

# AlgaEurope 2016 Conference Program

Day 1 - Tuesday December 13<sup>th</sup> 2016

-	Suay December 15 2010
08:00 - 09:00	Registration
09:00 - 09:40	Conference opening and key note lecture
09:00 - 09:10	Conference opening
09:10 - 09:40	Key note: Macroplane, ennertunities for animal health and clobal food security, the
09:10 - 09:40	Key note: Macroalgae, opportunities for animal health and global food security, the
	swine industry as an example
	Stefan Kraan, Ocean Harvest (Ireland)
09:40 - 11:00	Session 1: Research and industrial applications worldwide: the global experience
09:40 - 10:00	1.1 Title
	Matt Carr, Executive Director of the Algae Biomass Organization (USA)
10:00 - 10:20	1.2 Modification of traditional raceways for the large-scale, sustainable cultivation of
	microalgae
	Carla Kampman, InnoVenton, Nelson Mandela Metropolitan University (South
	Africa)
10:20 - 10:40	1.3 Engineering of Nannochloropsis for triacylglycerol biosynthesis
	Xiaonian Ma, Peking University (China)
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10:40 - 11:00	1.4 Towards industrial products from microalgae
	Maria Barbosa, Wageningen University (the Netherlands)
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**11:00 – 11:30**Coffee breakTime to visit the posters and trade show participants







11:30 - 12:50	Session 2: Science innovation potential in Europe
11:30 – 11:50	2.1 Optimisation of microalgae culture in the light changing conditions of solar photobioreactor production Jeremy Pruvost, University of Nantes (France)
11:50 - 12:10	2.2 ALGATECH Centre in Třeboň – R&D in Microalgae Biotechnology Jiří Masojídek, ALGATECH (Czech Republic)
12:10 - 12:30	2.3 New approaches of marine biotechnology through interdisciplinary process development Philipp Schwerna, Institute of Bioprocess Engineering (Germany)
12:30 - 12:50	2.4 Production of biodiesel from wet microalgal biomass. Process options and economic Emilio Molina-Grima, University of Almería (Spain)

#### 12:50 – 14:10 Lunch

14:10 - 15:30	Session 3: Genetically improved and GMO algae for high value products and commodities
14:10 - 14:30	3.1 Enhancement of Fatty Acids and Carotenoids Production by Classical (Random) Mutagenesis and Genetic Engineering in Microalgae Herminia Rodríguez, University of Seville (Spain)
14:30 - 14:50	3.2 Surf and turf: transferring triterpenoid plant-metabolic pathways to micro-algal hosts and their growth optimisation Andrew Spicer, Algenuity (UK)
14:50 - 15:10	3.3 The algal chloroplast as a low-cost platform for recombinant proteins Saul Purton, University College London (UK)
15:10 - 15:30	3.4 Systems biology study on the molecular basis of lipid production in Phaeodactylum tricornutum Maria Huete-Ortega, University of Sheffield (UK)

15:30 - 16:00	<b>Coffee break</b> Time to visit the posters and trade show participants
16:00 – 18:20	Session 4: Innovative processes for high value products
16:00 - 16:20	4.1 Membrane processes for the microalgae biorefinery: example of polysaccharides upgrading Anthony Massé, GEPEA, University of Nantes (France)
16:20 - 16:40	4.2 Pulsed Electric Field Processing of Microalgae – Benefits and Limitations Wolfgang Frey, Karlsruhe Institute of Technology (Germany)







16:40 - 17:00	4.3 Green selective extraction of fucoxanthin from Phaedolactylum tricornutum
	employing the Hansen solubility parameters approach
	Andrea del Pilar Sanchez-Camargo, Institute of Food Science Research (CIAL, CSIC-
	UAM) (Spain)

17:00 - 17:20	<b>Coffee break</b> Time to visit the posters and trade show participants
17:20 – 18:20	Session 4 continued
17:20 – 17:40	4.4 Raman microscopy shows the distribution of proteins, starch, lipids and polyphosphate within individual algal cells Šárka Moudříková, Charles University (Czech Republic)
17:40 - 18:00	4.5 Macroalgae cell culture: An innovative approach to develop sustainable marine active ingredients Erwan Le Gélébart, BiotechMarine (France)
18:00 - 18:20	4.6 Accelerating the reliable modelling of microalgae growth through model-based design of experiments and a photobioreactor-on-a-chip technology Fabrizio Bezzo, University of Padova (Italy)

