

PROGRAMME

Sunday 23rd October 2016

16:00-19:00	Registration <i>Room: Hall Tramuntana</i>
17:00-18:30	Welcome reception <i>Room: Hall Tramuntana</i>

Monday 24th October 2016

08:00	Registration <i>Room: Hall Tramuntana</i>	
09:00-09:10	Welcome - Ashok Pandey, Chairman, BIORESTEC and Editor-in-chief Bioresource Technology <i>Room: Tramuntana II/III</i>	
09:10-09:50	[PL.1] The biomass-based economy: fuels, chemicals and sustainability <i>Andre Faaij, Rijksuniversiteit Groningen, Netherlands</i> <i>Chair: Ashok Pandey</i>	
09:50-10:30	[PL.2] Future biorefineries: Integration of Ag bioindustries, green chemistry, red and white biotechnologies <i>Gerard Goma, INSA Toulouse, France</i> <i>Chair: Ashok Pandey</i>	
10:30-11:00	Refreshments and Poster session I <i>Room: Tramuntana I</i>	
11:00-12:30	Session IA - Biomass fractionation – Pretreatment processes and technologies <i>Chair: Thallada Bhaskar, India</i> <i>Room: Tramuntana II/III</i>	Session IB - Algal biorefinery <i>Chair: Hao Huu Ngo, Australia</i> <i>Room: Mestral</i>
11:00-11:30	[INV.01] Innovative pretreatment methods for complete utilization of biomass for fuels, chemicals, and materials production <i>Roger Ruan, University of Minnesota Twin Cities, USA</i>	[INV.02] Photosynthetic biorefinery: Sustainable platform for circular bioeconomy <i>S Venkata Mohan, Indian Institute of Chemical Technology, India</i>
11:30-11:45	[O1.1.1] Hydrothermal processing of organic solid waste: Oxidative vs. non-oxidative routes! <i>A. Yousefifar*¹, S. Baroutian¹, D.J. Gapes², B.R. Young¹, M.M. Farid¹, ¹University of Auckland, New Zealand, ²Scion, New Zealand</i>	[O1.2.1] Biogas production from microalgae: Effect of pretreatments and co-digestion <i>M. Solé¹, H. Carrère², C. Eskicioglu³, M. Garfí¹, I. Ferrer*¹, ¹Universitat Politècnica de Catalunya BarcelonaTech, Spain, ²INRA, Laboratoire de Biotechnologie de l'Environnement, France, ³University of British Columbia (Okanagan), Canada</i>
11:45-12:00	[O1.1.2] Effect of ultrasounds, high voltage electrical discharges and microwaves on lignin removal from rapeseed straw <i>M. Brahim*^{1,2}, S. El kantar¹, N. Boussetta¹, N. Grimi¹, N. Brosse², E. Vorobiev¹, ¹Université de technologie de Compiègne, France, ²Université de Lorraine, France</i>	[O1.2.2] Bioconversion of alginate from brown macroalgae into ethanol using <i>Clostridium phytofermentans</i> <i>A.A. Fathima*¹, M. Sanitha¹, T. Thangarathinam², M. Ramya¹, ¹SRM University, India, ²Analytical Research and Development Division, Piramal Enterprises Limited, India</i>

