

Monday July 1st Session 1

	PARALLEL ORAL SESSION 1.A. <u>Advances in Wastewater Treatment</u> ROOM A - PARANINFO Chairman: Rupert Craggs Chairwoman: Rita Henderson	PARALLEL ORAL SESSION 1.B. <u>Experimental Methods</u> ROOM B – CLAUDIO MOYANO Chairman: Armando González Chairman: Daniel Puyol	PARALLEL ORAL SESSION 1.C. <u>Algal-based Biorefineries and Life Cycle Assessment</u> ROOM C – REY FELIPE II Chairman: John Benemann Chairwoman: Eugenia J. Olguín
9:30-9:45	1.A.1. T. E. Kunetz, K. Kumar, Z. Wen, X. Zhao, M. A. Gross (Metropolitan Water Reclamation District of Greater Chicago, USA) “Algae for Wastewater Treatment: Nutrient Removal/Recovery and Beyond”	1.B.1. D. Manhaeghe, S. Michels, D. P. L. Rousseau, S. W. H. Van Hulle (Ghent Univ., Belgium) “The influence of heat-stress and photoinhibition on microalgae respiration and photosynthetic growth”	1.C.1. R. Congestri, S. Savio, S. Farrotti, A. Amati, K. Krasojevic, N. Perini, G. Cocetta, A. Ferrante, M. Antonelli, L. Migliore, F. Costa (Univ. of Rome ‘Tor Vergata’, Italy) “An algal-bacterial photobioreactor is the core of an intelligent dishwasher system to upcycle wastewater and produce zero-mile food”
9:45-10:00	1.A.2. A. Pizzera, M. Bellucci, F. Marazzi, V. Mezzanotte, K. Parati, E. Ficara (Politecnico di Milano, Italy) “A pilot scale algae-bacteria treatment of undiluted agro-digestate under suboptimal climatic conditions”	1.B.2. A. Sánchez-Zurano, C. Gómez Serrano, F. G. Acién Fernández, J. M. Fernández Sevilla, E. Molina Grima (Univ. Almería, Spain) “A novel photorespirometry method to characterize microalgae-bacteria consortia in wastewater treatment”	1.C.2. S. Astals, M. Solé-Bundó, F. Passos, M. S. Romero-Güiza, I. Ferrer (Univ. of Queensland, Australia) “Co-digestion strategies to enhance microalgae anaerobic digestion: A review”
10:00-10:15	1.A.3. A. Ward, J. Dwyer (The Univ. of Queensland, Australia) “Pilot Scale Wastewater Remediation Using Aggregated Microalgae Bacterial Flocs”	1.B.3. S. Rossi, F. Marazzi, E. Sforza, M. Pastore, M. Bellucci, T. Fantasia, F. Casagli, V. Mezzanotte, E. Barbera, A. Bertucco, E. Ficara (Politecnico di Milano, Italy) “Respirometric methods for microalgae-bacteria photobioreactors: monitoring and model calibration procedures”	1.C.3. J. Ruiz, Z. Arbib, J. A. Perales (Algades, Univ. Cádiz, Spain) “Economic comparison of wastewater treatment: HRAP vs. Constructed Wetlands and Tricking Filters”
10:15-10:30	1.A.4. P. Álvarez, M. J. Torres-Porras, D. González-Ballester, N. Merghoub, H. EL Arroussi, M. Hervé- Castro, J. L. Rastoin, F. Delrue, A. Dubini (CEA Cadarache, Groupe Biomasse 3G, France & Univ. Córdoba, Spain) “The WABA project: Wastewater Bioremediation using Algae-Bacteria consortia for rural Areas”	1.B.4. M. Bonnanfant, B. Jesus, J-L Mouget, J. Pruvost (Mer-Molécules-Santé (MMS), Le Mans Univ., France) “Estimating growth and photosynthesis efficiency by using online Chlorophyll a fluorescence in microalgae culture systems”	1.C.4. T. V. Fernandes, M. S. Muñoz, L. M. Trebuch, P. J. Verbraak, D. B. Van de Waal (Netherlands Institute of Ecology (NIOO-KNAW), The Netherlands) “Closing cycles from wastewater by microalgae: opportunities and risks”
10:30-10:45	1.A.5. S. Akizuki, G. Cuevas-Rodríguez, T. Toda (Univ. of Guanajuato, México) “Anaerobic Digestion Effluent Treatment Using Microalgae and Nitrifiers in an Outdoor Raceway Pond with Fluidized-Carriers”	1.B.5. J. Lacroux, J. Seira, J-P. Steyer, R. van Lis (INRA-LBE, Univ. Montpellier, France) “The pH strongly influences the growth of microalgae on volatile fatty acids from waste fermentation”	1.C.5. A. Guldhe, P. Ramsundar, P. Musetsho, P. Singh, N. Renuka, I. Rawat, F. Bux (Durban Univ. of Technology, South Africa) “Evaluation of municipal wastewaters at various stages of treatment process as growth media for microalgae cultivation”
10:45-11:00	1.A.6. L. Yang, X. Zhou (Tongji Univ., China) “Integrated anaerobic digestion with microalgae culture for nutrients recovery from hydrothermal liquefaction wastewater”	1.B.6. J. González-Camejo, P. Montero, S. Aparicio, M. V. Ruano, L. Borrás, R. Barat, J. Ferrer, A. Seco (CALAGUA, Univ. Politècnica de València, Spain) “Assessment of the nitrite inhibition of microalgae at bench and pilot scale”	1.C.6. N. Hasport, T. Wawilow, U. Theilen, J. Londong, S. Beier (THM – Univ. of Applied Sciences, Germany) “Application of Algae Cultivation to Improve Nutrient Removal and Energy Consumption at Municipal WWTP”

