

9:00 - 10:30

**ORAL SESSION 2DO.1**

**Techno-economic evaluation of small-scale systems and biogas upgrading**

Room: AUDITORIUM 10

**CHAIRPERSONS:**

**Jens BORN**, Jahr, GERMANY

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

**2DO.1.1**

**TECHNICAL-ECONOMIC EVALUATION OF A SMALL LIQUEFACTION PLANT FOR BIO-LNG PRODUCTION**

Stefano FRIGO, University of Pisa, Energy, Systems, Territory and Costruction Engineering Dpt., ITALY

Co-authors: M. Antonelli, G. Pasini, A. Baccioli, University of Pisa, Italy

**2DO.1.2**

**TECHNOLOGIES FOR BIOMETHANE PRODUCTION IN SMALL AND MEDIUM SCALE APPLICATIONS - ASSESSMENT WITHIN THE EUROPEAN PROJECT RECORD BIOMAP**

Kathrin BIENERT, DBFZ Deutsches Biomasseforschungszentrum, GERMANY

Co-authors: S. Shakya, E. Fischer, B. Schumacher, DBFZ Deutsches Biomasseforschungszentrum, Leipzig, Germany; G. Rogstrand, 2RISE Research Institutes of Sweden, Uppsala, Sweden; M. Zielinski, M. Debowski, University of Warmia and Mazury in Olsztyn, Poland

**2DO.1.3**

**INVESTIGATING THE ECONOMICS OF SMALL SCALE DOMESTIC ANAEROBIC DIGESTION SYSTEMS**

Ioannis MARKIDIS, UNITED KINGDOM

Co-authors: T.C. Arnot, B Plosz, University of Bath, Department of Chemical Engineering, Water Informatics Science & Engineering (WIS), United Kingdom

**2DO.1.4**

**MODEL-BASED AND EXPERIMENTAL ANALYSIS OF SMALL SCALED BIOGAS UPGRADING VIA WATER SCRUBBING**

Wilfried ZÖRNER, Technische Hochschule Ingolstadt, Institute of new Energy-Systems, GERMANY

Co-authors: A. Saidi, M. Sonnleitner, M. Goldbrunner, Institute of new Energy Systems, Technische Hochschule Ingolstadt, Ingolstadt, Germany; F. Conti, Department of Chemical Sciences, University of Padova, Italy

**2DO.1.5**

**DESULFURIZATION OF BIOGAS FROM VARIED SOURCES FOR SENSITIVE ENERGY CONVERTERS**

Serge BIOLLAZ, PSI - Paul Scherrer Institut, Thermal Processes & Combustion, SWITZERLAND

Co-authors: A. S. Calbry-Muzyka, A. Gantenbein, J. Schneebeil, T. J. Schildhauer, J. Witte, Paul Scherrer Institut, Villigen-PSI, Switzerland

09:00 - 10:30

**ORAL SESSION 4DO.2**

**Climate impacts of bioenergy**

Room: AUDITORIUM 11+12

**CHAIRPERSONS:**

**Rocio DIAZ-CHAVEZ**, Stockholm Environment Institute - Africa Centre c/o World Agroforestry Centre (ICRAF), KENYA

**Guido REINHARDT**, IFEU-Institut Heidelberg, GERMANY

**4DO.2.1**

**THE CONSISTENCY OF CARBON BUDGETS OF FOREST BIOENERGY SYSTEMS WITH THE UK'S CUMULATIVE EMISSION BUDGET**

Mirjam ROEDER, University of Manchester, UNITED KINGDOM

Co-authors: P. Thornley, Supergen Bioenergy Hub, Manchester, United Kingdom; E. Thiffault, Laval University, Quebec, Canada; C Martinez-Alonso, CETEMAS, Asturias, Spain