12:00-12:15	[O1.1.3] Innovative pretreatment to increase cellulose accessibility of rape straw within three days: A new lead for valorization of agriculture residues J.H. Tian*, A.M. Pourcher, P. Peu, <i>Irstea, France</i>	[O1.2.3] Optimized culture condition of <i>Chlorella</i> sp. for tertiary treatment of livestock wastewater and biodiesel recovery potential H.W. Kim, J.Y. Kim*, Chonbuk National University, Republic of Korea
12:15-12:30	[O1.1.4] Chemical pre-treatment on microalgae <i>Isochrysis</i> sp. for bio-oil production N.A. Abd Rahman*, M. Maroto-Valer, A. Sanna, <i>Heriot-Watt University, UK</i>	[O1.2.4] Hydrothermal liquefaction of microalgae for biofuel production A. Sánchez-Bayo*, G. Vicente, L.F. Bautista, V. Morales, R. Rodríguez, <i>Rey Juan Carlos University, Spain</i>
12:30-14:00	Lunch <i>Restaurant</i>	
13:00-14:00	Poster session I (continued) <i>Room: Tramuntana I</i>	
14:00-15:30	Session IIA - Thermo-chemical processing of biomass <i>Chair: Roger Ruan, USA</i> <i>Room: Tramuntana II/III</i>	Session IIB - Algal biorefinery <i>Chair: Mohammad Taherzadeh, Sweden</i> <i>Room: Mestral</i>
14:00-14:30	[INV.03] Pyrolytic approach for effective utilization of Biomass: Synergistic strategies for economically viable biorefinery Thallada Bhaskar, <i>CSIR-Indian Institute of Petroleum, India</i>	[INV.04] Algal biorefinery: process perspectives Duu-Jong Lee, <i>National Taiwan University, Taiwan</i>
14:30-14:45	[O2.1.1] Pilot plant design and operation of a novel biomass gasifier for converting lump biomaterials into renewable syngas D. Doucet, G. Perkins*, G. Bollaert, <i>Wildfire Energy Pty Ltd, Australia</i>	[O2.2.1] Use of cell immobilization technology in separation of microalgae during cultivation for oil accumulation and biodiesel production P. Kaewkannetra*, S. Moonamart, R. Roonmai, <i>Khon Kaen University, Thailand</i>
14:45-15:00	[O2.1.2] Hydrothermal carbonization of vinasse and sugarcane bagasse: Influence of acid, basic and salt catalysts C.C. Silva ¹ , C.A. Melo* ¹ , A.B. Moreira ¹ , O.P. Ferreira ² , F.H. Soares Junior ² , M.C. Bisinoti ¹ , ¹ <i>Universidade Estadual Paulista Julio De Mesquita Filho, Brazil</i> , ² <i>Universidade Federal do Ceara, Brazil</i>	[O2.2.2] Different algal microbial consortia are formed depending upon the enrichment method and can perform better than unialgal cultures G.B. Leite ¹ , R. Lee ¹ , S. Ge ¹ , P.C. Hallenbeck ² , P. Champagne* ¹ , ¹ <i>Queens University, Canada</i> , ² <i>Université de Montréal, Canada</i>
15:00-15:15	[O2.1.3] Valorization of Pre-Consumer Food Waste into Hydroxymethylfurfural I.K.M. Yu*, D.C.W. Tsang, <i>Hong Kong Polytechnic University, China</i>	[O2.2.3] Improvement of microalgae fractionation using steam explosion and tangential cross-flow filtration E. Lorente* ¹ , C. Torras ¹ , E. Clavero ¹ , M. Haponska ² , O. Núñez ² , J. Salvadó ² , ¹ <i>Catalonia Institute for Energy Research, IREC, Spain</i> , ² <i>Universitat Rovirai Virgili, Spain</i>
15:15-15:30	[O2.1.4] Performance assessment of a synthetic natural gas (SNG) production plant based on a flexible sorption enhanced biomass gasification process I. Martínez*, M.C. Romano, <i>Politecnico di Milano, Italy</i>	[O2.2.4] Thermo-economic analysis of a supercritical fluid-based integrated Brazilian microalgae-sugarcane biorefinery concept J.Q. Albarelli* ^{1,2} , V. Grumiaux ³ , D.T. Santos ^{1,2} , A.V. Ensinas ³ , F. Maréchal ³ , M.J. Cocero ² , M.A.A. Meireles ¹ , ¹ <i>University of Campinas, Brazil</i> , ² <i>University of Valladolid, Spain</i> , ³ <i>Swiss Federal Institute of Technology Lausanne, Switzerland</i>
15:30-16:00	Refreshments and Meet the Editor Session A <i>Room: Tramuntana I and Tramuntana II/III</i>	
16:00-17:30	Session IIIA - Biological wastes treatment – resource recovery and recycling <i>Chair: S Venkata Mohan, India</i> <i>Room: Tramuntana II/III</i>	Session IIIB - Lignocellulose biorefinery <i>Chair: Christian Larroche, France</i> <i>Room: Mestral</i>
16:00-16:30	[INV.05] Converting biofuel process residues/wastes into protein-rich aquatic feed with simultaneous reclamation of treated effluent Samir Kumar Khanal, <i>University of Hawai'i, USA</i>	[INV.06] Nature-inspired lignocellulose processing Shulin Chen, <i>Washington State University Pullman, USA</i>

