

## PRELIMINARY PROGRAM

### TUESDAY 8 NOVEMBER 2011

- 09:00 ▪ Opening – Anne-Yvonne Le Dain  
Vice-Présidente en charge de : Enseignement supérieur et de la recherche - nouvelles technologies de l'information et de la communication - innovation - pôles de compétitivité
- 09:15 ▪ Opening Conference – John Benemann – Benemann Ass., USA
- 09:55 ▪ Introduction Session – Mario Tredici – University of Firenze, Italy
- 10:35 ▪ Introduction Session: Old AlgoChemistry to replace NewPetroChemistry?  
Yannick Lerat - CEVA, France
- 11:15 ▪ "Livre Turquoise" – Laura Lecurieux-Belfond - Trimatec, France
- 11:25 ▪ Posters Presentations
- 11:35 - 12:00 Posters Session  
12:00 - 13:30 Lunch

#### *Session 1: Algae at which price?*

- 13:30 ▪ Production costs of a real microalgae production plant and strategies to reduce them  
Emilio Molina Grima - University of Almeria, Spain
- 14:10 ▪ New frontiers in Algal Biotechnology, from nutritional products to Bio-Fuels  
Ami Ben Amotz – National Institute of Oceanography, Israël
- 14:50 ▪ Biodiversity of microalgae: how to play this trump card?  
Arnaud Muller-Feuga - Microphyt, France
- 15:10 ▪ Algae vs Energy: an analysis of their potentials and limits by Algogroup  
Xavier Montagne - IFPEN, France
- 15:30 ▪ Numerical prediction of microalgae productivity and energy requirement during the cultivation process in raceway  
Olivier Bernard – INRIA BIOCORE, France
- 15:50 ▪ Discussion
- 16:00 - 16:30 Coffee Break
- 16:30 ▪ Can we produce biofuels from microalgae without a renewable source of electricity and heat  
Pierre Collet – INRIA BIOCORE, France
- 16:50 ▪ Techno-economic evaluation of the production of biofuel from algal lipids  
Florian Delrue - CEA, France
- 17:10 ▪ The use of a Lafarge cement plant flue gas to grow micro-algae  
Frédérique Ferey - Lafarge Centre de Recherche, France
- 17:30 ▪ Economic aspects of open ocean seaweed cultivation  
W.J. Lenstra -, The Energy Research Center, the Netherlands
- 17:50 ▪ Discussion

**WEDNESDAY 9 NOVEMBER 2011**

**Session 2: Which raw material from algae for what applications?**

- 08:30 ▪ Biorefinery of microalgae  
Rene Wijffels – University of Wageningen, The Netherlands
- 09:10 ▪ The comparison of extensive, open water cultivation (e.g. Kappaphycus) with intensive onland tank forms (e.g. Palmaria, Chondrus)  
Alan T. Critchley – Acadian Seaplants Ltd, Canada
- 09:50 ▪ Research and development of secondary metabolites from microalgae  
Coralie Audoin - GREENSEA SAS, France
- 10:10 ▪ Anti-cancer Compounds from Seaweeds  
Catherine Murphy - CyberColloids Ltd, Ireland
- 10:30 ▪ Discussion
- 10:40 - 11:00 Coffee Break
- 11:00 ▪ Controlled Synthesis of nanocrystalline mixed oxides by an alginate matrix  
Pierre Agulhon - Institut Charles Gerhardt, France
- 11:20 ▪ Alginate as catalytic support for organometallic and organic catalysis  
Isabelle Dez - Laboratoire de Chimie Moléculaire et Thioorganique, CNRS, France
- 11:40 ▪ The importance of being porous: alginic acid derived carbonaceous materials for use in adsorption, chromatography and catalysis  
Helen Parker – University of York, United Kingdom
- 12:00 ▪ Making Sense of Seaweeds Scents  
Estelle Delort - Firmenich SA, Switzerland
- 12:20 ▪ A new green surface treatment for composite materials  
Vincent Palluault - Rescoll, France
- 12:40 ▪ Discussion
- 12:50 - 14:20 Lunch  
14:20 - 14:50 Posters Session