Monday July 1st Session 2

	PARALLEL ORAL SESSION 2.A. Advances in Wastewater Treatment ROOM A - PARANINFO Chairman: José Pires Chairman: Faizal Bux	PARALLEL ORAL SESSION 2.B. <u>Valorization and Downstream Products</u> ROOM B – CLAUDIO MOYANO Chairman: Robert Reinhardt Chairman: Sergi Astals	PARALLEL ORAL SESSION 2.C. <u>Understanding Nutrients Removal and Metabolism in Microalgae</u> ROOM C – REY FELIPE II Chairman: Bruce E. Rittmann Chairman: Tatsuki Toda
11:30-11:45	2.A.1. <u>M. Verhein</u> (Algalos, Spain & Univ. Islas Baleares, Spain & Lawrence Berkeley National Lab, USA & Univ. of Naples, Italy) "Algalos PBR's the platform for low cost industrial scale micro algae production"	2.B.1. <u>L. T. Arashiro</u> , I. Ferrer, D. P. L. Rousseau, S. W. H. van Hulle, M. Garfi (GEMMA, Univ. Politècnica Catalunya, Spain and Ghent Univ., Belgium) "Wastewater treatment and resources recovery with microalgae: biogas production and pigments extraction"	"The Jülich Algal Solutions Group" - Workshop 2.C.1. G. Perin, M. Valton, H. Yang, E. Alobwede, D. Malatinsky, <u>P. R. Jones</u> (Imperial College London, UK) "From molecular control of metabolism to practical implementation using cyanobacteria for sustainable cycling of nutrients"
11:45-12:00	2.A.2. C. Saucó, <u>R. Cano</u> , F. Rogalla, Z. Arbib, E. Lara, E. Navarro-López, F. G. Acien (FCC-Aqualia, Spain) "Production of microalgae-based biofertilizer and water for reuse from wastewater in El Toyo WWTP"	2.B.2. M. Llamas, E. Tomás-Pejó, <u>C. González-Fernández</u> (IMDEA Energy, Spain) "From microalgae biomass to microbial oils via yeast fermentation"	2.C.2. <u>S. D. Calahan</u> , I. Meuser, L. Nedbal, C. Kuchendorf (Forschungszentrum-Jülich, Germany) "Tertiary Treatment of Sewage Using an Algal Turf Scrubber"
12:00-12:15	2.A.3. <u>C. Gómez-Serrano</u> , I. Martín, M. Ciardi, J.M. Fernández-Sevilla, F. G. Acien (Univ. Almería, Spain) "Optimization of microalgal biomass production using different wastewater types as nutrients source"	2.B.3. <u>C. Garrido-Pérez</u> , M. Canto-López, J. A. Perales (Univ. Cádiz, INMAR, Spain) "Microalgae-Bacteria sludge from urban wastewater phycobioremediation as soil improver and plants growing media "	2.C.3. N. Siebers, D. Hofmann, H. Schiedung, A. Landsrath, B. Ackermann, L. Gao, P. Mojzeš, N. D. Jablonowski, W. Amelung, A. Solovchenko, <u>S. D. Calahan</u> , L. Nedbal (Forschungszentrum-Jülich, Germany) "Towards closing the phosphorus cycle: ³³ P isotope marking the path from water to algal fertilizer, to soil, and to higher plants"
12:15-12:30	2.A.4. A. Mohamed, <u>P. Kamath</u> , L. Welles, F. J. Rubio-Rincon, A. M. Rada Ariza, D. Brdjanovic, C. M. Lopez-Vazquez (IHE Delft Institute for Water Education, The Netherlands) "A Model-Based Photo-Activated Sludge-Enhanced Biological Phosphorus Removal (PAS-EBPR) System"	2.B.4. T. Fábryová, <u>J. Cheel</u> , D. Kubáč, P. Hrouzek, L. Tůmová, J. Kopecký (ALGATECH & Charles Univ., Czech Republic) "Isolation of astaxanthin esters from <i>Haematococcus pluvialis</i> using liquid-liquid chromatography"	2.C.4. <u>M. Plouviez</u> , B. Guieysse (Masseys Univ., New Zealand) "Microalgal N ₂ O synthesis: Where are we at?"
12:30-12:45	2.A.5. <u>P. Scarponi</u> , E. Amadio, M. Selva, A. Perosa, C. Cavinato (Univ. Ca' Foscari of Venice, Italy) "Comparison of <i>Chlorella vulgaris</i> and <i>Scenedesmus obliquus</i> growth on the Organic Fraction of Municipal Solid Waste (OFMSW) digestate"	2.B.5. J. A. Magdalena, <u>C. González-Fernández</u> (IMDEA Energy, Spain) "Strategies for the enhancement of volatile fatty acids production from microalgae biomass: archaea inhibition"	2.C.5. <u>R. Soto Ramírez</u> , P. Poirrier, R. Chamy (Pontificia Univ. Católica de Valparaíso, Chile) "FTIR study of the effect of nutritional deprivation in microalgae grown under continuous culture on envelope characteristics"
12:45-13:00	2.A.6. <u>M^a J. García-Galán</u> , L. Arashiro, L. H. M. L. M. Santos, S. Rodríguez-Mozaz, D. Barceló, I. Ferrer, M. Garfi (Univ. Politècnica de Catalunya, GEMMA Group, Spain) "Removal and fate of priority pharmaceuticals, their metabolites and transformation products in microalgae-based wastewater treatment systems"	2.B.6. I. González, <u>N. Herrero</u> , J. A. Siles, M. A. Martín, C. García, J. M. Gómez (BIOMASA PENINSULAR S.A., Spain) "N and P removal from secondary urban wastewater with microalgae cultivated in biofilm and its valorisation as component of bio-based fertilisers: TL-BIOFER Project"	2.C.6. K. G. Coronado-Apodaca, M. Vital-Jácume, G. Buitrón, <u>G. Quijano</u> (Univ. Nacional Autónoma de México, UNAM) "Characterization of non-axenic microalgal cultures: microbiological and kinetic aspects"
13:00-13:15	2.A.7. <u>V. Jauzein</u> , J-P. Steyer, E. Fouilland, O. Bernard (SAUR, France) "Lessons learnt from two years of HRAP management for wastewater treatment at two geographic position"	2.B.7. <u>A. Lorenzo Hernando</u> , J. Martín, F. G. Acién, S. Bolado (Institute of Sustainable Processes, Univ. Valladolid, Spain) "Pretreatment Effect on Inhibitory Compounds Production of Microalgae-Bacteria Biomass from Swine Treatment Photo-bioreactors"	2.C.7. L. A. Pham, A. Wanko, P. Bois, <u>J. Laurent</u> (ICube, ENGEEs, CNRS, Univ. de Strasbourg, France) "Algal Bacterial dynamics in a High Rate Algal Pond system under different nutrient loads and hydraulic retention times: experimental and modeling evaluation"
13:15-13:30	2.A.8. X. Hu, Y. E. Meneses, <u>A. A. Hassan</u> (Univ. of Nebraska-Lincoln, USA) "Treatment of Meat Processing Wastewater Using Immobilized Co-culture of Microalgae Consortium and Activated Sludge"	2.B.8. A. Ferreira, B. Ribeiro, J. Vladic, S. Vidovic, D. Cvetkovic, L. Melkonyan, G. Avetisova, A. F. Ferreira, M. Costa, A. Reis, <u>L. Gouveia</u> (LNEG, Portugal) "Industrial wastewater-grown <i>Scenedesmus obliquus</i> biomass-to-fuels and biofertilizers production: an integrative approach"	2.C.8. <u>A. R. Hisee</u> , J. G. Mitchell, H. J. Fallowfield (Flinders Univ., Australia) "Influence of microbial communities on bacterial populations and algal biomass in high rate algal pond in Kingston on Murray"

