTENTIAL OF BIOMASS FOR THE BIOBASED ECONOMY
Floor VAN DER HILST, Utrecht University, Energy & Resources, Copernicus Institute, THE NETHERLANDS
Co-authors: K. Viana, R. Perez, Universidade Federal de Viçosa, Viçosa, Brazil; J.A. Verstegen, University of Münster, Germany; B. Wicke, Copernicus Institute, Utrecht University, The Netherlands

1AO.4.5
ASSESSING THE SENSITIVITY OF NATIONAL ENERGY INFRASTRUCTURE DECISIONS TO IMPORTED BIOMASS FEEDSTOCKS: A UK CASE STUDY USING THE BIOMASS VALUE CHAIN MODEL
Zoe HARRIS, Imperial College London, Centre for Environmental Policy, UNITED KINGDOM
Co-author: R. Slade, Imperial College London, United Kingdom

15:15 - 16:45
ORAL SESSION 2AO.5
Solving ash related problems, improved process control and simulations
Room: AUDITORIUM 11+12

CHAIRPERSONS:
Ingwald OBERNBERGER, Bios Bioenergiesysteme, AUSTRIA
Morten Gottlieb JESPERSEN, Danish Technological Institute, Biomass and combustion technology, DENMARK

2AO.5.1
COMBUSTION BEHAVIOUR AND SLAGGING TENDENCIES OF KAOLIN ADDITIVATED AGRICULTURAL PELLETS AND OF WOOD-STRAW PELLET BLENDINGS IN SMALL SCALE BOILERS
Daniel KUPTZ, Technology and Support Centre of Renewable Raw Materials, Solid Biofuels Dpt., GERMANY
Co-authors: R. Mack, H. Hartmann, Technology and Support Center in the Center of Excellence for Renewable Ressources (TFZ), Straubing, Germany

2AO.5.2
FUEL FLEXIBLE AND LOW-EMISSION BIOMASS COMBUSTION BY COMBINATION OF FUEL ADDITIVATION AND COMBUSTION RELATED PRIMARY MEASURES
Christoph MANDL, Bios Bioenergiesysteme, AUSTRIA
Co-authors: I. Obernberger, BIOS BIOENERGIESYSTEME, Graz, Austria; H. Knautz, POLYTECHNIK Luft- u. Feuerungstechnik, Weissenbach, Austria

2AO.5.3
BLENDING BIOMASS: DILUTION OR CHEMICAL REACTION IN COMBUSTION PROCESS
Gilles RATEL, CEA-TECH, LITEN/DTBH Dpt., FRANCE
Co-authors: F. Defoort, M. Marchand, B. Grangier, H. Miller, cea, grenoble, France; M. Campargue, Ragt energy, Albi, France; C. Dupont, IHE, Delft, The Netherlands

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2AO.5.4
HYSTERESIS IN WOOD LOG COMBUSTION DEMONSTRATED THROUGH TRANSIENT CFDSIMULATIONS AND EXPERIMENTS
Mette BUGGE, SINTEF Energy Research, Thermal Energy, NORWAY
Co-authors: N.E.L. Haugen, M. Seljeskog, Ø. Skreiberg, SINTEF Energy Research, Trondheim, Norway

2AO.5.5
OPTIMIZATION OF WOOD COMBUSTION IN LOW-POWER FIRING SYSTEMS BY SENSOR-BASED OPERATION: HIGH TEMPERATURE CO/HC SENSOR FOR LONG-TERM IN-SITU OPERATION
Heinz KOHLER, Karlsruhe University of Applied Sciences, Inst. for Sensor and Information systems, GERMANY
Co-authors: B. Ojha, X. Zhang, Karlsruhe University of Applied Sciences, Germany

MONDAY

15:15 - 16:45
ORAL SESSION 3AO.6
Biorefineries, value chains and business models
Room: 20

CHAIRPERSONS:
Gerfried JUNGMEIER, Joanneum Research Centre, AUSTRIA
René VAN REE, Wageningen University, THE NETHERLANDS

3AO.6.1
COMPARATIVE TECHNOECONOMIC AND ENVIRONMENTAL ASSESSMENT OF LIGNOCELLULOSIC MARINE BIOFUEL PRODUCTION IN SCANDINAVIA
Samantha TANZER, TU Delft, Faculty of Technology, Policy, and Management, THE NETHERLANDS
Co-authors: A. Ramirez-Ramirez, J. Posada, Delft University of Technology, The Netherlands; S. Geraedts, GoodFuels, Amsterdam, The Netherlands

3AO.6.2
A TWO STEP PROCESS FOR THE HYDROTHERMAL REFORMING OF SUCROSE
Varsha PAIDA, University of Twente, Faculty of Science and Technology, THE NETHERLANDS
Co-authors: S.R.A Kersten, D.W.F Brilman, University of Twente, Enschede, The Netherlands

