

**09:00 - 12:35 | AUDITORIUM I**  
**MONDAY CONFERENCE OPENING** *Status as of 16-05-2019*

**09:00 - 10:00**  
**OPENING ADDRESSES**

**HOST COUNTRY ADDRESS**

**João MATOS FERNANDES**, Minister of Environment and Energy Transition, Portugal

**Maria DA GRAÇA CARVALHO**, EUBCE Conference General Chair, European Commission, Directorate-General Research and Innovation, Member Scientific Advice Mechanism Unit

**Carlos MOEDAS**, European Commissioner for Research, Science and Innovation (videomessage)

**Dominique RISTORI**, European Commission Director-General DG Energy

**João Paulo OLIVEIRA**, The Navigator Company, Board Member

**10:00 - 11:10**  
**SCIENTIFIC OPENING / PLENARY SESSION**  
**Applications of Science in Industry**

**CHAIRPERSONS:**

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

**Nicolae SCARLAT**, European Commission, Joint Research Centre, Directorate for Energy, Transport and Climate, EUBCE Technical Programme Chair

**BIOFUELS FROM ALGAE TECHNOLOGIES ( BIOFAT), FROM R&D TO COMMERCIAL INDUSTRIALISATION: THE ALGATEC ECO BUSINESS PARK**

**Nuno COELHO**, A4F - Algae for Future, Chief Executive Officer, Portugal

**SUSTAINABLE PYROLYSIS OIL FROM LABORATORY TO COMMERCIAL PLANTS: THE ROAD OF INNOVATION**

**René VENENDAAL**, BTG Biomass Technology Group BV, Chief Executive Officer, The Netherlands

**FROM PARIS TO PRACTICE – KEY DEVELOPMENTS IN THE ADVANCED BIOFUELS SECTOR**

**Marko JANHUNEN**, UPM - The Biofore Company, Director Public Affairs, Finland / LSB Leaders of Sustainable Biofuels Chair

**RENOVABIO: A MARKET ANSWER TO A POLICY CHALLENGE**

**Géraldine KUTAS**, UNICA – Brazil Sugarcane Industry Association  
 Head of International Affairs, Brazil

**11:10 - 12:30**  
**MODERATED PANEL DISCUSSION**

**The role of biomass in delivering the Paris targets and supporting sustainable development goals**

**MODERATOR:**

**Uwe R. FRITSCHE**, IINAS, Scientific Director, Germany

**PANELISTS:**

**Paula ABREU MARQUES**, European Commission, Directorate-General Energy, Head of Unit - Renewables and CCS Policy

**Bah F. M. SAHO**, ECREEE, Principal Program Officer - Renewable Energy and Responsible for Bioenergy Program

**Jenny WALTHER-THOSS**, WWF, Policy Officer Sustainable Biomass, Germany

**Marko JANHUNEN**, UPM - The Biofore Company, Director Public Affairs, Finland / LSB Leaders of Sustainable Biofuels Chair

**Representative from Portugal**

**12:20 LINNEBORN PRIZE 2019 CEREMONY + LINNEBORN'S VISION ON THE BIOMASS HORIZON**

**12:30 EUBIA 2019 AWARD CEREMONY**

**12:35 - 13:30**

**LUNCH BREAK**

**Oral session 1AO.1 | 13:30 - 15:00 | Auditorium II**  
**BIOMASS AVAILABILITY IN A CHANGING CLIMATE**
**CHAIRPERSONS:**

**Joana PORTUGAL PEREIRA**, Imperial College London, UNITED KINGDOM  
**Sylvain MARSAC**, ARVALIS - Institut du Végétal, R&D Dpt., FRANCE

**1AO.1.1****GLOBAL ASSESSMENT OF SUSTAINABLE LAND AVAILABILITY FOR BIOENERGY AND FOOD PRODUCTION**

Florian RIEGEL, Bauhaus Luftfahrt, Alternative Fuels, GERMANY  
 Co-authors: A. Roth, V. Batteiger, Bauhaus Luftfahrt, Taufkirchen, Germany