Monday July 1st Session 3

	PARALLEL ORAL SESSION 3.A. <u>Biofuels</u> ROOM A - PARANINFO Chairman: Jason Park Chairman: Frank Rogalla	PARALLEL ORAL SESSION 3.B. <u>Microalgae Based Wastewater Treatment</u> ROOM B – CLAUDIO MOYANO Chairman: Fernando G. Fermoso Chairwoman : Paqui Blázquez	PARALLEL ORAL SESSION 3.C. <u>Advances in Wastewater Treatment and Pathogens and Metals Removal</u> ROOM C – REY FELIPE II Chairman: Howard Fallowfield Chairwoman: M ^a Jesús García Galán
15:30-15:45	3.A.1. M. Barragán-Trinidad, G. Buitrón (Univ. Nacional Autónoma de México) "Hydrolysis of microalgal biomass by using ruminal fluid to increase hydrogen and methane production"	3.B.1. F. B. Green , W. J. Oswald and R. E. Dawyot (Univ. California, Oswald Green, Oswald Engineering Associates and Allied Engineer. USA) "Sustainable Wastewater Reclamation: the Nexus of Water, Energy and Nutrient Resource Recovery"	3.C.1. F. Sakarya, L. W. Scannell, B. Z. Haznedaroğlu (Bogazici Univ., Turkey) "Feasibility of using algal biomass for the pretreatment of metals in hydraulic fracturing wastewater"
15:45-16:00	3.A.2. K. P. Roberts, S. Heaven, C. J. Banks (Univ. of Southampton, UK) "Semi-continuous anaerobic digestion of the marine micro-algal species <i>I. galbana</i> and <i>D. salina</i> grown under low and high sulphate conditions"	3.B.2. J. Qian , X. Liu, M. Fujiwara, T. Kodera, S. Akizuki, T. Toda, S. Ban (Univ. of Shiga Prefecture, Japan) "Optimal Pre-treated pH and HRT for Continuous Culture of a Microalga using Anaerobic Digestion Effluent from Aquatic Macrophytes"	3.C.2. G. Ruas , S. L. Farias, M. L. Serejo, P. G. Scarcelli, M. A. Boncz. (Federal Univ. of Mato Grosso do Sul, Brazil) "The effect of CO ₂ addition and hydraulic retention time on pathogens removal in HRAP"
16:00-16:15	3.A.3. E. Romero-Frasca , S. B. Velasquez-Orta, V. Escobar-Sánchez, J. R. Tinoco-Valencia, M. T. Orta Ledesma (Univ. Nacional Autónoma de México, UNAM) "Nutrient removal and ethanol production via pre-treated microalgae biomass as carbon source in domestic wastewater in wildtype ethanologenic yeast cultures"	3.B.3. M. V. A. Santos, T. Köchling, L. R. Martins, S. Gavazza, M. T. Kato, L. Florencio (Federal Univ. of Pernambuco, Brazil) "Performance of full-scale rock filters for the removal of cyanobacteria and suspended solids from stabilization ponds"	3.C.3. P. Chambonniere , J. Bronlund, B. Guileysse (Massey Univ. New Zealand) "Optimization of wastewater disinfection using High Rate Algal Ponds"
16:15-16:30	3.A.4. E. J. Olguín , A. Mendoza, S. Rizzo (Institute of Ecology, INECOL, México) "Potential of <i>Chlorococcum</i> sp. for bioethanol production utilizing stillage's digestates with a high COD content during late autumn"	3.B.4. C. Sambusiti , B. Segues, M. Bahuaud, A. Parsy, T. Elan, P. Baldoni-Andrey, F. Perié (TOTAL SA, PERL, Lacq, France) "Toward a functional integration of CO ₂ capture, biotreatment of Oil&Gas produced water, nutrient recovery and renewable energy production"	3.C.4. D. Hernández , B. Riaño, M. C. García-González (Agricultural Technological Institute of Castilla y León. ITACYL, Spain) "Recovery of Cu ²⁺ and Zn ²⁺ from pig manure through microalgal biosorption"
16:30-16:45	3.A.5. J. Ferrer , M. Solé, F. Passos, H. Carrère, M. Garfi (Univ. Politècnica de Catalunya, GEMMA, Spain) "How can pretreatments and co-digestion enhance microalgae conversion to biogas?"	3.B.5. X. Álvarez , G. Chonillo, I. Mercado, K. Naranjo. (Univ. de Guayaquil, Ecuador) "Wastewater from a dairy industry as a substrate for batch cultivation of <i>Arthrospira</i> sp.: Biochemical and nutritional composition of biomass"	3.C.5. S. Vasilieva , E. Lobakova, I. Selyakh, L. Semenova, P. Gotovtsev, C. Antipova, O. Chivkunova, P. Scherbakov, A. Lukyanov, A. Solovchenko (Lomonosov Moscow State Univ., Russia) "Bio-inspired materials from microalgal cells on chitosan-based carriers for biocapture of nutrients"
16:45-17:00	3.A.6 P. G. Scarcelli , M. L. Serejo, M. Á. Boncz, G. Ruas (Federal Univ. of Mato Grosso do Sul UFMS, Brazil) "Effect of thermal pretreatment versus thermophilic digestion on methane production from microalgae and macroalgae"	3.B.6. T. Lundquist , S. Blackwell, E. Diego, J. Coyne, J. Benemann (MicroBio Engineering Inc., USA) "Performance of Algae Raceways Operated in Series for Nitrogen Removal and Recovery"	3.C.6. H. R. Oliveira , I. D. Bassin, M. C. Cammarota (Univ. Federal do Rio de Janeiro, Brazil) "Bioflocculation of Cyanobacteria with Pellets of <i>Aspergillus niger</i> "