3AO.6.3
RETRO-TECHNO-ECONOMIC-ENVIRONMENTAL ANALYSIS (RTEEA) APPLIED TO A FIRST AND SECOND GENERATION ETHANOL PRODUCTION
Marcelo RIBEIRO, Federal University of São Carlos, Chemical Engineering, BRAZIL
Co-authors: A.M. Elias, F.F. Furlan, R.C. Giordano, UFSCar, São Carlos, Brazil

3AO.6.4
A NOVEL BUSINESS-INSPIRED DECISION MAKING METHODOLOGY FOR SELECTION OF CHEMICALS TO BE PRODUCED FROM BIOMASS
Soledad GUTIÉRREZ, Universidad de la República, URUGUAY
Co-authors: C. Philippi, A. Helal, F. Mangone, P. Ures, M. Tejera, R. Kreimerman, A.I. Torres, Instituto de Ingeniería Química, Facultad de Ingeniería, Universidad de la República, Montevideo, Uruguay

3AO.6.5
LIFE CYCLE ASSESSMENT OF NEW BIOREFINERY CONCEPTS PRODUCING PLATFORM AND SPECIALTY CHEMICALS BASED ON WOODY BIOMASS
Kathleen MEISEL, DBFZ-German Biomass Research Centre, Bioenergy Systems Dpt., GERMANY
Co-authors: R. Nitzsche, A. Gröngröft, DBFZ, Leipzig, Germany

15:15 - 16:45
VISUAL PRESENTATIONS 4AV.3
Sustainability criteria and socio-economic assessments in bioenergy and bieoeconomy
See page 52

15:15 - 16:45
VISUAL PRESENTATIONS 3AV.4
Production, evaluation and upgrade of oil-based biofuels
See page 54

16:45 - 17:00 **BREAK**

17:00 - 18:30
ORAL SESSION 1AO.7
Biomass quality upgrading
Room: AUDITORIUM 10

MONDAY

CHAIRPERSONS:
Andrea MONTI, University of Bologna, ITALY
Zuzhang XIA, FAO, ITALY

1AO.7.1
IMPROVEMENT OF FOREST CHIP QUALITY AND SUPPLY CHAIN PERFORMANCE BY MEANS OF A CONTINUOUS QUALITY MEASUREMENT SYSTEM
Tapio RANTA, Lappeenranta University of Technology, School of Energy Systems, FINLAND
Co-authors: O.-J. Korpinen, M. Aalto, Lappeenranta University of Technology, Mikkeli, Finland

1AO.7.2
CHARACTERISATION AND MODELLING OF THE HYSTERIC COMPACTION-DILATION RELATIONSHIP FOR A RANGE OF BIOMASS PRODUCTS IN AUSTRALIA AND THE PACIFIC ISLANDS
Kenneth WILLIAMS, University of Newcastle, Newcastle Institute for Energy and Resources, AUSTRALIA
Co-authors: D. Ilic, D. Ellis, M. Jones, Newcastle Institute for Energy and Resources, University of Newcastle, Callaghan, Australia; S. Williams, E. Ronneberg, Secretariat of the Pacific Region Environmental Program, Apia, Samoa Island; C. Maurin, International Centre for Balanced Land Use, University of Newcastle, Callaghan, Australia

1AO.7.3
SOLAR ENHANCED DRYING IMPROVING THE WOODY BIOMASS SUPPLY CHAIN
Jyrki RAITILA, VTT Technical Research Centre of Finland, Bioenergy Dpt., FINLAND
Co-authors: E. Tsupari, J. Kärki, VTT, Jyväskylä, Finland

1AO.7.4
STORAGE OF BIOMASS FOR BIOGAS PRODUCTION: EFFECT OF ENSILING AND CO-ENSILING, BIOLOGICAL ADDITIVE AND SIZE REDUCTION
Lu FENG, Aarhus University, Department of Engineering, DENMARK
Co-authors: E.F Kristensen, Y.M.L Perschke, H.B Møller, V. Moset, Aarhus University, Tjele, Denmark

1AO.7.5
EFFECT OF BIOGAS DIGESTATE PROCESSING ON FERTILIZER VALUE
Claudia MAURER, University of Stuttgart, Institute for Sanitary Engineering, Water Quality and Solid Waste Management, GERMANY
Co-authors: J. Seiler-Petzold, J. Müller, University of Hohenheim, Institute of Agricultural Engineering, Tropics and Subtropics Group, Stuttgart, Germany; R. Schulz, University of Hohenheim, Institute of Crop Science, Fertilization and Soil Matter Dynamics, Stuttgart, Germany

Status as of 27/04/2018

17:00 - 18:30
ORAL SESSION 2AO.8
Strategies to solve ash related problems in large scale systems
Room: AUDITORIUM 11+12

CHAIRPERSONS:
Marco BARATIERI, Free University of Bolzano, ITALY
Peter Arendt JENSEN, Danish Technical University, DENMARK

2AO.8.1
EVALUATION OF THE LOW-TEMPERATURE CORROSION POTENTIAL OF FLUE GASES FROM THE COMBUSTION OF WOOD AND NON-WOOD FUELS
Thomas BRUNNER, Bios Bioenergiesysteme, AUSTRIA
Co-authors: I. Obernberger, C. Ramerstorfer, W. Kanzian, BIOS BIOENERGIESYSTEME, Graz, Austria