**Session 3: Biology, Chemistry and process engineering towards algae-bioraffineries**

- 14:50 ▪ Bioactives from macroalgae for the feed and functional food industry  
Stefan Kraan – Ocean Harvest Technology Ltd, Ireland
- 15:30 ▪ Cyanobacteria as producers of organic chemicals through metabolic engineering  
Francisco J. Florencio – University of Sevilla, Spain
- 16:10 ▪ Isolation and conservation enhancement of microalgae  
Carole Vialleix - GREENSEA SAS, France
- 16:30 ▪ Discussion
- 16:40 - 17:00 Coffee Break
- 17:00 ▪ Extraction of lipids from *Chlorella vulgaris* microalgae by supercritical carbon dioxide extraction assisted by micro waves  
Guy Lumia – CEA, France
- 17:20 ▪ Ultrasound-assisted water extraction of lipids from fresh microalgae cells: a green and fast alternative for biodiesel conversion energy  
Fanny Adam - Université d'Avignon et des Pays de Vaucluse, France
- 17:40 ▪ IDEALG, a long term national integrative project to capitalize on the recent breakthroughs in algal genomics to develop agronomy, biotechnology and chemistry from seaweed bio-resources  
Philippe Potin – Université Pierre et Marie Curie Paris 6, France
- 18:00 ▪ Discussion

**THURSDAY 10 NOVEMBER 2011**

**Session 3: Biology, Chemistry and process engineering towards algae-bioraffineries**

- 8:30 ▪ Phenolic compounds from the Brown macroalga *Sargassum muticum*: effect of conditioning treatments and extraction processes on <sup>1</sup>H NMR metabolic profiles, total phenolic content and antioxidant activities  
Anaëlle Tanniou - Université de Bretagne Occidentale, France
- 8:50 ▪ Near infrared spectroscopy: a tool for the anaerobic digestion process of algae  
Mathieu Lesteur - Ondalys, France
- 9:10 ▪ CO<sub>2</sub> bioconversion efficiency of microalgae cultures in a windy, wavy and wiped industrial photobioreactors  
Pierre Valiorgue - Ecole Centrale de Lyon, France
- 9:30 ▪ Phycocyanin valorization using evapeos technology  
Fabrice Gascons Villadomat - Ederna, France
- 9:50 ▪ Industrialization of Algae Cultivation  
Joël Butler - Solix BioSystems, France
- 10:10 ▪ Discussion
- 10:20 - 10:40 Coffee Break
- 10:40 ▪ Optimisation of algal biomass pre-treatments towards biogas production  
Carlos Vanegas - Institute of Technology Sligo, Ireland
- 11:00 ▪ Tuning the polysaccharide profile in Ulvaceae through controlled tank aquaculture conditions  
Jennifer Champenois - Centre d'Etude et de Valorisation des Algues, France
- 11:20 ▪ Biomass production from freshwater and marine microalgae supplemented with anaerobic digestion products  
Eric Fouilland - ECOSYM, France
- 11:40 ▪ Seaweed Biorefinery: towards third generation biobased commodities  
Jaap W. Van Hal - The Energy Research Centre of the Netherlands, The Netherlands
- 12:00 ▪ Discussion
- 12:10 ▪ Presentation of Green Stars (Institute of Excellence in the exploitation of micro-algae)
- 12:40 - 14:10 Lunch  
14:10 - 14:35 Posters Session
- 14:35 ▪ Characterisation of the gasification potential of microalgae  
Florian Delrue - CEA, France
- 14:55 ▪ Validity of the steady state 3 states model for photosynthesis to describe microalgal growth in a photobioreactor  
Claude Aflalo - Ben Gurion University, Israël
- 15:15 ▪ Hydroconversion of micro-algae to 3<sup>rd</sup> generation biofuel  
Lis Ramirez - Université Lyon 1, France
- 15:35 ▪ Discussion
- 15:45 Round Table  
John Benemann - Benemann Ass., USA  
Jean-Paul Cadoret - IFREMER, France  
Otto Pulz - IGV, Germany
- 16:45 Closure