Monday July 1st Session 4

	PARALLEL ORAL SESSION 4.A. <u>Algal-based Biorefineries</u> ROOM A - PARANINFO Chairwoman: Eva Thorin Chairman: Jean-Philippe Steyer	PARALLEL ORAL SESSION 4.B. <u>Wastegas Treatment</u> ROOM B – CLAUDIO MOYANO Chairman: David A. Jeison Chairman: Joan García	PARALLEL ORAL SESSION 4.C. <u>Harvesting</u> ROOM C – REY FELIPE II Chairman: Zouhayr Arbib Chairman: Cesar R. Mota
17:30-17:45	4.A.1. <u>F. G. Ación Fernández</u> , C. Gómez Serrano, J. M. Fernández Sevilla, E. Molina Grima E. (Univ. Almería, Spain) “Last advances on the large scale production of bioactive compounds for agriculture and aquaculture from microalgae”	4.B.1. <u>R. Ángeles</u> , J. Gutiérrez, E. Arnáiz, R. Muñoz, R. Lebrero (Institute of Sustainable Processes, Univ. Valladolid, Spain) “Evaluation and optimization of photosynthetic biogas upgrading in a tubular photobioreactor”	4.C.1. <u>J. B. K. Park</u> , C. Meerman, R. J. Craggs (National Institute of Water and Atmospheric Research, NIWA, New Zealand) “Continuous low dosing of cationic polyacrylamide (PAM) to enhance algal harvest from a hectare-scale wastewater treatment High Rate Algal Pond”
17:45-18:00	4.A.2. <u>G. Cea-Barcia</u> , R. Imperial Cervantes, I. Torres Zúñiga, S. Van Den Hende (Univ. de Guanajuato, Mexico) “Tequila wastewater as an opportunity to produce yeast-microalgae biomass”	4.B.2. <u>J. J. González-Cortés</u> , L.D. Saldarriaga, S. Torres-Herrera, F. Almenglo, M. Ramírez, D. Cantero (IVAGRO, Univ. Cádiz, Spain) “Biogas Desulfurization and Upgrading by an Anoxic Airlift Bioreactor and Column Bubble Photobioreactor Coupled to an External Absorption Unit”	4.C.2. A. M. Mohseni, <u>L. Fan</u> , F. A. Roddick, H. Li, Y. Gao, Z. Liu (WETT Research Centre, RMIT Univ., Australia) “Using starch-based flocculants for biomass harvesting in algal treatment of municipal wastewater RO concentrate”
18:00-18:15	4.A.3. <u>M. Martínez</u> , F. Urrego, F. Restović (Fraunhofer Chile Research, Chile) “Biorefinery of <i>Chlorella protothecoides</i> focused on lutein recovery”	4.B.3. M. Franco-Morgado, T. Tabaco-Angoa, M. A. Ramirez-Garcia, <u>A. González-Sánchez</u> (Univ. Nacional Autónoma de México) “Strategies for decreasing dissolved oxygen in a High Rate Algal Pond deployed for biogas upgrading”	4.C.3. M. Campos, I. L. Freire, <u>P. Scarcelli</u> , M. Serejo (Federal Univ. of Mato Grosso do Sul, Brazil) “Harvesting Microalgal Biomass: Comparing the use of Commercial and Regenerated Coagulant”
18:15-18:30	4.A.4. <u>A. Jebali</u> , R. Naimi, F. Feki M. A. Masmoudi, S. Sayadi (Lab. of Environ. Bioprocesses, Sfax Centre of Biotechn., Tunisia) “ <i>Scenedesmus</i> sp. cultivation for olive mill wastewater bioremediation, bioactive molecules and biofertilizer production”	4.B.4. <u>J. S. Park</u> , G. Kumar, S-H Kim (Yonsei Univ., Republic of Korea) “Biological CO ₂ fixation using pure and mixed microalgae strains”	4.C.4. C. Formosa-Dague, <u>P. Guiraud</u> (LISBP, INSA, INRA, CNRS, Univ. de Toulouse, France) “Towards a better understanding of microalgae natural flocculation mechanisms to enhance flotation harvesting efficiency”
18:30-18:45	4.A.5. <u>V. Heredia</u> , L. Marchal, M. Cueff, L. Hervé, O. Gonçalves, J. Pruvost (GEPEA-CNRS, France) “Triglyceride recovery from microalgae grown in diurnal cycles: Physiological influence over Downstream process efficiency”	4.B.5. <u>H. R. Molitor</u> , E. J. Moore, J. L. Schnoor (Univ. of Iowa, USA) “Maximum CO ₂ Utilization by Nutritious Microalgae”	4.C.5. S. Velea, A. Paulenco, A. C. N. Vintila, <u>A. M. Galán</u> (National Inst. for Research & Develop. in Chemistry and Petrochem., Romania) “Optimization of <i>Chlorella Vulgaris</i> biomass harvesting by electro-flocculation using a continuous system”