16:30-16:45	[O3.1.1] Biomonitoring of algal-bacterial system for wastewater treatment: Assessment towards better process control M. Hassan*, R. Samir, T. Essam, S. Megahed <i>Cairo University, Egypt</i>	[O3.2.1] Reverse membrane bioreactors for biofuels production M.J. Taherzadeh, <i>University of Borås, Sweden</i>
16:45-17:00	[O3.1.2] Bioresource recovery using a photoautotrophic sequencing batch reactor to polish livestock wastewater H.Y. Kim, J.K. Jang, J.U. Yu*, <i>Chonbuk National University, Republic of Korea</i>	[O3.2.2] A microreactor based energy-efficient process for enzymatic hydrolysis of cellulose for biofuel production S. Chakraborty*, P.K. Singh, P. Paramashetti, <i>Indian Institute of Technology Kharagpur, India</i>
17:00-17:15	[O3.1.3] Potential of wastewater treatment systems as bioresources: Biopolymers of floccular and aerobic granular activated sludge E. Dulekgurgen*, S.B. Sam, <i>Istanbul Technical University, Turkey</i>	[O3.2.3] Improved enzymatic hydrolysis of lignocellulose through oxidative removal of lignin by air pressure plasma R. Ravindran*, C. Sarangapani, A. Jaiswal, <i>Dublin Institute of Technology, Ireland</i>
17:15-17:30	[O3.1.4] Esters production from carboxylates recovered from paper mill wastewater C.I. Cabrera-Rodríguez*, L.A.M. van der Wielen, A.J.J. Straathof, <i>Delft University of Technology, The Netherlands</i>	[O3.2.4] In vitro fermentation of Xylooligosaccharides derived from wheat straw E. Jurado*, B.K. Ahring, <i>Aalborg University, Denmark</i>

Tuesday 25th October 2016

09:10-09:50	[PL.3]– Aligning policy, economics and green-house gas reductions in bioenergy Patricia Thornley, <i>The University of Manchester, UK</i> Chair: Christian Larroche	
09:50-10:30	[PL.4] Industrial biorefinery of lignocellulose for production of biomaterials and bioethanol Run-Cang Sun, <i>Beijing Forestry University, China</i> Chair: Christian Larroche	
10:30-11:00	Refreshments and Poster session II Room: Tramuntana I	
11:00-12:30	Session IVA - Biological waste treatment – Environmental bioengineering Chair: Hans Oechsner, <i>Germany</i> Room: Tramuntana II/III	Session IVB - Lignocellulose biorefinery Chair: Angeles Sanroman, <i>Spain</i> Room: Mestral
11:00-11:30	[INV.07]Recent Advances in Bioelectrochemical conversion of CO₂ to chemicals: Electrosynthesis via bacteria and enzymes] Deepak Pant, <i>VITO-Flemish Institute for Technological Research, Belgium</i>	[INV.08]Life cycle thinking in the strategy of development of biobased products M ^a Teresa Moreira Vilar, <i>Universidade de Santiago de Compostela, Spain</i>
11:30-11:45	[O4.1.1] Changes in chemistry of N sources induce changes in growth and physiology of <i>Arthrospira</i> sp. PCC 8005 D. Frédéric ¹ , B.-V. Guillaume ¹ , D. Orily ² , N. Sachdeva* ¹ , C.P.J. Carlos ³ , L. Baptiste ¹ , M. Koenraad ² , W. Ruddy ¹ , ¹ <i>University of Mons, Belgium</i> , ² <i>KU Leuven campus Kortrijk, Belgium</i> , ³ <i>Materia Nova, Belgium</i>	[O4.2.1] Biorefinery-based steam pretreatment and fermentation of sugarcane bagasse and harvest residues for the co-production of ethanol, chemicals and fuel M.L. Hamann*, E. Van Rensburg, J.F. Görgens, <i>Stellenbosch University, South Africa</i>
11:45-12:00	[O4.1.2] Redox potential-based micro-aeration process control for anaerobic digestion D. Nguyen, S. Khanal*, <i>University of Hawaii at Manoa, USA</i>	[O4.2.2] Strategic framework for the transition of the pulp and paper industry into biorefinery N. Gabriella*, J-P. Schoeggel, A. Posch, <i>Karl-Franzens Universität Graz, Austria</i>
12:00-12:15	[O4.1.3] Biologically induced calcium phosphate precipitation in granular partial nitrification-anammox sludge S. Johansson*, M. Rusalleda, J. Colprim, <i>University of Girona, Spain</i>	[O4.2.3] Integrated 1st and 2nd generation sugarcane bio-refinery for biojet fuel production in Brazil C.I. Santos*, J.A. Posada, S.I. Mussatto, P. Osseweijer, L.A.M. van der Wielen, <i>Delft University of Technology, The Netherlands</i>