**4DO.2.2**

**QUANTIFYING THE CLIMATE IMPACT OF BIOENERGY PRODUCTION SYSTEMS OVER TIME**

Sierk DE JONG, Utrecht University, Copernicus Institute of Sustainable Development, THE NETHERLANDS

Co-authors: C. Grobler, M. Staples, S. Barrett, Massachusetts Institute of Technology, Cambridge, Usa; V. Daioglou, PBL Netherlands Environmental Assessment Agency, The Hague, The Netherlands; R. Malina, Hasselt University, Belgium; R. Hoefnagels, M. Junginger, Utrecht University, The Netherlands; A. Faaij, University of Groningen, The Netherlands

**4DO.2.3**

**CAPTURE AND REMOVAL OF CO2 FROM THE US ETHANOL INDUSTRY**

Brendan JORDAN, Great Plains Institute, USA

Co-authors: A. Dirkswager, D. McFarlane, Great Plains Institute, Minneapolis, Usa; M. DuBois, Improved Hydrocarbon Recover, LLC, Lawrence, KS, Usa; S. Stover, Kansas Geological Survey, Lawrence, KS, Usa

**4DO.2.4**

**GREENING THE CHARCOAL VALUE CHAIN TO MITIGATE CLIMATE CHANGE**

Zuzhang XIA, FAO, ITALY

Co-authors: J. van Dam, Jinke van Dam Consultancy B.V., Bunnik, The Netherlands; X Zuzhang, Food and Agriculture Organization of the United Nations, Rome, Italy; J. van Eijck, JvE Consultancy, Utrecht, The Netherlands; J. Schure, Schure Research, Amsterdam, The Netherlands

**4DO.2.5**

**THE CLIMATE CHANGE IMPACT OF SECOND-GENERATION BIOENERGY**

Steeff HANSSEN, Radboud University, Environmental Science Dpt., THE NETHERLANDS

Co-authors: Z.J.N. Steinmann, M.A.J. Huijbregts, Radboud University, Nijmegen, The Netherlands; S. Spawn, H.K. Gibbs, University of Wisconsin-Madison, Madison, Usa; J. Whitaker, Centre for Ecology & Hydrology, Lancaster, United Kingdom

09:00 - 10:30

**ORAL SESSION 3DO.3**

**Analytical and fundamental pyrolysis**

Room: 20

**CHAIRPERSONS:**

**Andreas APFELBACHER**, Fraunhofer-Institut UMSICHT, GERMANY

**Paul DE WILD**, Energy Research Centre of the Netherlands, THE NETHERLANDS

**3DO.3.1**

**MICRO-PYROLYSIS OF LIGNIN-RICH DIGESTED STILLAGE FROM 2ND GENERATION BIOETHANOL PRODUCTION: INVESTIGATION TO DETERMINE THE CATALYTIC EFFECT OF ITS NATURAL ASH**

Wolter PRINS, Ghent University, Bioresources Processing Dpt., BELGIUM

Co-authors: N Priharto, School of Life Sciences and Technology, Institut Teknologi Bandung, Indonesia; H Heeres, Department of Chemical Engineering, University of Groningen, The Netherlands; F Ronsse, Department of Biosystems Engineering, Ghent University, Belgium

**3DO.3.2**

**TECHNICAL MODIFICATIONS IMPROVING OPERATIONAL STABILITY AT THE BIOLIQ FAST PYROLYSIS PLANT**

Andreas NIEBEL, Karlsruhe Institute of Technology, Institute of Catalysis Research and Technology, GERMANY

Co-authors: N. Dahmen, S. Muenkel, C. Pfitzer, N. Weih, KIT, Eggenstein-Leopoldshafen, Germany

**3DO.3.3**

**SIMULATION OF A TILTED-SLIDE REACTOR FOR THE FAST PYROLYSIS OF BIOMASS**

Sang-Kyu CHOI, Korea Institute of Machinery & Materials, Dept. of Clean Fuel & Power Generation, KOREA