Tuesday July 2nd – Session 5

	PARALLEL ORAL SESSION 5.A. <u>Algal-Bacterial Photobioreactors</u> ROOM A - PARANINFO Chairman: Rafael Bastos Chairman: José Antonio Perales	PARALLEL ORAL SESSION 5.B. <u>INCOVER Session</u> ROOM B – CLAUDIO MOYANO Chairwoman: Ivet Ferrer Chairman: Domingo Cantero	PARALLEL ORAL SESSION 5.C. <u>Modelling and Control Strategies</u> ROOM C – REY FELIPE II Chairman: Guillermo Quijano Chairwoman: Cristina González
9:30-9:45	5.A.1. <u>E. Jiménez</u> , C. Madera, A. Ortiz, P. Morales, E. Peña, F. Machuca (Univ. del Valle, Colombia) “High Rate Algal Pond for the removal of pharmaceutical compounds in urban wastewater under tropical conditions. Case study: Santiago de Cali-Colombia”	5.B.1. <u>J. C. Fradinho</u> , J. Almeida, E. Serrano, A. Oehmen, E. Lara, M. A. M. Reis (UCIBIO-REQUIMTE, Univ. NOVA de Lisboa, Portugal) “Polyhydroxyalkanoates production in HRAP retrofitted for wastewater treatment with phototrophic purple bacteria”	5.C.1. <u>M. Barceló-Villalobos</u> , J. L. Guzmán Sánchez, F. G. Ación Fernández (Univ. Almería, Spain) “A feedback control strategy of dissolved oxygen in raceway reactors”
9:45-10:00	5.A.2. Q. L. Zhang, C. W. Zhou, G. Y. Chen, Y. Tao (Tsinghua Univ., China) “Microalgae cultivation in a ceramic membrane photobioreactor for nutrients removal from secondary effluent of WWTP and microalgal biomass production”	5.B.2. <u>M. R. Rodero</u> , A. Carvajal, V. Castro, D. Navia, C. de Prada, R. Lebrero, R. Muñoz (Institute of Sustainable Processes, Univ. Valladolid, Spain) “Development of a control strategy to cope with biogas flowrate variations during photosynthetic biogas upgrading”	5.C.2. R. G. Passos, V. V. M. Ferreira, N. M. G. Oliveira, <u>M. Von Sperling</u> (Nuclear Technology Development Center, CDTN, Brazil) “Fluorescent tracers, dyes and flow meters as tools for hydrodynamic characterization of ponds in the field and validation of CFD models”
10:00-10:15	5.A.3. <u>J. González-Camejo</u> , R. Barat, D. Aguado, J. Ferrer, A. Seco (CALAGUA, Univ. of Valencia, Spain) “Evaluation of 3-year operational data of a Membrane microalgae PhotoBioReactor (MPBR) using multivariate projection methods”	5.B.3. <u>E. Rueda Hernández</u> , M. J. García-Galán, R. Díez Montero, J. García (GEMMA, Univ. Politècnica de Catalunya, Spain) “Photosynthetic production of polyhydroxybutyrate (PHB) by cyanobacteria isolated from wastewater treatment processes”	5.C.3. E. Rodríguez-Miranda, <u>J. L. Guzmán</u> , M. Berenguel, F. G. Ación, A. Visioli (Univ. degli studi di Brescia, Italy & Univ. Almería, Spain) “Diurnal and Nocturnal pH control in Microalgae Raceway Reactors”
10:15-10:30	5.A.4. <u>V. Dalvi</u> , P. Chawla, A. Malik (Indian Institute of Technology Delhi, India) “Evaluating Mode of Agitation for Speedy Recovery of Nutrients from Municipal Wastewater: Aeration vs. Mechanical Mixing”	5.B.4. <u>R. Díez-Montero</u> , E. Uggetti, M. J. García-Galán, J. García (GEMMA, Univ. Politècnica de Catalunya, Spain) “Start-up of a demonstrative scale microalgae-based system for wastewater treatment and production of biopolymers”	5.C.4. D. F. C. Dias, R. G. Passos, <u>M. Von Sperling</u> (Federal Univ. of Minas Gerais, Brazil) “Placing simple mid-depth transverse baffles perpendicular to the flow to improve bacterial disinfection in a shallow maturation pond – performance evaluation and CFD simulation”
10:30-10:45	5.A.5. <u>L. Vassalle de Castro</u> , C. C. Moreira, M. P. Freitas, A. F. Torres, F. Passos and C. R. Mota Filho (Federal Univ. of Minas Gerais, Brazil) “Removal of emerging micro pollutants from domestic wastewater in a system comprised of a USAB reactor followed by a high rate algal pond”	5.B.5. <u>R. Cano</u> , F. Rogalla, Z. Arbib, C. Saucó, E. Lara (FCC-Aqualia, Spain) “Carbon footprint assessment of microalgae systems for wastewater treatment”	5.C.5. <u>A. Zapata</u> , M. Peña (Univ. del Valle, Colombia) “CFD Model to Characterize the Physical Processes of Energy Transfer in a Secondary Facultative Lagoon”
10:45-11:00	5.A.6. <u>A. F. Torres-Franco</u> , S. E. Araújo, M. P. Freitas, L. Vassalle de Castro, F. Passos, C. C. Figueredo, C. R. Mota Filho. (Federal Univ. of Minas Gerais, Brazil) “Community structure and biochemical methane potential of microalgae in a LED-enhanced High Rate Algal Pond treating high strength wastewater”	5.B.6. F. Rodríguez, <u>M. Placer</u> , L. P. Herrero-Castilla, J. Álvarez (AIMEN, Spain) “Cyanobacteria population monitoring in PHA production photo-bioreactor for process optimization”	5.C.6. <u>F. Casaqli</u> , G. Zuccaro, A. Pizzera, J. P. Steyer, E. Ficara (Politecnico di Milano, Italy and LBE, Univ. Montpellier, INRA, France) “A comprehensive model to optimize microalgae-bacteria wastewater treatment in raceway ponds”