12:15-12:30	[O4.1.4] Anaerobic digestion for closing the loop of a biorefinery for organic farming: Production of biogas and organic fertilizer from process residues M. Santamaria-Fernandez ¹ , N. Karkov Ytting ² , M. Lübeck ¹ , H. Uellendahl* ¹ , ¹ Aalborg University Copenhagen, Denmark, ² University of Copenhagen, Denmark	[O4.2.4] Lignin-based functional materials for health-care applications D. Kai*, X.J. Loh, <i>Institute of Materials Research and Engineering, Singapore</i>
12:30-14:00	Lunch <i>Restaurant</i>	
13:00-14:00	Poster session II (continued) <i>Room: Tramuntana I</i>	
14:00-15:30	Session VA - Biological waste treatment & Solid-waste management <i>Chair: Duu Jong Lee, Taiwan</i> <i>Room: Tramuntana II/III</i>	Session VB - White Biotechnology – Production of industrial chemicals and products <i>Chair: Robin C Anderson, USA</i> <i>Room: Mestral</i>
14:00-14:30	[INV.09] A novel biogenic flocculants enhanced primary treatment process for domestic sewage Jonathan Wong, <i>Hong Kong Baptist University, Hong Kong</i>	[INV.10] Applied enzymology for biomass conversion: lignocellulose hydrolysis and yeast strain engineering Bernd Nidetzky, <i>Austrian Center of Industrial Biotechnology, Austria</i>
14:30-15:45	[O5.1.1] Granular sludge formation and characterization in a chain elongation process M. Roghair*, D.P.B.T.B. Strik, K.J.J. Steinbusch, R.A. Weusthuis, M.E. Bruins, C.J.N. Buisman, <i>Wageningen University & Research, The Netherlands</i>	[O5.2.1] Production of copolymer of 3-hydroxybutyrate (3HB) and 3-hydroxyvalerate (3HV) as a bioplastic raw material from rice straw E.H. Jho* ¹ , J. Ahn ² , K. Nam ² , ¹ Hankuk University of Foreign Studies, Republic of Korea, ² Seoul National University, Republic of Korea
14:45-15:00	[O5.1.2] Phosphorus speciation in animal manures and biosolids: An integrated study of sequential extraction, nuclear magnetic resonance spectroscopy and x-ray absorption spectroscopy R. Karunanithi* ^{1,2} , N. Bolan ^{1,2} , B. Seshadri ^{1,2} , R. Naidu ^{1,2} , ¹ University of Newcastle, Australia, ² CRC CARE, Australia	[O5.2.2] Microbial production of astaxanthin by X. dendrorhous using enzymatically hydrolysed rapeseed meal Z.T. Harith*, A. Chatzifragkou, D. Charalampopoulos, <i>University of Reading, UK</i>
15:00-15:15	[O5.1.3] Performance evaluation of the pilot scale UASB-DHS system for natural rubber processing wastewater treatment in south Vietnam T. Watari* ^{1,5} , T.C. Mai ² , D. Tanikawa ³ , Y. Hirakata ¹ , M. Hatamoto ¹ , K. Syutsubo ⁴ , M. Fukuda ¹ , N.B. Nguyen ² , T. Yamaguchi ¹ , ¹ Nagaoka University of Technology, Japan, ² Rubber Research Institute of Vietnam, Viet Nam, ³ National Institute of Technology, Kure College, Japan, ⁴ National Institute for Environmental Studies, Japan, ⁵ Hanoi University of Science and Technology, Viet Nam	[O5.2.3] Lactococcus lactis, a microbial platform for acetoin and 2,3-butanediol production T. Roncal*, S. Caballero, M.M. Díaz de Guereñu, I. Rincón, S. Prieto-Fernández, J.R. Ochoa-Gómez, <i>TECNALIA, Spain</i>
15:15-15:30	[O5.1.4] Effect of feedstock/inoculum ratio on dry-thermophilic anaerobic co-digestion of rice straw and pig urine L.Y. Meng*, T.S. Sako, S.H. Riya, A.H. Terada, M.A. Hosomi, <i>Tokyo Unniversity of Agriculture and Technology, Japan</i>	[O5.2.4] Lactate as a platform chemical for waste-derived biofuels S.K. Cho ¹ , M.S. Kim ¹ , J.G. Na ² , C.K. Lee ³ , D.H. Kim* ⁴ , ¹ Korea Institute of Energy Research, Republic of Korea, ² Dongguk University, Republic of Korea, ³ Research Engineering Development, Republic of Korea, ⁴ Inha University, Republic of Korea
15:30-16:00	Refreshments and Meet the Editors Session B <i>Room: Tramuntana I</i>	
16:00-17:30	Session VIA - White Biotechnology – Production of industrial chemicals and products <i>Chair: Andres Illanes, Chile</i> <i>Room: Tramuntana II/III</i>	Session VIB - Biomass to fuels & chemicals: Techno-economic evaluation, Life-cycle assessment and policy <i>Chair: Samir Khanal, USA</i> <i>Room: Mestral</i>
16:00-16:30	[INV.11] Microbial upgrading of biofuel production side streams Michael Sauer, <i>Austrian Centre of Industrial Biotechnology, Austria</i>	[INV.12] Eco-efficiency assessment of biogas production systems from biomass sources: Joint implementation of life cycle assessment and data envelopment analysis Sara González García, <i>Universidad de Santiago de Compostela, Spain</i>