18:00 – 18:15 Closure of conference day 1







### Day 2 - Wednesday December 14<sup>th</sup> 2016

11:00 - 11:30	Coffee break
	Hilke Heinke, Volkswagen (Germany)
10:40 - 11:00	5.4 The H2020-project Photofuel: Biocatalytic solar fuels for sustainable mobility in Europe
	Natascia Biondi – Diana Fonseca
10:20 - 10:40	5.3 Title to be announced - Biofat
	InteSusal
10:00 - 10:20	5.2 Title to be announced
09.40 - 10.00	Zouhayr Arbib, FCC Aqualia, SA, (Spain)
09:40 - 10:00	projects 5.1 FP 7 All-gas project: 3.6 hectares Demonstration scale under construction
09:40 - 11:00	Session 5: Breakout to commercialization: 'Algae Cluster' and other 'Lighthouse'
00.40 44.00	
	Szilvia Bozsoki
09:10-09:40	Key note
09:00 - 09:10	Opening session
09:00 – 09:40	Opening and key note day 2
00.00 00.40	One wine and here note day 2

	Time to visit the posters and trade show participants
11:30 – 12:50	Session 6: Value chains in commercialization: EU biorefinery and added-value
	products
11:30 – 11:50	6.1 Sustainable integrated Algae Biorefinery for the production of bioactive compounds for Agriculture aNd Aquaculture (SABANA) Gabriel Acien, University of Almeria, (Spain)
11:50 – 12:10	6.2 Production of specialties for food, aquaculture and non-food applications via multi- product biorefinery of microalgae: Progress of the EU FP7 project MIRACLES Hans Reith, Wageningen University (the Netherlands)
12:10 - 12:30	6.3 Submerged Membrane Based Water Recycling & Harvesting for Microalgae Cultivation Leen Bastiaens, Flemish Institute of Technological Research (VITO) (Belgium)
12:30 – 12:50	6.4 CO2Algaefix: Biofixation of CO2 from industrial flue gases by microalgae and its transformation into added-value products <i>Federico G. Witt, AlgaEnergy S.A. (Spain)</i>

12:50 - 14:10 Lunch







14:10 - 15:30	Session 6 continued
	Value chains in commercialization: EU biorefinery and added-value products
14:10 - 14:30	6.5 COST Action ES1408: European Network for Algal-Bioproducts Cristina Gonzalez-Fernandez, IMDEA Enegy (Spain)
14:30 - 14:50	6.6 Lipid production by Nannochloropsis oceanica at large scale: energy balance and techno-economic analysis
	Liliana Rodolfi, University of Florence, (Italy)
14:50 – 15:10	6.7 Sustainable PoLymers from Algae Sugars and Hydrocarbons (SPLASH): lessons learned
	Lolke Sijtsma, Wageningen Food & Biobased Research (the Netherlands)
15:10 - 15:30	6.8 Biobased polyurethanes from microalgae
	Philip Sellars, University of Warwick (UK)

15:30 - 16:00	Coffee break Time to visit the posters and trade show participants
16:00 - 18:00	Workshop: Algae Research Agenda for 2020 and 2030
16:00 - 16:20	Whitepaper "European Roadmap for an Algae-Based Industry"
	René Wijffels, Wageningen University (the Netherlands)
16:20 - 18:00	Roundtable with 3 members from industry, and 3 members from academia
18:00 - 18:10	Closure of conference day 2
20:00 - 22:00	Conference dinner
	The Westin Palace Madrid
	Award ceremony for the best 2 posters