Tuesday July 2nd – Session 6

	PARALLEL ORAL SESSION 6.A. <u>Algal-Bacterial Photobioreactors and Operating Strategies</u> ROOM A - PARANINFO Chairman: Ignacio de Godos Chairman: Marcos von Sperling	PARALLEL ORAL SESSION 6.B. <u>Microalgae Based Wastewater Treatment</u> ROOM B – CLAUDIO MOYANO Chairman: Patrik Jones Chairwoman: Luisa Gouveia	PARALLEL ORAL SESSION 6.C. <u>Valorization Strategies</u> ROOM C – REY FELIPE II Chairman: Charles Banks Chairwoman: Sonia Heaven
11:30-11:45	6.A.1. N. N.Cheng, H. J. Fallowfield (Flinders Univ., Australia) "Effect of intermittent aeration on nitrification of ammonia during biological aerobic treatment of pig slurry for microalgal growth in High Rate Algal Pond"	6.B.1. J. W. Hong, S. W. Jo, J. M. Do, H. Na, M. K. Lee, J. J. Kim, S. I. Park, H. S. Yun, H.J. Kim, J.Y. Jung, Y.J. Yeom, I.S. Kim, H.S. Yoon (Kyungpook National Univ., South Korea) "Wastewater treatment and energy recovery by efficient maintenance of microalgal outdoor ponds in South Korea"	6.C.1. C. R. Àvila , T. Vicent, P. Blázquez (Univ. Autònoma de Barcelona, Spain) "Low temperature thermal pretreatment with and without flocculation to enhance microalgae solubility and digestibility"
11:45-12:00	6.A.2. M. Serejo , S. Lacerda, G. Ruas, P. Paulo, M. Boncz (Federal Institute of Mato Grosso do Sul, Brazil) "Surfactant removal and biomass production in a microalgal-bacterial process: effect of feeding regime"	6.B.2. L. X. Coggins , M. Ghisalberti, A. Ghadouani (The Univ. of Western Australia) "Improving hydraulics performance of waste stabilisation ponds using baffles"	6.C.2. N. Fakhimi , A. Dubini, O. Tavakoli, D. González-Ballester (Univ. Córdoba, Spain & Univ. Tehran, Iran) "Acetic Acid Produced by Bacteria Drives Hydrogen Production in <i>Chlamydomonas reinhardtii</i> "
12:00-12:15	6.A.3. N. Zalivina , C. M. Recinos Arenas, P. van der Steen, J. van de Vossenber, M. Wang, S.J. Ergas (Univ. South Florida, USA) "High ammonia strength wastewater treatment using algae, bacteria and ion exchange"	6.B.3. S. Ban , X. Liu, J. Qian, T. Toda, K. Ishikawa, M. Koyama, A. Kohzu, A. Imai (Univ. of Shiga Prefecture, Japan) "Conservation of Lake Ecosystems through Anaerobic Digestion of Excessively Growing Aquatic Weeds and Mass-culturing Microalgae"	6.C.3. M. P. Freitas, J. O. Sánchez-Lara, K. G. Coronado-Apodaca, L. V. de Castro, A. F. Torres, C. R. Mota, F. Passos , J. Carrillo-Reyes, G. Buitrón (Federal Univ. of Minas Gerais, Brazil and Univ. Nacional Autónoma de México) "Effect of different temperatures and substrate/inoculum ratios on the hydrolysis of microalgal biomass using ruminal microorganisms"
12:15-12:30	6.A.4. R. Whitton , M. Santinelli, R. Villa, B. Jefferson, M. Pidou (Cranfield Univ., UK) "Immobilised microalgae for wastewater nutrient remediation"	6.B.4. H. Jia, Q. Yuan (Univ. of Manitoba, Canada) "Effects of Light Intensity and Wavelength on Nitrogen Removal Efficiency Using an Algae - Bacteria Consortium"	6.C.4. N. Wood , A. Baker, M. Alonso Camargo-Valero (Univ. of Leeds, UK) "Investigating the effect of pH, bicarbonate addition and nitrogen source on the growth, neutral lipid accumulation and phosphate accumulation of the microalga <i>C. reinhardtii</i> "
12:30-12:45	6.A.5. B. D. Shoener, J. L. DeBellis, T. Robinson, W. Holm, J. S. Guest (Univ. Illinois, USA) "Optimization of model structure for suspended growth microalgal treatment processes"	6.B.5. H. Onouchi , K. Komatsu, A. Imai, E. F. binti Hashim, N. Kawasaki, T. Toda (National Institute for Environmental Studies, Japan) "Evaluation of the growth promoting effect of dissolved organic matter extracted from soils on microalgae"	6.C.5. L.R. Martins, C.N.C. Souto, S.M.S. Barbosa, S. Gavazza, M.T. Kato, L. Florencio (Federal Univ. of Pernambuco, Brazil) "Anaerobic digestion of fresh microalgae biomass and the residues after lipid extraction"
12:45-13:00	6.A.6. V. C. F. Carvalho , E. B. Freitas, J. C. Fradinho, A. Eehmen, M. A. M. Reis (UCIBIO-REQUIMTE- Univ. NOVA de Lisboa, Portugal) "Can phototrophic Enhanced Biological Phosphorus Removal systems be directly selected from conventional activated sludge?"	6.B.6. M. Kube, L. Fan , F. Roddick, B. Spedding, L. Gao, R. Whitton, M. Pidou, B. Jefferson (RMIT Univ., Australia) "Suspended, biofilm, entrapped microalgae or macroalgae?"	6.C.6. A. Serrano, C. Contreras, G. Ruiz-Filippi, R. Borja, F. G. Feroso (Instituto de la Grasa, CSIC, Spain) "Use of <i>Nannochloropsis Gaditana</i> for valorization of table olive processing water"
13:00-13:15	6.A.7. V. Montemezzani, R. Craggs (National Institute of Water and Atmospheric Research, NIWA, New Zealand) "Modification of High rate algal pond hydraulic retention time to limit zooplankton grazers"	6.B.7. M. Hirahara , M. Sekine, H. Onouchi, Y. Sugai, M. Kishi, K. Tsuchiya, T. Toda (Soka Univ. Japan) "Effect of Predatory Control on Wastewater Treatment Using Algal-bacterial System in High Rate Algal Pond (HRAP)"	6.C.7. R. M. González-Balderas , S. B. Velásquez-Orta, I. Valdez-Vázquez, M. T. Orta Ledesma (Univ. Nacional Autónoma de México) "Ultrasound and ozone sequential pretreatment process to recover carbohydrates and phosphorus from <i>Desmodesmus</i> sp. biomass cultivated in wastewater"
13:15-13:30	6.A.8. R. García-Tirado , L. García-Rego, I. Tormos, C. González-Fernández, C. García-Izquierdo, M. T. Hernández-Fernández (S. Fomento Agrícola Castellonense, FACSA, Spain) "Development of new strategies for integration of microalgae-bacteria consortia in small urban wastewater treatment plants. MICROALBAC"	6.B.8. J. Benemann , Ian Woertz, T. Lundquist (MicroBio Engineering Inc., USA) "Microalgae Wastewater Treatment with CO ₂ Utilization, Biofuels Production, and Nutrient Recovery"	6.C.8. R. Reinhardt (Algen, Algal Technology Company, llc, Slovenia) "SaltGae, algae to treat saline wastewater"