**1AO.1.2****POTENTIAL VULNERABILITY OF WOOD ENERGY SUPPLY CHAIN TOWARDS 2050 IN THE FRENCH MEDITERRANEAN AREA ACCORDING TO THE GLOBAL WARMING AND THE EVOLUTION OF WILD-LAND FIRE HAZARD**

Emmanuel GARBOLINO, Mines Paris-tech, Centre de Recherche sur les Risques et les Crises, FRANCE  
 Co-author: W. Daniel, University of Antwerp, Belgium

**1AO.1.3****HOW TO FEED THE EUROPEAN BIOECONOMY IN THE FUTURE? CLIMATE CHANGE-FORCED SHIFTS IN GROWTH SUITABILITY OF INDUSTRIAL CROPS UNTIL 2100**

Moritz VON COSSEL, University of Hohenheim (340b), Biobased Products and Energy Crops Dpt., GERMANY  
 Co-authors: V. Mohr, K. Warrach-Sagi, V. Wulfmeyer, University of Hohenheim, Institute of Physics and Meteorology, Stuttgart, Germany; S. Happe, E-nema Gesellschaft für Biotechnologie und biologischen Pflanzenschutz, Schwentinental, Germany; B. Elbersen, I. Staritsky, M. Van Eupen, Wageningen University & Research, Earth Informatics, The Netherlands; S. Mantel, International Soil Reference and Information Centre, Wageningen, The Netherlands; Y. Iqbal, I. Lewandowski, University of Hohenheim, Institute of Crop Science, Biobased Products and Energy Crops, Stuttgart, Germany; D. Scordia, S. L. Cosentino, University of Catania, Agricultural, Food and Environment, Italy

**1AO.1.4****EFFECT OF DROUGHT ON POSIBILITIES OF PERENNIAL INDUSTRIAL CROPS PRODUCTION ON MARGINAL LAND IN POLAND**

Rafal PUDELKO, Institute of Soil Science and Plant Cultivation, Agrometeorology and Applied Informatics Dpt., POLAND  
 Co-authors: A. Jedrejek, M. Matyka, IUNG, Pulawy, Poland

**1AO.1.5****CONVERTE PROJECT EVALUATION OF THE POTENTIAL OF ENERGY CROPS IN PORTUGAL**

Mariana ABREU, Laboratório Nacional de Energia e Geologia (LNEG), Unidade de Bioenergia (UB), PORTUGAL  
 Co-authors: A. Reis, P. Moura, A. Luís, L. Quental, P. Patinha, F. Girio, Laboratório Nacional de Energia e Geologia - LNEG, I.P., Lisboa, Portugal; A.L. Fernando, Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa (FCT NOVA), Almada, Portugal

**Oral session 2AO.2 | 13:30 - 15:00 | Room 5A**
**INNOVATIONS IN STOVE TECHNOLOGY AND FILTER DEVELOPMENT****CHAIRPERSONS:**

**Ingwald OBERNBERGER**, Bios Bioenergiesysteme, AUSTRIA  
**Peter Arendt JENSEN**, Danish Technical University, DENMARK

**2AO.2.1****INFLUENCE OF USER BEHAVIOUR ON EMISSIONS FROM FIREWOOD STOVES**

Robert MACK, Technology and Support Centre of Renewable Raw Materials, Solid Biofuels Dpt., GERMANY  
 Co-authors: C. Schön, H. Hartmann, Technology and Support Centre of Renewable Raw Materials, Straubing, Germany

**2AO.2.2****THE APPLICATION OF OPTICAL SENSOR SYSTEMS TO A WOOD STOVE**

Yifan DU, Technical University of Denmark, Chemical Engineering Dpt., DENMARK  
 Co-authors: S. Clausen, P. Glarborg, W. Lin, W. Lin, Technical University of Denmark, Copenhagen, Denmark

**2AO.2.3****ELECTROSTATIC PRECIPITATORS FOR SMALL STRAW BOILERS**

Erik Fløjgaard KRISTENSEN, Aarhus University, Engineering Dpt., DENMARK  
 Co-authors: J. K. Kristensen, Aarhus University, Denmark; M. F. Jerdig, Alcon, Låsby, Denmark