Co-authors: Y.S. Choi, S.J. Kim, S.Y. Han, Korea Institute of Machinery and Materials, Daejeon, Korea

**3DO.3.4**

**THE ENERGETICS OF CELLULOSE GLYCOSIDIC BOND CLEAVAGE**

Paul DAUENHAUER, University of Minnesota, Chemical Engineering and Materials Science, USA

**3DO.3.5**

**INVESTIGATION OF SLURRIES MADE OF CHAR-IN-PYROLYSIS OIL IN TERMS OF FORMULATIONS, STABILITY, AND RHEOLOGICAL PROPERTIES**

Marco BUFFI, CREAR/RE-CORD, DIEF - Industrial Energy Dept., University of Florence, ITALY  
Co-authors: L. Bettucci, A. M. Rizzo, D. Chiaramonti, RE-CORD, Florence, Italy

09:00 - 10:30

**VISUAL PRESENTATIONS 1DV.1**

**Supply of residues and by-products from agriculture and forestry**

See page 89

09:00 - 10:30

**VISUAL PRESENTATIONS 2DV.2**

**Properties and quality of solid biofuels**

See page 90

09:00 - 13:00

**PARALLEL EVENT**

**INCREASE IN REDUCTION AND RECOVERY OF EXPIRED FOOD – I-REXFO UNDER EU LIFE**

See page 104

09:00 - 16:00

**WORKSHOP**

**PRODUCTION AND UTILISATION OPTIONS FOR SOLID RECOVERED FUELS**

See page 111

10:30 - 10:45

**BREAK**

10:45 - 12:15

**ORAL SESSION 2DO.4**

**Biogas feedstocks and pretreatment technologies**

Room: AUDITORIUM 10

**CHAIRPERSONS:**

Jens Bo HOLM-NIELSEN, Aalborg University, DENMARK  
Ioana IONEL, Universitatea Politehnica Timisoara, ROMANIA

**2DO.4.1**

**FEEDSTOCK COMPOSITION AND BIOGAS YIELD: A REVIEW**

Hans LANGEVELD, Biomass Research, THE NETHERLANDS  
Co-authors: E.C. Peterson, Universidad Icesi, Cali, Colombia; J.W.A. Langeveld, Biomass Research, Wageningen, The Netherlands

**2DO.4.2**

**ANAEROBIC DIGESTION OF GRAPE POMACE: EFFECTS OF BIOCHEMICAL COMPONENTS ON METHANE PRODUCTION AND PROCESS INTENSIFICATION USING SEVERAL PRETREATMENT CONDITIONS**

Jean EL ACHKAR, LEBANON  
Co-authors: T. Lendormi, J-L. Lanoiselle, University of South Brittany, Pontivy, France; D. Salamaleh, N. Louka, R. Maroun, Z. Hobaika, Saint Joseph University of Beirut, Lebanon

**2DO.4.3**

**A REVIEW: CHARACTERIZATION METHODS FOR EVALUATING THE BIOACCESSIBILITY OF LIGNOCELLULOSE SUBSTRATES AFTER PRE-TREATMENT IN ANAEROBIC DIGESTION PROCESSES**

Mirjam VICTORIN, Lund University, Department of Chemical Engineering, SWEDEN  
Co-authors: Å. Davidsson, O. Wallberg, Lund University, Sweden

**2DO.4.5**

**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, Ireland; P. Davis, School of Business, Dublin City University, Ireland; C. Connolly, Alltech European Bioscience Centre, Summerhill Road, Dunboyne, Meath, Ireland; J. Lawler, School of Biotechnology, Dublin City University, Ireland

10:45 - 12:15

**ORAL SESSION 4DO.5**

**Bioenergy: Impacts on soils and air pollution**

Room: AUDITORIUM 11+12

**CHAIRPERSONS:**

Jacopo GIUNTOLI, European Commission, Joint Research Centre, ITALY  
Berien ELBERSEN, Alterra, THE NETHERLANDS