Tuesday July 2nd – Session 7

	PARALLEL ORAL SESSION 7.A. <u>Purple Phototrophic Bacteria</u> ROOM A - PARANINFO Chairman: Germán Buitron Chairwoman: Silvia Bolado	PARALLEL ORAL SESSION 7.B. <u>Photobioreactor Design</u> ROOM B – CLAUDIO MOYANO Chairman: Rubén Díez Chairwoman: Elena Ficara	PARALLEL ORAL SESSION 7.C. <u>Advances in Wastewater Treatment- Nutrients Removal and Recovery</u> ROOM C – REY FELIPE II Chairman: F. Gabriel Acién Chairman: Eloy Bécarea
15:30-15:45	7.A.1. <u>M. Cerruti</u> , G. Crosset-Perrotin, D. G. Weissbrodt (Delft Univ. of Technology, The Netherlands) “Engineering Associations of Fermenters and Purple Non-Sulfur Bacteria under Dark and Light Regimes for Carbohydrate-Based Aqueous Waste Biorefinery”	7.B.1. <u>L. R. Assis</u> , M. L. Calijuri, P. P. Assemany, L. A. Nascimento, L. V. Febroni (Univ. Federal de Viçosa, Brazil) “Evaluation of the performance of reactors with different slopes for microalgae production”	7.C.1. <u>K. Katam</u> , D. Bhattacharyya, S. Soda, T. Shimizu (Indian Institute of Technology Hyderabad) “Effect of hydraulic retention time on the performance of algae-bacteria based trickling photobioreactor in removing organic micropollutants and nutrients from domestic wastewater”
15:45-16:00	7.A.2. <u>A. Alloui</u> , D. Adamczyk, S. E. Vlaeminck (Univ. of Antwerp, Belgium) “Cost-efficient phototrophic production of microbial protein on brewery wastewater using purple bacteria in raceway ponds”	7.B.2. <u>D. Bliersch</u> , J. Ekong, A. Carrano, K. Kardel (Auburn Univ., USA) “Improving Algal Turf Scrubber Performance in Recovery of Aquaculture Wastewater Nutrients with Design of 3D Growth Substrata”	7.C.2. <u>J.A. Perales</u> (Univ. Cádiz, Spain) “Valorization of nutrient streams through microalgae phycobiotechnology: lights and shadows”
16:00-16:15	7.A.3. M. F. Paniagua, F. Martínez, J. A. Melero, <u>D. Puyol</u> , R. Molina (Univ. Rey Juan Carlos, Spain) “Experimental Evaluation and Modelling of a Photo-Anaerobic Biological Membrane reactor treating Wastewater from Food Industry”	7.B.3. <u>J. Dávila</u> , E. Lara, Z. Arbib and A. Fernández-Morales (Univ. Sevilla, Spain) “Enhancement of mixing in High Rate Algal Pond by innovative and low cost aerofolios”	7.C.3. <u>M. Gross</u> , Z. Wen, X. Zhao, M. Gangestad (Gross-Wen Technologies, Iowa, USA) “Evaluation of Nutrient Recovery from Municipal Wastewater Lagoon Using Pilot-Scale Revolving Algal Biofilm (RAB)”
16:15-16:30	7.A.4. <u>D. Marín</u> , E. Posadas, D. García, D. Puyol, R. Lebrero, R. Muñoz (Institute of Sustainable Processes, Univ. Valladolid, Spain) “Assessing the potential of purple phototrophic bacteria for the simultaneous treatment of piggery wastewater and upgrading of biogas”	7.B.4. <u>M. Sadik Akca</u> , Ö.K Kemal Kinacı, B. İnanç (Istanbul Technical Univ., Turkey) “Hydrodynamic design of a novel raceway pond with improved vertical mixing”	7.C.4. <u>P. Chatterjee</u> , S. Saarnio, I. Laaksonen, M. Kokko, A.-M. Lakaniemi, J. Rintala (Tampere Univ., Finland) “Nutrient recovery from source-separated urine by microalgae cultivated in outdoor raceway pond”
16:30-16:45	7.A.5. C. Nairn , Y. Segura, R. Molina, R. Simarro, N. González, E. M. Díaz-Peña, M. C. Molina, J. A. Melero, F. Martínez, <u>D. Puyol</u> (Univ. Rey Juan Carlos, Spain) “Purple photo-bacteria development at different extra organic sources treating domestic wastewater”	7.B.5. E. Musgrove, <u>S. Heaven</u> , G. Muller (Univ. Southampton, UK) “Paddlewheels used as a propulsion mechanism in algal raceways: a brief design”	7.C.5. <u>K. Sukačová</u> (Global Change Research Inst., Czech Republic) “The microalgal biofilms for nutrients removal and phosphorus recovery”
16:45-17:00	7.A.6. <u>H. Lu</u> , G. Zhang, M. Peng, S. He (China Agricultural Univ.) “Brewery wastewater treatment and resource recovery by photosynthetic bacteria: from indoor small scale to outdoor pilot scale”	7.B.6. <u>A. Silverman</u> , K. Nelson (New York Univ., USA) “Design of shallow, unit-process, open-water (UPOW) wetlands for removal of nitrate, trace organic contaminants and microbial contaminants from water”	7.C.6. <u>M. Wang</u> , J. DeBellis, N. Zalivina, D. G. Weissbrodt, J. Guest, S. Ergas (Penn State Univ., USA) “The Impact of Solids Residence Time on the Microbial Community of Photo Sequencing Batch Reactors for shortcut N Removal”