**2AO.2.4****FIELD EMISSION MEASUREMENTS ON DOMESTIC WOOD FIRING SYSTEMS RETROFITTED WITH ELECTROSTATIC PARTICLE PRECIPITATORS**

Josef WÜEST, Fachhochschule Nordwestschweiz, IBRE Dpt., SWITZERLAND  
 Co-authors: N. Lohberger, T. Griffin, FHNW, Windisch, Switzerland

**2AO.2.5****COMBINED FILTER MATERIAL FOR EMISSION REDUCTION IN AN INTERNAL COMBUSTION ENGINE FIRED WITH BIOLIQUIDS**

Julian WALBERER, Fraunhofer UMSICHT, GERMANY  
 Co-authors: G. Mateus, M. Meiller, R. Daschner, A. Hornung, Fraunhofer UMSICHT, Sulzbach-Rosenberg, Germany

**Oral session 3AO.3 | 13:30 - 15:00 | Room 5B**  
**BIOREFINERY CONCEPTS**
**CHAIRPERSONS:**

**Maria GEORGIADOU**, European Commission, DG RTD, BELGIUM  
**Wouter HUIJGEN**, Royal COSUN, THE NETHERLANDS

**3AO.3.1****A COST-COMPETITIVE BIOREFINERY OF SWEET SORGHUM BASED ON ADVANCED SOLID-STATE FERMENTATION**

Shizhong LI, Tsinghua University, Division of Biofuels & Biochemicals, P.R. CHINA

**3AO.3.2****CONCEPT OF BUILDING AN EXPERIMENTAL BIOMASS REFINERY PLANT IN POZNAN-STRZESZYN (POLAND)**

Krystian BUTLEWSKI, Institute of Technology and Life Sciences, Biomass Processing Technologies Dpt., POLAND

**3AO.3.3****CONNECTING LIGNIN GASIFICATION WITH GAS FERMENTATION**

Eleni LIAKAKOU, ECN part of TNO, Biomass & Energy Efficiency Dpt., THE NETHERLANDS  
 Co-authors: A. Infantes, A. Neumann, KIT, Karlsruhe, Germany; B. Vreugdenhil, ECN part of TNO, Petten, The Netherlands

**3AO.3.4****BIOREFINING OF SEAWEED FOR THE PRODUCTION OF FURANIC MOLECULES**

Karla DUSSAN ROJAS, ECN part of TNO, THE NETHERLANDS  
 Co-authors: W.J.J. Huijgen, Cosun Research & Development, Dinteloord, The Netherlands; D.F. Meyer, J. W. Dijkstra, J. W. Hal, ECN part of TNO, Petten, The Netherlands

**3AO.3.5****EFFICIENT PRODUCTION OF BUTYL BUTYRATE FROM LIGNOCELLULOSE-DERIVED SUGARS**

Bernd WITTGENS, SINTEF Industry, Process Technology Dpt., NORWAY  
 Co-authors: O. Berglihn, A. Wentzel, SINTEF Industry, Trondheim, Norway; H. Preisig, NTNU, Trondheim, Norway

**Parallel event 14:30 - 18:30 | Room 3C - See page 102**
**CURRENT STATUS OF BIOENERGY IN PORTUGAL**  
**PORTUGAL NATIONAL DAY CONFERENCE**

**Oral session 1AO.4 | 15:15 - 16:45 | Auditorium II  
ASSESSMENT METHODS AND CASE STUDIES**

**CHAIRPERSONS:**

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

**Sari MANNONEN**, UPM Biofuels, FINLAND

**1AO.4.1**

**BIOMASS POTENTIALS IN CENTRAL AND SOUTH EAST EUROPE**

Seungwoo KANG, IRENA, GERMANY

Co-author: J. Skeer, IRENA, Bonn, Germany

**1AO.4.2**

**SPATIAL MODELLING OF THE ORGANIC WASTE GENERATION BY PRIVATE HOUSEHOLDS**

Lea BOEHME, University of Stuttgart, GERMANY

Co-authors: L. Böhme, M. Kranert, University Stuttgart, Germany

**1AO.4.3**

**BIOMASS LOGISTICS PLANNING: ARE THERE GAINS IN INTEGRATING CHIPPING AND TRANSPORTATION OPERATIONS?**

Alexandra Sofia FONSECA MARQUES, INESC TEC, PORTUGAL

Co-authors: R. Soares, P. Amorim, INESC TEC, Faculty of Engineering, University of Porto, Portugal; J. Rasinmäki, Simosol Oy, Riihimäki, Finland