## LIST OF POSTERS

- Environmental assessment of biofuel from offshore cultivated macroalgae.  
Juliette Langlois – Montpellier SupAgro - INRA, France.
- Biological effect of various sulfated polysaccharides extracted from algae on skin barrier function through their impact on corneocyte maturation.  
G rard Malle – L'Or al Recherche et Innovation, France.
- From Marine Algae to Bioactive Compounds.  
Eric Deslandes – Plateforme Technologique BIODIMAR<sup>®</sup> - IUEM, France.
- New insight for agar uses: green biocomposites from polymers/agar.  
Daniel Robledo – Cinvestav-M rida, Mexico.
- Tuning the Ulva green algae composition to obtain various material properties.  
Benjamin Saulnier – LimatB - UBS, France.
- Extraction and characterization of anti-UV mycosporine-like amino acids from the red algae *Solieria chordalis*.  
Nathalie Bourgougnon – LBCM – Universit  de Bretagne, France.
- Hydrothermal fractionation of *Sargassum muticum* biomass for obtaining antioxidants.  
Enma Conde – Faculty of Science – University of Vigo, Spain.
- Potential of radiation-resistant micro-algae for accumulation of carbon 14.  
Diane de Gouvion Saint Cyr – CEA – Laboratoire de Physiologie Cellulaire V g tale, France
- Study of different pretreatments in order to optimize lipid extraction of three strains of microalgae (Chlorophyta).  
Amaury Massart – University of Mons – Faculty of Engineering, Belgium.
- Oil extraction from microalgae using terpenes solvents as an alternative to *n*-Hexane.  
C line Dejoye – Universit  d'Avignon – Groupe de Recherche en Eco Extraction de produits Naturels, France.
- Artificial and *in vitro* culture of a green alga: *Ulva*.  
Mariam El Harchi – Laboratoire de Biologie et Sant , Universit  Abdelmalek Ess adi, Maroc.
- Tropical Seaweeds: a promising source of antiprotozoal compounds.  
Yolanda Freile-Pelegrin – Cinvestav-M rida, Mexico.
- Evaluation of the toxic effect on the Nitrogen Content of Lemna Gibba Growth Medium.  
S. Semsari – University of Blida – Laboratory of Chemical Engineering, Algeria.
- Alginate aerogels as adsorbents of polar molecules from liquid hydrocarbons.  
Mike Robitzer – Institut Charles Gerhardt, France.
- Ionotropic alginate aerogels for Pd nanoparticles catalysed Suzuki carbon- carbon coupling reaction.  
Fran oise Quignard – Institut Charles Gerhardt, France.
- Etude de l'effet biocide des films nanostructur s de ZnO et ZnS sur l'algue *Klebsormidium flaccidum*.  
Nabila Bouasla – LEREC – University of Badji, Algeria.
- Co-cultures of methane oxidizing bacteria and microalgae allow sustainable carbon neutral methane oxidation in anaerobic effluents.  
David Van der Ha – LabMET – Ghent University, Belgium.
- Oxidative stability of cosmetics formulated with algal extracts.  
Elena M. Balboa – Faculty of Science – University of Vigo, Spain.
- ALGORAFFINERIE: Integrated process for the whole volarization of the microalgae *Chlorella vulgaris* and *Porphyridium cruentum*.  
Olivier Pignolet – Universit  de Toulouse – INP-ENSIACET – LCA - INRA, France.
- Introducing *Chromera velia*, a novel model of microalga  
Eric Mar chal – Universit  Grenoble1 – CNRS – CEA - INRA, France.
- Integrity conservation of *Dunaliella salina* membrane during centrifugation  
Alexandre Besson – Universit  de Toulouse – INSA – UPS - INP - LISBP, France.