**4DO.5.1**

**ENVIRONMENTAL IMPACT ASSESSMENT OF COMBINED BIOCHAR & BIOENERGY PRODUCTION**

Lydia FRYDA, Energy Research Centre of the Netherlands, Bioenergy and Energy Efficiency, THE NETHERLANDS  
Co-author: R. Visser, ECN, Petten, Netherland Antilles

**4DO.5.2**

**USING DIGESTATE AS ORGANIC FERTILIZER: PERSPECTIVES AND LIMITATIONS**

Wolter ELBERSEN, Wageningen Research, Food and Biobased Products Dpt., THE NETHERLANDS  
Co-authors: J.W.A. Langeveld, Biomass Research, Wageningen, The Netherlands; PMF Quist-Wessel, AgriQuest, Heteren, The Netherlands; S Blankenburg, Enki-Energy, Nijmegen, The Netherlands

**4DO.5.3**

**PARTICULATE AND GAS EMISSIONS OF A FAST-PYROLYSIS BIO-OIL OPERATED DISTRICT HEATING BOILER**

Olli SIPPULA, University of Eastern Finland, Environmental and Biological Sciences Dpt., FINLAND  
Co-authors: K. Huttunen, H. Suhonen, M. Kortelainen, T. Karhunen, P. Jalava, O. Uski, P. Yli-Pirilä, M.-R. Hirvonen, J. Jokiniemi, University of Eastern Finland, Kuopio, Finland; J. Hokkinen, T. Kajolinna, VTT, Espoo, Finland; S. Kärki, Fortum Power and Heat, Espoo, Finland

**4DO.5.4**

**LIFE CYCLE ASSESSMENT OF WASTE WOOD COMBUSTION -THE EFFECT OF ADDITIVES TO REDUCE CORROSION PROBLEMS IN HEAT AND POWER GENERATION**

Blanca CORONA, Utrecht University, Copernicus Institute of Sustainable Development, THE NETHERLANDS  
Co-authors: L. Shen, M. Junginger, Utrecht University, The Netherlands

**4DO.5.5**

**IMPACT OF THE USE OF WOOD STOVES ON INDOOR AIR CONTENT OF PARTICLES, CARBON MONOXIDE AND NITROGEN OXIDES**

Céline LE DREFF - LORIMIER, CSTB, CAPE/VAC, FRANCE  
Co-authors: M. Nicolas, CSTB, Grenoble, France; B. Guenego, WIGWAM Conseil, Nantes, France; M. Dufresne de Virel, CSTB, Nantes, France

10:45 - 12:15

**ORAL SESSION 3DO.6**

**Applied pyrolysis**

Room: 20

**CHAIRPERSONS:**

**Wim VAN SWAAIJ**, University of Twente, THE NETHERLANDS

**Ralph P. OVEREND**, Biomass & Bioenergy Journal, CANADA

**3DO.6.1**

**CALIBRA: CASCADING LIGNIN BIREFINERY APPROACH**

Paul DE WILD, Energy Research Centre of the Netherlands, Biomass & Energy Efficiency Dpt., THE NETHERLANDS

**3DO.6.2**

**APPLICATION OF STEEL INDUSTRY SLAGS AS NOVEL COST EFFICIENT CATALYSTS IN CATALYTIC FAST PYROLYSIS OF BIOMASS**

Juha LEHTONEN, VTT, Sustainable energy and chemical technology, FINLAND

Co-authors: T. Ohra-Aho, C. Lindfors, A. Oasmaa, VTT Technical Research Centre of Finland, Espoo, Finland; E. Kholkina, N. Kumar, D.Yu. Murzin, Åbo Akademi University, Finland