**1AO.4.4**

**DESIGN OF A NATIONWIDE BIOREFINING NETWORK FOR FOREST RESIDUES IN IRELAND**

Ashutosh RAI, National University of Ireland, IRELAND

Co-authors: R. Monaghan, D. Joyce, National University of Ireland, Galway, Ireland

**1AO.4.5**

**OPTIMISATION OF FRENCH ENERGY CATCH CROP PRODUCTION IN DOUBLE CROPPING SYSTEMS FOR ON-FARM BIOGAS USE**

Sylvain MARSAC, ARVALIS - Institut du Végétal, R&D Dpt., FRANCE

Co-authors: M. Bazet Euralis, Lescar, France; N. Delaye, F. Labalette, GIE GAO, Paris, France; V. Lecomte, GIE GAO, Bazziège, France; G. Espagnol, M. Heredia, GIE GAO, Montardon, France

**Oral Session 2AO.5 | 15:15 - 16:45 | Room 5A**

**NEW DEVELOPMENTS IN COMBUSTION TECHNOLOGY, PROCESS CONTROL AND HEAT RECOVERY**

**CHAIRPERSONS:**

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

**Hannariina HONKANEN**, JAMK University of Applied Sciences, FINLAND

**2AO.5.1**

**COMBUSTION OF PRETREATED BARK WITH ADDITIVES IN A PILOT SCALE REAL FLAME SWIRL BURNER TEST RIG**

Richard NOWAK DELGADO, Technical University of Munich, Institute for Energy Systems, GERMANY

Co-authors: T. de Riese, S. Fendt, H. Spliethoff, Technical University of Munich, Germany

**2AO.5.2**

**BEHAVIOR OF TORREFIED PELLETS VERSUS FRESH WOODY PELLETS IN A FIXED-GRATE REACTOR: COMPARISON OF COMBUSTION PARAMETERS AND FOULING AND SLAGGING TENDENCY.**

Roberto AREVALO, CIRCE Foundation, SPAIN

Co-authors: P. Canalís-Martínez, J. Royo, University of Zaragoza, Spain; R. Arévalo, S. Zapata, A. Rezeau, CIRCE Foundation, Zaragoza, Spain

**2AO.5.3**

**DETAILED EXPERIMENTAL INVESTIGATION OF THE SPATIALLY DISTRIBUTED GAS RELEASE AND BED TEMPERATURES IN FIXED-BED BIOMASS COMBUSTION WITH LOW OXYGEN CONCENTRATION**

Georg ARCHAN, Graz University of Technology, AUSTRIA

Co-authors: A. Andrés Anca-Couce, M. Buchmayr, C. Hochenauer, R. Scharler, Graz University of Technology, Austria; J. Gruber, Hargassner GesmbH, Austria

**2AO.5.4**

**DEVELOPMENT OF A FUEL FLEXIBLE CONDENSER COUPLED TO A SMALL-SCALE COMBUSTION TECHNOLOGY BASED ON EXTREME AIR STAGING – CFD BASED DEVELOPMENT AND OPERATION EXPERIENCES**

Thomas BRUNNER, Bios Bioenergiesysteme, AUSTRIA

Co-authors: G. Thek, C. Benesch, I. Obernberger, Bios Bioenergiesysteme, Graz, Austria; M. Kerschbaum, Windhager Zentralheizung Technik, Seekirchen, Austria; D. Popovic, Evoplan, Zumikon, Switzerland

