



# Present and Potential Uses of Algae: A Cooperation Event

28-29 September 2011 - Trelleborg, Sweden

## AGENDA

### WEDNESDAY 28<sup>TH</sup> OF SEPTEMBER

- 8:30 - 9:00 Registration and coffee at Horizont Conference Center
- 9:00 - 9:15 Opening remarks by Ulf Bingsgård, Trelleborg Commune Mayor
- 9:15 - 9:30 Brief introduction to the BSR SUBMARINER project and to the idea of a „BSR Network for innovative marine uses“
- 9:30 - 10:10 Keynote Speaker: **Michele Stanley**, Scottish Marine Institute, Scotland: „The BIOMARA project“
- 10:10 - 10:40 Coffee break
- 10:40 - 12:30 Seminar 1: Harvesting algae for sustainable energy
- 10:40 - 11:00 **Fredrik Gröndahl** (Royal Institute of Technology, Sweden): Introduction to the seminar topic and „Sustainable use of Baltic Sea natural resources based on ecological engineering“
- 11:00 - 11:15 **Kyla Orr** (Scottish Association for Marine Science): „Beach-cast seaweed for biofuel in Scotland - ecological considerations“
- 11:15 - 11:30 **Anders Fredenslund** (Solrød Kommune, Denmark): „Utilization of cast seaweed for biogas production - assessment of environmental consequences of the Solrød project“
- 11:30 - 11:45 **Joseph Santhi Pechsiri** (Royal Institute of Technology, Sweden): „Cyanobacteria harvesting in the Baltic Sea: Preliminary assessment of potential benefits“
- 11:45 - 12:00 **Radka Ptanikova** (University of Oldenburg, Germany): „Quantification of marine biomass potentially usable for energy production along Ostfriesian coast“
- 12:00 - 12:15 **Emma Risen** (Royal Institute of Technology, Sweden): „Natural resource potential of macroalgae harvesting in Trelleborg, Sweden“
- 12:15 - 12:30 Questions to presenters and panel discussion (Moderator: Fredrik Gröndahl)
- 12:30 - 13:40 Lunch at Horizont Conference Center restaurant
- 13:40 - 14:20 Keynote Speaker: **Thomas Wencker** (IGV Institut für Getreideverarbeitung GmbH, Nuthetal, Germany): „Photobioreactor design principles“



## (Continuation - Wednesday 28<sup>th</sup> of September)

- 14:20 - 16:40 Seminar 2: Present and potential use of algae in the Baltic Sea Region
- 14:20 - 14:40 **Jukka Seppälä** (Finnish Environment Institute SYKE): Introduction to the seminar topic and „Large-scale cultivation of phytoplankton algae in the Baltic Sea Region“
- 14:40 - 14:55 **Fredrika Gullfot** (SimrisAlg AB, Sweden): „The establishment of a new industry in Sweden“
- 14:55 - 15:10 **Francesco Gentili** (Umeå Energy Sweden): „Biomass production to remove nutrient from wastewater and CO<sub>2</sub> from a power plant“
- 15:10 - 15:40 Coffee break
- 15:40 - 15:55 **Herman Carr** (CWE Nordic): „Biological cleaning of water“
- 15:55 - 16:10 **Claudio Ledda** (University of Milano, Italy): „Green microalgae *Scenedesmus sp.* growth in livestock manure treatment effluent: development of a potential biorefinery“
- 16:10 - 16:25 **Bronwyn Cahill** (Informus, GmbH, Germany): „Developing general guidelines for environmental assessment of new usage of Baltic Sea marine resources: the macroalgae example“
- 16:25 - 16:40 Questions to presenters and panel discussion (Moderator: Jukka Seppälä)
- 16:40 - 17:45 Poster session and exhibits
- 17:45 - 18:30 Free time and opportunity for participants to go back to their hotels
- 18:30 Gather at Horizont Conference Center lobby for joint walk to Trelleborgen
- 19:00 - 22:00 Viking dinner at Trelleborgen (warm clothing recommended)

## THURSDAY 29<sup>TH</sup> OF SEPTEMBER

- 8:30 - 8:50 Opening day 2 of the conference and presentation by the Trelleborg Municipality of their algae and biogas activities (WAB project) and the program for the afternoon study tour
- 8:50 - 9:30 Keynote Speaker: **Jun Cheng** (Sustainable Energy Institute of Zhejiang University, Hangzhou, China): „Biofuel production from microalgae biomass“
- 9:30 - 10:50 Seminar 3: Algae biofuels
- 9:30 - 9:50 **Catherine Legrand** (Linnaeus University, Sweden): Introduction to the seminar topic and „Growing algae in Scandinavia: Utopia or Opportunity“
- 9:50 - 10:05 **Eva Albers** (Chalmers University of Technology, Sweden): „Bioethanol production from carbohydrate-rich biomass of marine microalgae“
- 10:05 - 10:20 **Dagmar Enss** (VTT Technical Research Center of Finland): „Comparison of twenty cold and warm water adapted microalgae“





(Continuation - Thursday 29<sup>th</sup> of September)

- 10:20 - 10:50 Coffee break
- 10:50 - 11:05 **Maria Stockenreiter & Florian Haupt** (University of Munich): „Enhancing the lipid production of micro-algal communities – the effect of species diversity“
- 11:05 - 11:20 **Martin Olofsson** (Linnaeus University, Sweden): „Seasonal variations of lipids and fatty acids of the microalgae *Nannochloropsis oculata* grown in outdoor large scale photobioreactors“
- 11:20 - 11:35 **Chris Hulatt** (Finnish Environment Institute SYKE): „Investigating the energy demands of microalgal photobioreactors for sustainable bioenergy“
- 11:35 - 11:50 Questions to presenters and panel discussion (Moderator: Catherine Legrand)
- 11:50 - 12:30 Keynote Speaker: **Rene H. Wijffels** (Bioprocess Engineering Wageningen University, Netherlands): „Biorefinery of microalgae“
- 12:30 - 13:30 Lunch at Horizont Conference Center restaurant
- 13:30 - 14:15 Panel discussion with invited politicians and keynote speakers
- 14:15 - 14:30 Conference Wrap-up and closing remarks
- 14:30 - 16:30 Study tour: Wetlands, algae, biogas
1. Wetlands: Outdoor cultivation of algae to produce biomass for biogas production and removal of nutrient outflow to the Baltic Sea - Presented by Herman Carr (Clear Water Energy Nordic AB, Sweden)
  2. Beach cast algae: The potential of nutrient removal and biomass for biogas production - Presented by Fredrik Gröndahl (Royal Institute of Technology, Sweden)
  3. Biogas: Visit to the pilot biogas plant where algae is used to produce biogas - Presented by Sven Norup (Norup Gård Bioraff AB)