**3DO.6.3**

**TECHNICAL AND ECONOMIC OPTIMIZATION OF BIOMASS-TO-LIQUID PROCESSES USING EXERGO-ECONOMIC ANALYSIS**

Friedemann Georg ALBRECHT, DLR - Institut für Technische Thermodynamik, GERMANY

Co-authors: R.-U. Dietrich, S. Maier, S. Adelung, Z. Béalu, S. Estelmann, German Aerospace Center (DLR), Stuttgart, Germany

**3DO.6.4**

**STANDARD LIQUID FUEL FOR INDUSTRIAL BOILERS FROM USED WOOD**

Christian LINDFORS, VTT Technical Research Centre of Finland, FINLAND

Co-authors: A. Välimäki, A. Oasmaa, T. Ohra-aho, H. Punkkinen, VTT, Espoo, Finland

**3DO.6.5**

**TO-SYN-FUEL: TURNING SEWAGE SLUDGE INTO FUELS AND HYDROGEN**

Andreas APFELBACHER, Fraunhofer-Institut UMSICHT, Renewable Energy Dpt., GERMANY

Co-authors: R. Daschner, A. Hornung, A. Apfelbacher, Fraunhofer UMSICHT, Sulzbach-Rosenberg, Germany; M. Ouadi, University of Birmingham, United Kingdom

10:45 - 12:15

**VISUAL PRESENTATIONS 1DV.3**

**Biomass quality determination and upgrading**

*See page 92*

10:45 - 12:15

**VISUAL PRESENTATIONS 3DV.4**

**Pretreatment, enzymatic hydrolysis and fermentation for bio-alcohols production**

*See page 94*

12:15 - 13:30

**LUNCH BREAK**

13:30 - 15:00

**ORAL SESSION 2DO.7**

**Biomethanation, thermal methanation and microbial power to gas**

Room: AUDITORIUM 10

**CHAIRPERSON:**

**Bernhard DROSG**, Bioenergy 2020+, AUSTRIA

**Hans LANGEVELD**, Biomass Research, THE NETHERLANDS

**2DO.7.1**

**DIRECT BIOLOGICAL METHANATION OF THE SYNTHESIS GAS OF AN ALLOTHERMAL WOOD GASIFIER**

Thomas TRABOLD, Friedrich-Alexander-University of Erlangen-Nuremberg, Chair for Energy Process Engineering, GERMANY

Co-authors: J. Karl, M. Dillig, University of Erlangen-Nuremberg, Germany

**2DO.7.2**

**BIOMETHANATION OF SURPLUS ELECTRICITY IN ANAEROBIC DIGESTERS: IDENTIFICATION OF PARAMETERS DETERMINING ACETATE ACCUMULATION**

L. AGNEESSENS, Aarhus University, Department of Engineering - Manure Technology and Biogas, DENMARK

Co-authors: L.D.M. Ottosen, M.M. Andersen, C.B. Olesen, A. Feilberg, Aarhus University, Denmark; M.V.W. Kofoed, Danish Technological Institute, Aarhus, Denmark

**2DO.7.3**

**MICROBIAL POWER-TO-GAS - TECHNO-ECONOMICALLY INVESTIGATED**

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

Co-authors: M. Van Dael, VITO/UHasselt, Mol/Hasselt, Belgium; S. Kreps, N. Devriendt, A. Virag, K. Kessels, VITO, Mol, Belgium; K. Remans, CEE, Hamme-Mille, Belgium; F. De Wilde, OWS, Ghent, Belgium; D. Thomas, Hydrogenics, Oevel, Belgium

**2DO.7.4**

**BIOLOGICAL METHANATION IN A TRICKLE-BED REACTOR**

Tobias WEIDLICH, FAU Erlangen-Nuremberg, Chair of Energy Process Engineering, GERMANY

Co-authors: M Dillig, J Karl, Chair of Energy Process Engineering, Nuremberg, Germany