**2AO.5.5**

**SMART LOGWOOD BOILER - A HOLISTIC APPROACH FOR IMPROVING THE EFFICIENCY OF RESIDENTIAL HEATING SYSTEMS**

Markus GÖLLES, Bioenergy 2020+, AUSTRIA

Co-authors: C. Zemann, M. Deutsch, S. Zlabinger, Bioenergy2020+, Graz, Austria; G. Hofmeister, KWB - Kraft und Wärme aus Biomasse, St. Margarethen/Raab, Austria; M. Horn, Graz University of Technology, Institute for Automation and Control, Austria

**Oral sessio 3AO.6 | 15:15 - 16:45 | Room 5B  
BIOREFINERY ASSESSMENTS**

**CHAIRPERSONS:**

**Francesco ZIMBARDI**, ENEA Research Centre, Energy Technologies Dpt., ITALY

**Gerfried JUNGMEIER**, Joanneum Research Centre, AUSTRIA

**3AO.6.1**

**TWO CAPTAINS WILL NOT SINK THE SHIP: EVALUATION OF BIO-BASED BUNKER FUEL PRODUCTION AND DISTRIBUTION LOGISTICS IN BRAZIL**

Joana PORTUGAL PEREIRA, Imperial College London, UNITED KINGDOM

Co-authors: F. Carvalho, A. Szklo, J. Portugal-Pereira, COPPE/UFRJ, Rio de Janeiro, Brazil

**3AO.6.2**

**ORGANIC WASTE VALORISATION THROUGH POLYGENERATION STRATEGIES**

Kok Siew NG, University of Oxford, Engineering Science Dpt., UNITED KINGDOM

**3AO.6.3**

**THE POTENTIAL OF IONIC LIQUIDS IN THE BIOREFINERY CONCEPT**

Rafal LUKASIK, National Laboratory for Energy and Geology, Unit of Bioenergy, PORTUGAL

Co-authors: J. Bernardo, F. M. Girio, S. Marques, Laboratorio Nacional de Energia e Geologia, Lisbon, Portugal

**3AO.6.4**

**ENVIRONMENTAL AND ECONOMIC EVALUATION OF RENEWABLE LUBRICANTS FROM BIOMASS SORGHUM AND FOREST RESIDUES**

Bahar RIAZI, Drexel University, Civil & Environmental Engineering Dpt., USA

Co-author: S. Spatari, Drexel University, Philadelphia, Usa

**3AO.6.5**

**ECONOMIC AND ENVIRONMENTAL EVALUATION OF BIOFUELS FOR FUTURE SUSTAINABLE EUROPEAN AVIATION**

Ralph-Uwe DIETRICH, German Aerospace Center, Institute of Engineering Thermodynamics, GERMANY

Co-authors: S. Adlung, S. Estelmann, F. Habermayer, S. Maier, M. Raab, German Aerospace Center, Stuttgart, Germany

Workshop | 15:15 - 18:30 | Room 5C - See page 110

**EU-JAPAN BIOMASS SEMINAR - SUSTAINABLE VALUE CHAINS FOR DISTRIBUTED BIO-ENERGY PROJECTS**

EU project seminar | 16:00 - 18:30 | Room 1.05 - See page 117

**ADVANCEFUEL PROJECT: OPTIMISING VALUE CHAINS AND DEVELOPING SUSTAINABILITY CRITERIA FOR ADVANCED LIGNOCELLULOSIC BIOFUELS**

16:45 - 17:00

BREAK

Oral session 1AO.7 | 17:00 - 18:30 | Auditorium II  
**BIOMASS MOBILIZATION**

**CHAIRPERSONS:**

**Tapio RANTA**, Lappeenranta University of Technology, FINLAND

**Olivier DUBOIS**, UN Food and Agriculture Organisation, Senior Natural Resources Officer & Leader Energy Programme, ITALY

**1AO.7.1**

**MOBILIZATION OF WOOD FROM AGRARIAN PRUNING AND PLANTATION REMOVAL: RESULTS FROM 20 PIONEERING INITIATIVES SUPPORTED IN ITALY, GREECE, SPAIN AND UKRAINE**

