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 ^{1}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_2 bioconvertion 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 3rd 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.
Gérard Malle – L'Oréal Recherche et Innovation, France.

From Marine Algae to Bioactive Compounds.
Eric Deslandes – Plateforme Technologique BIODIMAR® - IUEM, France.

New insight for agar uses: green biocomposites from polymers/agar.
Daniel Robledo – Cinvestav-Mérida, 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 – Université 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 Végétale, 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.
Céline Dejoye – Université d'Avignon – Groupe de Recherche en Eco Extration de produits Naturels, France.

Artificial and *in vitro* culture of a green alga: *Ulva.*
Mariam El Harchi – Laboratoire de Biologie et Santé, Université Abdelmalek Essâadi, Maroc.

Tropical Seaweeds: a promising source of antiprotozoal compounds.
Yolanda Freile-Pelegrin – Cinvestav-Mérida, 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.
Françoise Quignard – Institut Charles Gerhardt, France.

Etude de l'effet biocide des films nanostructurés 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 – Université de Toulouse – INP-ENSIACET – LCA - INRA, France.

Introducing Chromera velia, a novel model of microalga
Eric Maréchal – Université Grenoble1 – CNRS – CEA - INRA, France.

Integrity conservation of Dunaliella salina membrane during centrifugation
Alexandre Besson – Université de Toulouse – INSA – UPS - INP - LISBP, France.