**2DO.7.5**

**STRATEGIES FOR ENERGY RECOVERY AND GAINS ASSOCIATED WITH THE IMPLEMENTATION OF AN EXTRA-DRY METHANIZATION SYSTEM FOR TREATING ORGANIC WASTE FROM THE CITY OF RIO DE JANEIRO - BRAZIL**

Carlos CHERNICHARO, Universidade Federal de Minas Gerais (UFMG), Department of Sanitary and Environmental Engineering, BRAZIL

Co-authors: B. O. Ferreira, L. C. S. Lobato, F. J. P. Pujatti, UFMG, Belo Horizonte, Brazil; L. F. D. Colturato, L. E. G. Pereira, METHANUM, Belo Horizonte, Brazil

13:30 - 15:00

**ORAL SESSION 4DO.8**

**Impacts from agricultural and forest bioenergy: new analysis**

Room: AUDITORIUM 11+12

**CHAIRPERSONS:**

**Mirjam ROEDER**, University of Manchester, UNITED KINGDOM

**Steve CROXTON**, Uniper Technologies, UNITED KINGDOM

**4DO.8.1**

**ANALYSING THE SPATIAL VARIATION OF ENVIRONMENTAL IMPACTS FROM SUGARCANE EXPANSION IN SAO PAULO STATE, BRAZIL**

Ivan VERA, Copernicus institute of sustainable development, Utrecht University, Heidelberglaan, THE NETHERLANDS

Co-author: F. van der Hilst, Utrecht University, Utrecht, The Netherlands

**4DO.8.2**  
**GBEP INDICATORS TO MONITOR AND ENHANCE BIOENERGY SUSTAINABILITY IN VIETNAM AND PARAGUAY**

Marco COLANGELI, GBEP - FAO, Climate and Environment Dpt., ITALY  
 Co-authors: C. Miller, M.M. Morese, T. Pirelli, A. Rossi, Food and Agriculture Organization of the United Nations, Rome, ITALY

**4DO.8.3**  
**LIFE CYCLE ASSESSMENT OF WOOD-ENERGY SUPPLY CHAINS IN MEDITERRANEAN FORESTS**

Emanuela MELIS, University of Cagliari, Department of Mechanical, Chemical and Materials Engineering, ITALY  
 Co-authors: P.F. Orrù, C. Pilo, G. Uras, University of Cagliari, Italy

**4DO.8.4**  
**LIFE CYCLE ASSESSMENT OF RENEWABLE JET FUEL FROM ETHANOL: AN ANALYSIS FROM CONSEQUENTIAL AND ATTRIBUTIONAL APPROACHES**

Rafael CAPAZ, State University of Campinas, Faculty of Mechanical Engineering (FEM), BRAZIL  
 Co-authors: J. Posada, P. Osseweijer, TU Delft, The Netherlands; J. Seabra, Unicamp, Campinas, Brazil

**4DO.8.5**  
**ENERGY EFFICIENCIES, ENERGY RATIOS, AND GREENHOUSE GAS EMISSIONS OF INTEGRATED AND NON-INTEGRATED GRASS REFINERY SYSTEMS**

Sylvestre NJAKOU DJOMO, Aarhus University, Agroecology Dpt., DENMARK  
 Co-authors: M.T. Knudsen, J.E. Hermansen, Aarhus University, Tjele, Denmark; L. Martinsen, M.S. Andersen, Aarhus University, Roskilde, Denmark; M. Ambye-Jensen, H.B. Moller, Aarhus University, Denmark

**13:30 - 15:00**  
**ORAL SESSION 3DO.9**

**Hydrothermal liquefaction of biomass for fuels and chemicals**

Room: 20

**CHAIRPERSONS:**

**Lasse ROSENDAHL**, Aalborg University, DENMARK  
**Jaroslav ZUWALA**, Institute for Chemical Processing of Coal, POLAND