Tetiana ZHELIEZNA, Bioenergy Association of Ukraine, UKRAINE

Co-authors: D. Garcia-Galindo, S. Zapata, A. Rezeau, CIRCE, Zaragoza, Spain; E. Karampinis, M.-A. Kougioumtzis, V. Gavidou, P. Grammelis, CERTH, Athens, Greece; M. Monteleone, A. Cammerino, UFG, Foggia, Italy; O Haidai, S. Drahniev, SECB, Kiev, Ukraine

**1AO.7.2**

**RESULTS OF THE TWO-YEAR REBAF PROJECT: HOW TO EXPLOIT BIOMASS FROM RIVER MAINTENANCE**

Simone PEDRAZZI, University of Modena and Reggio Emilia of Engineering "Enzo Ferrari"- Bio Energy Efficiency Laboratory (BEELAB), ITALY

Co-authors: G. Allesina, L. Barbieri, I. Lancellotti, F. Andreola, P. Tartarini, University of Modena and Reggio Emilia, Italy; A. Malcevski, University of Parma, Italy; L. Giorgini, University of Bologna, Italy; E. Ceotto, CREA, Bologna, Italy

**1AO.7.3**

**EFFICIENT PRESERVATION OF TECHNICALLY DRIED WOOD CHIPS - A COMPARISON BETWEEN OUTDOOR STORAGE WITH A FLEECE COVER AND STORAGE IN A STORAGE BUILDING**

Markus RIEBLER, Bavarian State Institute of Forestry, Forest Technology, Business Management and Timber Dpt., GERMANY

Co-authors: N. Hofmann, F. Burger, H. Borchert, Bavarian State Institute of Forestry (LWF), Freising, Germany

**1AO.7.4**

**MOBILISATION OF STRAW AS AN ENERGETIC RESOURCE - THE DANISH STRAW AUCTION MODEL**

Alexandra PFEIFFER, DBFZ German Biomass Research Centre, Bioenergy Systems Dpt., GERMANY

Co-authors: A. Brosowski, DBFZ, Leipzig, Germany; D. Thrän, - UFZ and DBFZ, Leipzig, Germany

**1AO.7.5**

**ASSESSMENT OF SOUTH PACIFIC DISASTER GREENWASTE FOR HANDLING AND BIOENERGY**

Dusan ILIC, The University of Newcastle, Newcastle Institute for Energy and Resources, AUSTRALIA

Co-authors: K. Williams, D. Ellis, G. Doherty, The University of Newcastle, Callaghan, Australia

Oral session 2AO.8 | 17:00 - 18:30 | Room 5A

**LOW QUALITY BIOMASS CO-COMBUSTION AND ASH MANAGEMENT IN LARGE UTILITIES**

**CHAIRPERSONS:**

**Pedro HARO**, Universidad de Sevilla, SPAIN

**Marco BARATIERI**, Free University of Bolzano, ITALY

**2AO.8.1**

**CO-FIRING OF TWO TORREFIED PRUNING RESIDUES WITH COAL IN A PULVERIZED FUEL PILOT PLANT**

Carmen BARTOLOME, CIRCE Foundation, Energy and Environmental Technologies Area, SPAIN

Co-authors: C. Bartolomé, A. González-Espinosa, J. Marcos, CIRCE Foundation, Zaragoza, Spain

**2AO.8.2**

**CO-COMBUSTION OF RESIDUAL FOREST BIOMASS WITH SLUDGE FROM THE PULP AND PAPER INDUSTRY IN A PILOT-SCALE BUBBLING FLUIDIZED BED**

Daniel PIO, University of Aveiro, Environment and Planning Dpt., PORTUGAL

Co-authors: L. Tarelho, T. Nunes, M. Matos, University of Aveiro, Aveiro, Portugal

**2AO.8.3**

**REDUCTION OF ASH-RELATED PROBLEMS IN LARGE-SCALE BIOMASS COMBUSTION SYSTEMS VIA RESOURCE EFFICIENT LOW-COST FUEL ADDITIVES**

Peter SOMMERSACHER, Bioenergy 2020+, Medium and Large Scale Combustion Dpt., AUSTRIA