16:30-16:45	[O6.1.1] Enhanced volatile fatty acids production with micro-oxygenation during anaerobic digestion of lignocellulosic biomass C. Sawatdeenarunat, S.K. Khanal*, <i>University of Hawai'i at Manoa, USA</i>	[O6.2.1] Techno-economic and ghg emissions analysis of oil crops and forestry residues as feedstocks for integrated biojet fuel biorefineries in Brazil C. Cornelio da Silva*, J.A. Posada, S..I. Mussatto, P. Osseweijer, L.A.M. van der Wielen, <i>Delft University of Technology, The Netherlands</i>
16:45:17:00	[O6.1.2] Organofinery: A biorefinery for the production of organic protein-rich feed for monogastric animals M. Santamaria-Fernandez*, H. Uellendahl, M. Lübeck, <i>Aalborg University - Copenhagen, Denmark</i>	[O6.2.2] Techno-economic assessment of catalytic gasification of biomass powders for methanol production L. Carvalho* ¹ , E. Furusjö ¹ , K. Kirtania ¹ , J. Lundgren ¹ , M. Anheden ² , J. Wolf ² , ¹ <i>Luleå University of Technology, Sweden</i> , ² <i>Innventia AB, Sweden</i>
17:00-17:15	[O6.1.3] Enhanced microbiological degradation of hard keratins by <i>Amycolatopsis keratiniphila</i> D2 for protein hydrolysates production F.C. Falco*, R. Espersen, Y. Huang, L. Lange, B. Svensson, K.V. Gernaey, A.E. Lantz, <i>Technical University of Denmark, Denmark</i>	[O6.2.3] A techno-sustainability assessment framework for biobased technologies G. Thomassen ^{1,2} , P. Rafiaani ^{2,3} , M. Van Dael ^{1,2} , T. Kuppens* ² , S. Van Passel ^{2,4} , ¹ <i>VITO, Belgium</i> , ² <i>Hasselt University, Belgium</i> , ³ <i>University of Liege, Belgium</i> , ⁴ <i>University of Antwerp, Belgium</i>
17:15-18:15	"How to write a scientific paper and get published" workshop with Elsevier Publisher (Early Career Researcher Event) <i>Room: Tramuntana II/III</i>	
19:30-22:00	Gala Dinner (Optional Event - Ticket Required) Meet in the Auditorium Lobby at 19:15	