## Day 3 - Thursday December 15<sup>th</sup> 2016

Dpening and key note day 3 Dpening session Key note: The Solar Microalgae Industry: Then, Now, and Coming John Benemann, CEO MicroBio Engineering Inc. (USA)
Key note: The Solar Microalgae Industry: Then, Now, and Coming
Iohn Benemann, CEO MicroBio Engineering Inc. (USA)
Session 7: Biofuels, chemicals, wastewater treatment, and greenhouse gas reduction
7.1 LCA of algal products: state of the art and perspectives
Guido Reinhardt, Institute for Energy and Environmental Research Heidelberg (Germany)
7.2 ERC Starting Grant – BiOLEAP Biotechnological optimization of light use efficiency in algae photobioreactors
Tomas Morosinotto, Università di Padova, (Italy)
7.3 The Approaching Phosphorus Crisis and Microalgal Biotechnology: Updates on a Growing Problem and Strategies for Effective Usage
Joshua Mayers, Chalmers University of Technology (Sweden)
7.4 An alternative strategy for sustaining the development of microalgae-based technology for wastewater treatment
Olga Tiron, National Research and Development Institute for Industrial Ecology - ECOIND (Romania)

# 11:00 – 11:30Coffee breakTime to visit the posters and trade show participants

11:30 - 12:50	Session 7 continued
	Biofuels, chemicals, wastewater treatment, and greenhouse gas reduction
11:30 - 11:50	7.5 Green Mining
	Steve Skill, Swansea University (UK)
11:50 – 12:10	7.6 Anti-inflammatory effects of different Phaeodactylum tricornutum extracts on
	human peripheral blood mononuclear cells
	Ulrike Neumann, Insitute of Clinical Nutrition, University of Hohenheim, (Germany)
12:10 - 12:30	7.7 Measurement of intra- and extracellular cytokinin content of algae cultures and
	application of Scenedesmus sp. cultures for plant growth promotion – resulted the
	new foliar fertilizer of Albitech Ltd.
	Erika Greipel, Albitech Biotechnological Ltd. (Hungary)
12:30 - 12:50	7.8 Synthesis of hydrocarbons from fatty acids in microalgae
	Fred Beisson, CEA-CNRS-Aix Marseille University (France)

#### 12:50 – 14:10 Lunch







14:10 - 15:50	Session 8: Novel foods and animal feed
14:10 - 14:30	<ul> <li>8.1 Microalgae biscuits – sensory, physical and chemical properties, antioxidant activity and in-vitro digestibility</li> <li>Ana Paula Batista, University of Lisbon (Portugal)</li> </ul>
14:30 - 14:50	8.2 How extrusion parameters affect the sensory properties of meat alternatives derived from soy and spirulina Stephanie Grahl, Georg-August-University Goettingen, (Germany)
14:50 - 15:10	8.3 Impact of processing on n-3 long chain poly-unsaturated fatty acids derived from microalgae Lore Gheysen, KU Leuven University (Belgium)
15:10 - 15:30	8.4 Micro Algae for Aquaculture; Converting Art into Technology William van der Riet, Tomalgae cvba (Belgium)
15:30 - 15:50	8.5 Raising broilers without antibiotics, thanks to algae Pi Nyvall Collén, Olmix Group (France)

15:50 - 16:20	Coffee break
	Time to visit the posters and trade show participants
16:20 - 17:40	Session 9: Algae cultivation: from laboratory to commercial plants and marketing in
	Europe
16:20 - 16:40	9.1 Distributing light into photobioreactor volume to produce high-density algal biomass
	Ladislav Nedbal, Forschungszentrum Jülich (Germany)
16:40 - 17:00	9.2 Eco-logic Green Farm at Società Agricola Serenissima (Italy): organic microalgae production in an integrated plant
	Giacomo Sampietro, Fotosintetica & Microbiologica Srl (Italy)
17:00 – 17:20	9.3 The use of heterotrophy as a tool to overcome the long and costly autotrophic scale-up process for large scale production: a case study for Chlorella vulgaris <i>Rui Gomes, CMP-ALGAFARM (Portugal)</i>
17:20 – 17:40	9.4 "Closing the gap" - How to provide appropriate commercial quantities of high quality Microalgae-Biomass to the industry Marcella Langer, MINT Engineering GmbH (Germany)
17:40 - 17:50	Closure of the conference

# 17:40 – 17:50Closure of the conference<br/>Concluding remarks and key messages to take away<br/>Prof. Mario Tredici, Chair of the AlgaEurope Scientific Committee<br/>Kyriakos Maniatis, Conference Co-Chair<br/>Vítor Verdelho, Conference Co-Chair