Co-authors: N. Kienzl, S. Retschitzegger, Bioenergy 2020+, Graz, Austria; C. Hochenauer, Institute of Thermal Engineering, Graz University of Technology, Austria

**2AO.8.4**

**INVESTIGATION ON DEPOSITS FORMATION IN STEAM SUPERHEATERS DURING COMBUSTION OF HALLOYSITE DOPED BIOMASS**

Sylwester KALISZ, Silesian University of Technology, Institute of Power Engineering and Turbomachinery, POLAND

Co-authors: W. Gadek, J. Wnorowska, Silesian University of Technology, Gliwice, Poland; P. Plaza, J. Maier, University of Stuttgart, Germany

**2AO.8.5**

**PM - O2 CORRELATION IN COMBUSTION PROCESSES IN PELLET STOVES AND BOILERS**

Adriano LEZZI, University of Brescia, Ingegneria industriale e dell'informazione Dpt., ITALY

Co-authors: L. Polonini, Università degli Studi di Brescia, Italy; D. Petrocelli, S. Parmigliani, AICO, Palazzolo sull'Oglio, Italy

Oral session 3AO.9 | 17:00 - 18:30 | Room 5B

**BIOREFINERY PROCESSING**

**CHAIRPERSONS:**

**Andre VAN ZOMEREN**, ECN part of TNO, THE NETHERLANDS

**Florbela CARVALHEIRO**, LNEG - Laboratório Nacional de Energia e Geology, PORTUGAL

**3AO.9.1**

**FLEXIBILITY IN RENEWABLE FUEL PRODUCTION FROM BIOMASS - THE ROLE OF ELECTROLYSIS BOOSTED FISCHER-TROPSCH SYNTHESIS**

Felix HABERMEYER, German Aerospace Center, Alternative Fuels Dpt., GERMANY

Co-author: R. Dietrich, German Aerospace Center, Stuttgart, Germany

**3AO.9.2**

**RECOVERING FURFURAL FROM THE AQUEOUS WASTE STREAM IN ARBACORE(TM) BROWN PELLETS PRODUCTION**

Tanja BARTH, University of Bergen, Chemistry Dpt., NORWAY

Co-authors: R. Brusletto, G. Marcotullio, Arbaflame, Oslo, Norway; M. Kleinert, C. Løhre, University of Bergen, Norway

3AO.9.3

**SELECTIVE CO<sub>2</sub> AND CO<sub>2</sub> CONSUMPTION BY B. METHYLOTROPHICUM DURING SYNGAS FERMENTATION**

Marta PACHECO, LNEG - Laboratório Nacional de Energia e Geologia, Unidade de Bioenergia, PORTUGAL  
Co-authors: J. Ortigueira, F. Gírio, P. Moura, National Laboratory for Energy and Geology, Lisbon, Portugal

3AO.9.4

**SEPARATION STRATEGIES FOR PRODUCING CHEMICAL CO-PRODUCTS IN A BIOREFINERY**

Nolan WILSON, National Renewable Energy Laboratory, USA  
Co-authors: S. Dell'Orco, D. Chiamonti, CREA/University of Florence; RE-CORD, Italy; B. Peterson, C. Engrakul, M. Nimlos, C. Mukarakate, K. Magrini, National Renewable Energy Laboratory, Golden, Usa

3AO.9.5

**DEVELOPMENT OF A PRE-EXTRACTION PROCESS FOR IMPROVED ACETONE ORGANOSOLV FRACTIONATION OF COMPLEX LIGNOCELLULOSIC BIOMASS**

Arjan SMIT, ECN part of TNO, THE NETHERLANDS  
Co-authors: B. O. Jimmink, A. van Zomeren, J.W. van Hal, ECN part of TNO, Petten, The Netherlands

19:30

WELCOME RECEPTION

**Oral session 1BO.1 | 08:30 - 10:00 | Auditorium II  
RESOURCE EFFICIENT AGRICULTURE**

**CHAIRPERSONS:**

**Andrea MONTI**, University of Bologna, ITALY  
**Efthymia ALEXOPOULOU**, Center for Renewable Energy Sources and Saving, GREECE

