
EPC6 Programme

The programme of Plenary, Symposia, Oral Talks and Posters includes the names of the presenting authors *only*. For names of all co-authors, please refer to the Abstract with the number indicated after each title. Presenters are requested to use *only* their allotted time so that the Convenors and Chairs can keep to time. Please time your presentation to allow for questions.

As a professional courtesy, you are kindly requested not to take photographs in the lecture rooms. If you are interested in data presented, please contact the presenter directly. We also would like to remind everybody to switch off their mobile devices during the presentations.

The code for Plenary Lectures, Keynote and Oral Papers, and Posters is: Pl = Plenary, Kn = Keynote presentation, Or = Oral presentation, Po = Poster); the first number refers to the Symposium number; the second number is the number of the individual presentation. All oral presentations and the coffee breaks will be held in the Champagne Suite area (either Foyer, Lobby, or Lecture Rooms). Posters are displayed in the Chablis Suite on the lower floor.

Sunday, 23 August 2015

13.00–21.00	Registration	Lobby
19.00–21.00	Welcome Reception	Foyer

Monday, 24 August 2015

8.00–12.00	Registration	Lobby
8.25–8.30	General announcements	
8.30–9.00	Opening Ceremony	Main Hall

Co-Presenters: Jane Lewis, Elliot Shubert,
Olivier De Clerck, Peter Kroth,
Christine Maggs & Christos Katsaros

9.00–10.00	Plenary Lecture	Main Hall
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John Archibald

One plus one equals one: symbiosis and the evolution of complex life

10.00–10.30	Coffee/Tea Break	
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10.00–12.30	Symposia 1, 2 and 3	
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Symposium 1:

Room 1

Algal diversity and species delimitation: new tools, new insights

Co-Convenors: Frederik Leliaert and David G Mann

- 10.30–11.00 Christophe Destombe – How complementary barcoding and population genetics analyses can help solve taxonomic questions at short phylogenetic distances the example of the brown alga *Pylaiella littoralis* (1Kn.1)
- 11.00–11.30 Pavel Škaloud – Generating the diversity - uncovering the speciation mechanisms in freshwater and terrestrial microalgae (1Kn.2)
- 11.30–12.00 Sebastien Colin – High-Content Fluorescence Microscopy applied to marine protists ecology (1Kn.3)
- 12.00–12.15 Maria Kahlert – Gaps to fill when analyzing freshwater diatom diversity with DNA barcoding – notes from a boreal region (1Or.1)
- 12.15–12.30 Gareth A. Pearson – Gender studies in seaweeds - expression and evolutionary rates of sex-biased genes in fucoid brown algae (1Or.2)

Symposium 2:

Room 2

Shedding new light on photosynthesis and its role in global biogeochemistry

Co-Convenors: Elly Spijkerman and John Raven

- 10.30–11.00 Susanne Wilken – Mixotrophs in aquatic ecosystems: Primary producers or consumers? (2Kn.1)
- 11.00–11.30 Brigitte Gontero – Biodiversity of GAPDH regulation in microalgae (2Kn.2)
- 11.30–12.00 Timo Mühlhaus – Systems-Wide Analysis of Acclimation Responses to Long-Term Heat Stress and Recovery in the Photosynthetic Model Organism *Chlamydomonas reinhardtii* (2Kn.3)
- 12.00–12.15 Kevin Oxborough – Using Fast Repetition Rate fluorometry to estimate PSII electron flux per unit volume: A purely optical method for estimating GPP by phytoplankton? (2Or.1)
- 12.15–12.30 Jacco C Kromkamp – High resolution FRRF measurements to measure net and gross primary production (2Or.2)

Symposium 3:

Room 3

Algal Lipids not just for burning

Co-Convenors: Michele Stanley and Philippe Soudant

- 10.30–11.00 Johnathan Napier – Metabolic engineering of diatoms for the enhanced production of high value lipids (3Kn.1)
- 11.00–11.30 Rene Wijffels – Industrial potential of microalgae for applications in food, feed and specialty chemicals (3Kn.2)
- 11.30–11.45 Matthias Schmid – Plasticity of fatty acid profiles and contents in seaweeds (3Or.1)
- 11.45–12.00 Philippe Soudant – Lipid composition modifications of the marine diatom *Pseudo-nitzschia delicatissima* under copper starvation (3Or.2)
- 12.00–12.15 Maria Huete-Ortega – Linkage between photosynthesis and nitrogen metabolism on the accumulation of lipids in microalgae (3Or.3)
- 12.15–12.30 Anastasiia Kryvenda – The European PUFACHain project (FP7) - a value chain from algal biomass to lipid-based products (3Or.4)

12.30–13.30 **Lunch** Chablis Suite

13.30–14.30 **Poster Session (1Po.1-20, 2Po.1-3, 3Po.1-14, 4Po.1-9, 9Po.1-20)** Chablis Suite

