



**ALGAEUROPE**  
13-15 DEC 2016 | MADRID | SPAIN

# AlgaEurope 2016 Conference Program

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

<b>08:00 – 09:00</b>	<b>Registration</b>
<b>09:00 – 09:40</b>	<b>Conference opening and key note lecture</b>
09:00 – 09:10	Conference opening
09:10 – 09:40	Key note: Macroalgae, opportunities for animal health and global food security, the swine industry as an example <i>Stefan Kraan, Ocean Harvest (Ireland)</i>
<b>09:40 – 11:00</b>	<b>Session 1: Research and industrial applications worldwide: the global experience</b>
09:40 – 10:00	1.1 Algae in Donald Trump's America <i>Matt Carr, Executive Director of the Algae Biomass Organization (USA)</i>
10:00 – 10:20	1.2 BUGGYPOWER's Aquafeed products: The ALGAFEED Project <i>Manuel Tárraga (Spain)</i>
10:20 – 10:40	1.3 Engineering of Nannochloropsis for triacylglycerol biosynthesis <i>Xiaonian Ma, Peking University (China)</i>
10:40 – 11:00	1.4 Towards industrial products from microalgae <i>Maria Barbosa, Wageningen University (the Netherlands)</i>
<b>11:00 – 11:30</b>	<b>Coffee break</b> Time 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 <i>Jeremy Pruvost, University of Nantes (France)</i>
11:50 – 12:10	2.2	ALGATECH Centre in Třeboň – R&D in Microalgae Biotechnology <i>Jiří Masojídek, ALGATECH (Czech Republic)</i>
12:10 – 12:30	2.3	New approaches of marine biotechnology through interdisciplinary process development <i>Philipp Schwerna, Institute of Bioprocess Engineering (Germany)</i>
12:30 – 12:50	2.4	Biofouling formation of marine microalgae on different surfaces of PBR. How far are we from solving it? <i>Emilio Molina-Grima, University of Almería (Spain)</i>

**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 <i>Herminia Rodríguez, University of Seville (Spain)</i>
14:30 – 14:50	3.2	Surf and turf: transferring triterpenoid plant-metabolic pathways to micro-algal hosts and their growth optimisation <i>Andrew Spicer, Algenuity (UK)</i>
14:50 – 15:10	3.3	The algal chloroplast as a low-cost platform for recombinant proteins <i>Saul Purton, University College London (UK)</i>
15:10 – 15:30	3.4	Systems biology study on the molecular basis of lipid production in <i>Phaeodactylum tricornutum</i> <i>Maria Huete-Ortega, University of Sheffield (UK)</i>

**15:30 – 16:00** Coffee break  
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 <i>Anthony Massé, GEPEA, University of Nantes (France)</i>
16:20 – 16:40	4.2	Pulsed Electric Field Processing of Microalgae – Benefits and Limitations <i>Wolfgang Frey, Karlsruhe Institute of Technology (Germany)</i>



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 **Coffee break**  
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

09:00 – 09:40	Opening and key note day 2
09:00 – 09:10	Opening session
09:10 – 09:40	Key note: EU Perspectives for Algae research beyond 2020 <i>Szilvia Bozsoki, European Commission, Directorate-General for Energy</i>

09:40 – 11:00	Session 5: Breakout to commercialization: 'Algae Cluster' and other 'Lighthouse' projects
09:40 – 10:00	5.1 FP 7 All-gas project: Demonstration scale under construction <i>Zouhayr Arbib, FCC Aqualia, SA, (Spain)</i>
10:00 – 10:20	5.2 Title to be announced <i>InteSusal</i>
10:20 – 10:40	5.3 Cultivation of <i>Nannochloropsis oceanica</i> F&M-M24 and <i>Tetraselmis suecica</i> F&M-M33 in the two 0.5-ha BIOFAT Pilot Plants for biofuel production <i>Nataschia Biondi – Diana Fonseca, University of Florence / A4F (Italy/Portugal)</i>
10:40 – 11:00	5.4 The H2020-project Photofuel: Biocatalytic solar fuels for sustainable mobility in Europe <i>Hilke Heinke, Volkswagen (Germany)</i>