Tuesday July 2nd – Session 8

	PARALLEL ORAL SESSION 8.A. <u>Algal-bacterial Interactions</u> ROOM A - PARANINFO Chairwoman: Tania Vasconcelos Chairman: Pedro A. García-Encina	PARALLEL ORAL SESSION 8.B. <u>Algal-bacterial Photobioreactors</u> ROOM B – CLAUDIO MOYANO Chairman: David Hernández Chairman: Jesús Barragán	PARALLEL ORAL SESSION 8.C. <u>Advances in Wastewater Treatment</u> ROOM C – REY FELIPE II Chairman: Miller A. Camargo-Valero Chairwoman: Roberta Congestri
17:30-17:45	8.A.1. L. X. Coggins , A. Ghadouani (The Univ. of Western Australia) "Flow cytometry for characterisation of microbial communities in waste stabilisation ponds"	8.B.1. S. M. Badenes , T. Azevedo, J. Silva, F. Semião, D. Figueiredo, L. T. Guerra, L. Costa (A4F – Algae for Future, Portugal) "Towards the development of a microalgae-based process in a WRRF in Lisbon, Portugal: from on-site pilot testing to industrial scale system"	8.C.1. R. K. X. Bastos , M. L. Calijuri, A. F. Santiago, A. B. S. Magalhães, I. A. Sánchez, P. P. Assemany (Univ. Federal de Viçosa, Brazil) "Wastewater treatment, plankton characterization and production for beneficial use – studies with high rate algal ponds and polishing ponds in Brazil"
17:45-18:00	8.A.2. A. Bani, S. Arabi, G. Bongioni, C. Previtali, A. Pizzera, E. Ficara, K. Parati, M. Bellucci (Politécnico de Milano, Italy) "Metabarcoding of pilot-scale photobioreactors treating digestate"	8.B.2. Z. Zhang , P. Le Clech, B. Tamburic, V. Chen, R. Henderson (The bioMASS Lab, UNSW, Australia) "Impact of algal diversity on submerged vibrational ultrafiltration performance"	8.C.2. A. Cerar, M. Berden-Zrimec, R. Reinhardt, J. M. Martín-Marroquin, L. Garrote, D. Hidalgo, F. Corona (Algen, Algal Technology Company, Ilc, Slovenia & CARTIF, Spain) "Heterotrophic microalgae: prototype treatment system for wastewater from fruit and vegetable processing industry"
18:00-18:15	8.A.3. Y. Tejido-Núñez , E. Aymerich, L. Sancho, D. Refardt (Ceit-IK4, Spain) "Wastewater treatment with microalgae: Sterilisation can change cultivation success and may explain patterns in large-scale cultivation"	8.B.3. E. Thorin , E. Nordlander, M. Odlare, S. Schwede (Mälardalen Univ., Sweden) "Microalgae Activated Sludge process in Swedish conditions"	8.C.3. G. Henderson, S. Toft, C. Samberger (Kellogg Brown & Root, UK) "Floating Algae Bioreactor to Augment Wastewater Treatment Ponds"
18:15-18:30	8.A.4. J. Collao , N. Fernandez-Gonzalez, S. Martínez-Páramo, F. G. Acién, P. García-Encina, S. Bolado (Institute of Sustainable Processes, Univ. Valladolid, Spain) "Seasonal evolution of the microbial community growing in different wastewater treatment photobioreactors"	8.B.4. H. Znad , A. Arkoazi, R. Utikar (Curtin Univ., Australia) "The Influence of Gas Sparger Geometry on performance of <i>Chlorella vulgaris</i> in a bubble column photobioreactor"	8.C.4. Y. Luo, P. Le-Clech, R. K. Henderson (The bioMASS Lab, UNSW Sydney, Australia) "Use of microalgae polyculture for secondary effluent polishing"
18:30-18:45	8.A.5. I. M. Bradley, M. C. Sevillano-Rivera, A. J. Pinto, J. S. Guest (Univ. Buffalo, USA) "Impact of Solids Residence Time on Community Structure and Nutrient Dynamics of Mixed Phototrophic Wastewater Treatment Systems"	8.B.5. C. Martinez , F. Mairet, O. Bernard (INRIA Sophia Antipolis, France) "Adaptation of HRAP depth to background turbidity for an optimal use in Wastewater Treatment"	8.C.5. M. Sekine , S. Akizuki, M. Kishi, T. Toda (Soka Univ., Japan) "Microalgae cultivation using nitrified anaerobic digestate without dilution"