**3DO.9.1**  
**UNDERSTANDING AND PREDICTING THE SOLUBILITY OF HTL DERIVED BIO-CRUDS**

Thomas Helmer PEDERSEN, Aalborg University, Energy Technology Dpt., DENMARK  
 Co-author: K.M. Michalski, Aalborg University, Denmark

**3DO.9.2**  
**IS THERE A BEST WAY FOR THE HYDROTHERMAL TREATMENT OF MOIST BIO-WASTE? FIRST EXPERIENCES FROM A MULTI-CRITERIA DECISION-MAKING APPROACH**

Daniel REIßMANN, Helmholtz Centre for Environmental Research - UFZ, Department of Bioenergy, GERMANY  
 Co-authors: D. Thraen, A. Bezama, Helmholtz-Centre for Environmental Research, Leipzig, Germany

**3DO.9.3**  
**ASSESSING HYDROTHERMAL LIQUEFACTION OF LIGNOCELLULOSIC BIOMASS, MICROALGAE AND SEWAGE SLUDGE AT PILOT SCALE**

Konstantinos ANASTASAKIS, Aarhus University, Biological and Chemical Engineering, DENMARK  
 Co-authors: I. Johannsen, P. Biller, Aarhus University, Denmark

**3DO.9.4**  
**A GENERAL REACTION NETWORK AND KINETIC MODEL OF THE HYDROTHERMAL LIQUEFACTION OF MICROALGA TETRAELEMIS SP.**

The Ky VO, Kyung Hee University, Chemical Engineering, KOREA  
 Co-authors: Jinsoo Kim, Department of Chemical Engineering, Kyung Hee University, Suwon, Korea; Seung-Soo Kim, Department of Chemical Engineering, Kangwon National University, Suwon, Korea

**3DO.9.5**  
**A KINETIC STUDY ON HYDROTHERMAL LIQUEFACTION OF LIGNOCELLULOSIC BIOMASS**

Benedetta DE CAPRARIIS, Sapienza University of Rome, Department of Chemical Engineering, ITALY  
 Co-authors: P. De Filippis, A. Petrucci, M. Scarsella, Sapienza University of Rome, Italy

**13:30 - 15:00**  
**VISUAL PRESENTATIONS 1DV.5**  
**Energy grasses and biomass crops: production, characteristics and best practices**  
*See page 96*

**13:30 - 15:00**  
**VISUAL PRESENTATIONS 3DV.6**  
**Assessments of production processes of thermally treated solid biomass**  
*See page 98*

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

**15:15 - 16:45**  
**CLOSING SESSION**

**WELCOME**  
 EUBCE Conference General Chairman,  
**Michael PERSSON**, Danish Bioenergy Association, Head of Secretariat

**KEYNOTE SPEECH**  
**MOVING TO THE NEXT LEVEL – HOW CAN WE ACCELERATE SUSTAINABLE BIOENERGY DEPLOYMENT?**  
**Adam BROWN**, IEA Paris, Senior Energy Analyst

**HIGHLIGHTS OF THE CONFERENCE WEEK**  
**Nicolae SCARLAT**, European Commission, Joint Research Centre, Directorate of Energy, Transport and Climate

**STUDENT AWARDS**  
**Jean-Francois DALLEMAND**, EUBCE Student Awards 2018 Coordinator, European Commission, Joint Research Centre  
**David BAXTER**, Former European Commission, Joint Research Centre

**POSTER AWARDS**  
**Dimitrios SIDIRAS**, EUBCE Best Visual Presentation Awards 2018 Coordinator, University of Piraeus, Greece  
**David BAXTER**, Former European Commission, Joint Research Centre

**ANNOUNCEMENT UPCOMING EUBCE**

**WHAT DO WE TAKE HOME FROM THE EUBCE? FAREWELL & CLOSING**  
 EUBCE Conference General Chairman,  
**Michael PERSSON**, Danish Bioenergy Association, Head of Secretariat

At the time of printing the detailed Programme of the Closing Session is under final preparation.  
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