2AO.8.2
DEPOSITION PROPERTIES OF BIOMASS FLY ASH
Yashasvi LAXMINARAYAN, Technical University of Denmark, Chemical and Biochemical Engineering, DENMARK
Co-authors: P. A. Jensen, H. Wu, F. J. Frandsen, P. Glarborg, Technical University of Denmark, Kongens Lyngby, Denmark; B. Sander, Ørsted Bioenergy & Thermal Power A/S, Fredericia, Denmark

2AO.8.3
THE IMPACT OF ALUMINOSILICATE-BASED ADDITIVES UPON THE SINTERING AND MELTING BEHAVIOUR OF BIOMASS ASH
Lee ROBERTS, University of Leeds, Chemical and Process Engineering, UNITED KINGDOM
Co-authors: J. M. Jones, W. F. Gale, A. Williams, P. E. Mason, University of Leeds, United Kingdom

2AO.8.4
STUDY ON BED AGGLOMERATION, FOULING AND SLAGGING REMEDIES IN BIOMASS FIRED BFB COMBUSTORS BASED ON LABORATORY TESTS AND LONG TERM OPERATIONAL EXPERIENCES
Jaroslaw ZUWALA, Institute for Chemical Processing of Coal, POLAND
Co-authors: J. Lasek, K. Glód, ICHPW, Zabrze, Poland

2AO.8.5
INDUSTRIAL PROCESS HEATING: A NEW ROUTE FOR BIOGAS UTILIZATION?
Jörg LEICHER, Gas- und Wärme-Institut Essen e.V., Industrial Combustion Technology, GERMANY
Co-authors: M. Fiehl, B. Islami, A. Giese, K. Görner, Gas- und Wärme-Institut Essen e.V., Essen, Germany; B. Fleischmann, Hüttentechnische Vereinigung der Deutschen Glas Industrie e.V., Offenbach am Main, Germany

17:00 - 18:30
ORAL SESSION 3AO.9
Biorefineries, new concepts and technologies
Room: 20

CHAIRPERSONS:
Maria GEORGIADOU, European Commission, DG Research, BELGIUM
Jaap VAN HAL, Energy Research Center of the Netherlands, THE NETHERLANDS

3AO.9.1
THERMO-CATALYTIC REFORMING AS BASEMENT FOR A NOVEL BIOREFINING ROUTE TO PRODUCE CHEMICALS AND FUELS
Nina SCHMITT, Fraunhofer Institute for Environmental, Safety, and Energy Technology UMSICHT, Renewable Energy, GERMANY
Co-authors: A. Apfelbacher, A. Hornung, Fraunhofer UMSICHT, Sulzbach-Rosenberg, Germany

3AO.9.2
SCREENING OF OLEAGINOUS YEASTS FOR LIPIDS AND PIGMENTS PRODUCTION FROM LIGNOCELLULOSIC HYDROLYSATE
Zhijia LIU, Technical Universiry of Denmark, Novo Nordisk Foundation Center for Biosustainability, DENMARK
Co-authors: G. Dragone, S. Mussatto, Technical University of Denmark, Copenhagen, Denmark

3AO.9.3
PROCESS DEVELOPMENT OF SEAWEED BIOREFINERY
Yutaka NAKASHIMADA, Hiroshima University, Department of Molecular Biotechnology, JAPAN
Co-authors: A. Kita, T. Miura, T. Tajima, T. Aki, Y. Okamura, Y. Matsumura, Hiroshima University, Japan; N Nakamura, Tokyo Universuty of Agriculture and Technology, Higashi-Koganei, Japan

3AO.9.4
BOOSTING THE CARBON EFFICIENCY OF THE BIOMASS TO LIQUID PROCESS WITH HYDROGEN FROM RENEWABLE POWER
Magne HILLESTAD, NTNU, Dept of Chemical Engineering, NORWAY
Co-authors: M. Ostadi, B. Austbø, E. Rytter, O. Burheim, Norwegian University of Science and Technology, Trondheim, Norway; G. Alamo Serrano, Sintef Energi, Trondheim, Norway; J. Pharoah, Queens University, Kingston, Canada

3AO.9.5
REDUCTIVE CATALYTIC FRACTIONATION: A HOLISTIC BIOREFINERY SCHEME
Thijs VANGEEL, KULeuven, BELGIUM
Co-authors: T. Renders, W. Schutyser, S. Van den Bosch, S.-F. Koelewijn, G. Van den Bossche, B. Sels, KULeuven, Belgium

17:00 - 18:30
VISUAL PRESENTATIONS 3AV.5
Production and application of biobased chemicals from biomass - Part 1
See page 54

17:00 - 18:30
VISUAL PRESENTATIONS 4AV.6
Assessment of bioenergy actions and biomass use on climate impact
See page 56

19:30
WELCOME RECEPTION
Welcome Speech by Ninna Hedeager Olsen, Technical and Environmental Mayor of Copenhagen