1BO.1.1

**INTEGRATED WEED MANAGEMENT IN NEW HARVESTING PRACTICES AND SIMULTANEOUS EXPLOITATION OF AGRICULTURAL SIDE STREAMS**

Christoph GLASNER, Fraunhofer UMSICHT, Biomass and Residues Utilization Dpt., GERMANY  
Co-authors: C. Andreasen, Z. Bitarafan, University of Copenhagen, Denmark; C. Vieregge, CLAAS Selbstfahrende Erntemaschinen, Harsewinkel, Germany; A. Dikjy, E. Shumilina, Norwegian University of Science and Technology, Trondheim, Norway; J. Robert, Fraunhofer UMSICHT, Oberhausen, Germany

1BO.1.2

**ON FARM BY-PRODUCTS COMPOSTING FOR RESILIENT AGROECOSYSTEMS**

Alberto ASSIRELLI, CREA - Research Center for Engineering and Agro-Food Processing, ITALY  
Co-authors: G. Rocuzzo, F. Stagno, CREA, Forlì, Italy

1BO.1.3

**SOIL EFFECTS DUE TO CROP RESIDUE REMOVAL AND POSSIBLE MEASURES TO REDUCE IMPACTS. EXPLORATORY REPORT ON THE EFFECTS ON SOIL CARBON FOR SCENARIOS OF CROP RESIDUE MANAGEMENT.**

Wolter ELBERSEN, Wageniongen UR, Biobased Products, THE NETHERLANDS  
Co-authors: H.W. Elbersen, Wageningen UR, The Netherlands; J-P Lesschen, Wageningen Environmental Research Food & Biobased Research, Wageningen, The Netherlands

1BO.1.4

**ECONOMIC AND BIOMASS ASSESSMENT OF CROP RESIDUES IN STATIC SOLID STATE DIGESTER**

Nicolas DELAYE, Terres Univia, French Interbranch Association for Vegetable Oils and Proteins, FRANCE  
Co-authors: S. Marsac, GIE GAO, Baziège, France; P. Peu, IRSTEA, Rennes, France; S. Pommier, INSA, Toulouse, France; D. Brosset, GAEC Bois Joly, La Verrie, France; R. Trochard, GIE GAO, Loireauxence, France; F. Labalette, GIE GAO, Paris, France

1BO.1.5

**FROM FARM TO LAND: CHARACTERISTICS OF BIOCHAR FOR AGRICULTURAL PURPOSES**

Genyr KAPPLER, Unisinos, BRAZIL  
Co-authors: D.M. Souza, A.B. Bueno, J.L. Silva, R.C.E. Modolo, C.A.M. Moraes, F.A. Brehm, University of Vale do Rio dos Sinos, São Leopoldo, Brazil; L.A.C. Tarelho, University of Aveiro, Portugal

**Oral session 2BO.2 | 08:30 - 10:00 | Room5A**

**INTEGRATED GASIFICATION SYSTEMS, PILOT PLANT STUDIES AND SYSTEM EVALUATION**

**CHAIRPERSONS:**

**Giulio ALLESINA**, BEELab (Bio Energy Efficiency Laboratory), Enzo Ferrari Engineering Dpt., ITALY  
**Katharina WAGNER**, Bioenergy 2020+, AUSTRIA

2BO.2.1

**OPERATION EXPERIENCE WITH A NOVEL HIGHLY EFFICIENT MICRO-SCALE CHP SYSTEM BASED ON FUEL-FLEXIBLE GASIFICATION AND A SOFC**

Christian RAMERSTORFER, BIOS Bioenergiesysteme, AUSTRIA  
Co-authors: I. Oberberger, T. Brunner, Bios Bioenergiesysteme, Graz, Austria; M. Kerschbaum, Windhager Zentralheizung Technik, Seekirchen, Austria; P.V. Aravind, Delft University of Technology, The Netherlands; R. Makkus, HyGear, Arnhem, The Netherlands; S. Megel, Fraunhofer Institut für Keramische Technologien und Systeme, Dresden, Germany; M. Hauth, S. Weissensteiner, AVL LIST, Graz, Austria