Wednesday 26th October 2016

08:00	Registration <i>Room: Hall Tramuntana</i>	
09:10-09:50	[PL.5] European country approaches towards a resource-efficient biobased economy Ruben Guisson, <i>VITO, Belgium</i> <i>Chair: Hao Huu Ngo</i>	
09:50-10:30	[PL.6] Econometric assessment for biofuel development Duu Jong Lee, <i>National Taiwan University, Taiwan</i> <i>Chair: Hao Huu Ngo</i>	
10:30-11:00	Refreshments <i>Room: Tramuntana I</i>	
11:00-12:30	Session VIIA - Biomass to fuels & chemicals: Social concerns and perspectives <i>Chair: Jonathan Wong, Hong Kong</i> <i>Room: Tramuntana II/III</i>	Session VIIB - Bioresource policies and economics <i>Chair: Jose Teixeira, Portugal</i> <i>Room: Mestral</i>
11:00-11:15	[O7.1.1] Improvement designs and fabrications for planar SOFC with anode supported cells based on button cell device X.V. Nguyen*, G.B. Jung, S.-H. Chan, J.W. Yu, C.C. Yeh, <i>Yuan Ze University, Taiwan</i>	[INV.13] Life cycle assessment of biorefineries: A claiming-based allocation approach Edgard Gnansounou, <i>Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland</i>
11:15-11:30	[O7.1.2] A low cost microbial fuel cell for power generation: Design, comparison and performance evaluation J. Mayorga*, N. Rodriguez, A. Guerrero, J. Rodriguez, A. Roza, A. Gonzalez, F. Jimenez, <i>Universidad de los Andes, Colombia</i>	
11:30-11:45	[O7.1.3] Hydrogen production and phosphorus recovery in microbial electrolysis cell: The influence of COD concentration and applied voltage A. Almatouq* ^{1,2} , A.O. Babatunde ¹ , ¹ <i>Cardiff University, UK</i> , ² <i>Kuwait Institute of Scientific Research, Kuwait</i>	[INV.14] An update of the food-fuel debate at the light of new economical, technological, environmental and social issues Electo Silva Lora, <i>Universidade Federal de Itajubá, Brazil</i>

11:45-12:00	[O7.1.4] Effect of anode process in PEMWE for ozone production C.C. Yeh*, G.B. Jung, C.W. Chen, J.W. Yu, C.C. Ma, C.W. Hsieh, C.L. Lin, X.V. Nguyen, <i>Yuan Ze University, Taiwan</i>	
12:00-12:15	[O7.1.5] Innovative anode catalyst design to reduce the degradation in ozone generator via PEM water electrolysis J.W. Yu*, G.B. Jung, C.W. Chen, C.C. Yeh, C.C. Ma, C.W. Hsieh, C.L. Lin, X.V. Nguyen, <i>Yuan Ze University, Taiwan</i>	[O7.2.1] Bioenergy development in Sweden - Frameworks for success A. Hansen* ¹ , A. Berlina ¹ , ¹ <i>Hansen Economics/NIBIO, Norway</i> , ² <i>NORDREGIO, Sweden</i>
12:15-12:30	[O7.1.6] The use of tungsten wire as current collector in microbial fuel cell with comparison of titanium and stainless steel wire I. Sharma*, M.M. Ghangrekar, <i>IIT Kharapur, India</i>	[O7.2.2] Localisation of "biorefineries" based on biomass input combination combination M. Bojesen, M.V. Jensen, T.R. Lillethorup, M. Gylling*, <i>University of Copenhagen, Denmark</i>
12:30-13:00	Closing session and BITE Best papers awards-2015 and BIORESTEC Best Posters awards <i>Room: Tramuntana II/III</i>	
13:00	Lunch <i>Restaurant</i>	