11:00 – 11:30	Coffee break Time to visit the posters and trade show participants
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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) <i>Gabriel Acien, University of Almeria, (Spain)</i>
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 <i>Hans Reith, Wageningen University (the Netherlands)</i>
12:10 – 12:30	6.3 Submerged Membrane Based Water Recycling & Harvesting for Microalgae Cultivation <i>Leen Bastiaens, Flemish Institute of Technological Research (VITO) (Belgium)</i>
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
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<b>14:10 – 15:30</b>	<b>Session 6 continued</b> <b>Value chains in commercialization: EU biorefinery and added-value products</b>
14:10 – 14:30	6.5 COST Action ES1408: European Network for Algal-Bioproducs <i>Cristina Gonzalez-Fernandez, IMDEA Enegy (Spain)</i>
14:30 – 14:50	6.6 Lipid production by Nannochloropsis oceanica at large scale: energy balance and techno-economic analysis <i>Liliana Rodolfi, University of Florence, (Italy)</i>
14:50 – 15:10	6.7 Sustainable PoLymers from Algae Sugars and Hydrocarbons (SPLASH): lessons learned <i>Lolke Sijtsma, Wageningen Food &amp; Biobased Research (the Netherlands)</i>
15:10 – 15:30	6.8 Biobased polyurethanes from microalgae <i>Philip Sellars, University of Warwick (UK)</i>

**15:30 – 16:00**      **Coffee break**  
Time to visit the posters and trade show participants

<b>16:00 – 18:00</b>	<b>Workshop: Algae Research Agenda for 2020 and 2030</b>
16:00 – 16:20	Whitepaper “European Roadmap for an Algae-Based Industry” <i>René Wijffels, Wageningen University (the Netherlands)</i>
16:20 – 18:00	Roundtable with members from industry, and members from academia Chair: Kyriakos Maniatis, European Commission, Directorate-General for Energy <ul style="list-style-type: none"> <li>- Vítor Verdelho, EABA</li> <li>- Mario Tredici, University of Florence</li> <li>- Pedro Carrolo, Buggypower</li> <li>- Carlos Rodríguez-Villa Förster, AlgaEnergy</li> <li>- Peter Ripplinger, Subitec</li> <li>- Patrik R. Jones, Imperial College London</li> <li>- Sammy Boussiba, Ben Gurion University</li> <li>- Matt Carr, Executive Director of the Algae Biomass Organization</li> </ul>

**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

09:00 – 09:40	Opening and key note day 3
09:00 – 09:10	Opening session
09:10 – 09:40	Key note: The Solar Microalgae Industry: Then, Now, and Coming <i>John Benemann, CEO MicroBio Engineering Inc. (USA)</i>
09:40 – 11:00	Session 7: Biofuels, chemicals, wastewater treatment, and greenhouse gas reduction
09:40 – 10:00	7.1 LCA of algal products: state of the art and perspectives <i>Guido Reinhardt, Institute for Energy and Environmental Research Heidelberg (Germany)</i>
10:00 – 10:20	7.2 ERC Starting Grant – BiOLEAP Biotechnological optimization of light use efficiency in algae photobioreactors <i>Tomas Morosinotto, Università di Padova, (Italy)</i>
10:20 – 10:40	7.3 To be confirmed
10:40 – 11:00	7.4 To be confirmed
11:00 – 11:30	Coffee break Time 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 <i>Steve Skill, Swansea University (UK)</i>
11:50 – 12:10	7.6 Anti-inflammatory effects of different <i>Phaeodactylum tricornutum</i> extracts on human peripheral blood mononuclear cells <i>Ulrike Neumann, Insitute of Clinical Nutrition, University of Hohenheim, (Germany)</i>
12:10 – 12:30	7.7 Measurement of intra- and extracellular cytokinin content of algae cultures and application of <i>Scenedesmus</i> sp. cultures for plant growth promotion – resulted the new foliar fertilizer of Albitech Ltd. <i>Erika Greipel, Albitech Biotechnological Ltd. (Hungary)</i>
12:30 – 12:50	7.8 Synthesis of hydrocarbons from fatty acids in microalgae <i>Fred Beisson, CEA-CNRS-Aix Marseille University (France)</i>
12:50 – 14:10	Lunch
14:10 – 15:50	Session 8: Novel foods and animal feed



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

**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 <i>Ladislav Nedbal, Forschungszentrum Jülich (Germany)</i>
16:40 – 17:00	9.2 Eco-logic Green Farm at Società Agricola Serenissima (Italy): organic microalgae production in an integrated plant <i>Giacomo Sampietro, Fotosintetica &amp; Microbiologica Srl (Italy)</i>
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 <i>Chlorella vulgaris</i> <i>Rui Gomes, CMP-ALGAFARM (Portugal)</i>
17:20 – 17:40	9.4 „Closing the gap“ - Continuous Availability of high Quality Microalgae-Biomass <i>Marcella Langer, Global Biomass EXchange (Germany)</i>

**17:40 – 17:50**

**Closure of the conference**

Concluding remarks and key messages to take away

*Prof. Mario Tredici, Chair of the AlgaEurope Scientific Committee*

*Kyriakos Maniatis, Conference Co-Chair*

*Vítor Verdelho, Conference Co-Chair*