Symposium 4: Room 1

Algae-microbiome interactions: integrative overview from biology to chemistry

Co-Convenors: Soizic Prado and Téséphore Sime-Ngando

- 14.30–15.00 Laure Guillou – Are biological controls of harmful algal blooms stable over time? (4Kn.1)
15.00–15.30 Simon Dittami – Microbiomes impact algal acclimation: the example of a freshwater strain of *Ectocarpus* (4Kn.2)
15.30–15.45 Aschwin Engelen – The microbiome of a seaweed invader across its introduced European range. (4Or.1)
15.45–16.00 Shinya Sato – An implication of bacteria-diatom interaction at the onset of sexual reproduction in diatoms (4Or.2)

Symposium 5: Room 2

Phylogenomics: new approaches to solving old problems in algal evolution

Co-Convenors: Anna Karnkowska and John Archibald

- 14.30–15.00 John Stiller – Untangling the web of eukaryotic photosynthetic evolution (5Kn.1)
15.00–15.30 Miroslav Oborník – Interrupted respiratory chain in the mitochondrion of *Chromera velia* (5Kn.2)
15.30–15.45 Marek Eliáš – A comparative analysis of mitochondrial genomes in eustigmatophyte algae (5Or.1)
15.45–16.00 John Archer – Whole genome phylogenomic analysis provides deeper insight into the origins and divergence of the cyanobacteria (5Or.2)

Symposium 6: Room 3

***Symbiodinium* as model organism**

Co-Convenors: David Suggett and Mark Warner

- 14.30–15.00 Christian Woolstra – Using *Symbiodinium* genomics to inform coral algae symbioses (6Kn.1)
15.00–15.30 Todd C LaJeunesse – Genetics-based systematics and taxonomy thrusts *Symbiodinium* (dinoflagellate) research into the 21st century. (6Kn.2)
15.30–15.45 Cheong Xin Chan – Genome analysis of two *Symbiodinium* isolates (6Or.1)
15.45–16.00 Benjamin CC Hume – *Symbiodinium thermophilum* sp. nov., a thermotolerant symbiotic alga prevalent in corals of the world's hottest sea, the Persian/Arabian Gulf (6Or.2)

16.00–16.30 **Coffee/Tea Break**

Symposium 4 (continued):

Room 1

Algae-microbiome interactions: integrative overview from biology to chemistry

Co-Convenors: Soizic Prado and T elesphore Sime-Ngando

- 16.30–16.45 Sergio Leiva – Phylogenetic diversity of epibiotic gram-positive bacteria isolated from Antarctic macroalgae (4Or.3)
- 16.45–17.00 Susan Blackburn – Australian National Algae Culture Collection – Unique biodiversity informing ecosystem knowledge and bioresources (4Or.4)
- 17.00–17.15 Tania Aires – Differentiation in bacterial communities associated to the red seaweed genus *Asparagopsis* in the western Atlantic and their potential drivers (4Or.5)
- 17.15–17.30 Warren Scott – Light and dissolved organic carbon drive interactions within river microphytobenthic communities (4Or.6)
- 17.30–17.45 T elesphore Sime-Ngando – Effects of fungal parasitism on freshwater cyanobacterial blooms (4Or.7)
- 17.45–18.00 Declan Schroeder – Phaeoviruses extend their host range to the kelps (4Or.8)

Symposium 5 (continued):

Room 2

Phylogenomics: new approaches to solving old problems in algal evolution

Co-Convenors: Anna Karnkowska and John Archibald

- 16.30–17.00 Anna Karnkowska – Evolution of plastid-targeted proteins in the secondary plastid-containing mixotrophic euglenid - *Rapaza viridis* (5Kn.3)
- 17.00–17.15 Glen L. Wheeler – Evolution of alternative pathways for vitamin C synthesis following plastid acquisition (5Or.3)
- 17.15–17.30 Nicolas Blouin – *Gracilariopsis andersonii* genome encodes several clues to maintaining a permissive parasite environment (5Or.4)
- 17.30–17.45 Stanislas Thiriet-Rupert – Genome-wide prediction and comparative analysis of transcription factors in microalgae (5Or.5)
- 17.45–18.00 Kasia Piosz – Who was the last aplastidic cryptophyte? (5Or.6)

Symposium 6 (continued):

Room 3

***Symbiodinium* as model organism**

Co-Convenors: David Suggett and Mark Warner

- 16.30–16.45 Lisa Fujise – Turning up the heat on *Symbiodinium* cell cycle analysis (6Or.3)
- 16.45–17.00 JTY Wong – Histone modifications during reversible transitions between motile and non-motile stages of dinoflagellates (6Or.4)
- 17.00–17.15 David M. Baker – The biogeochemistry of *Symbiodinium* function and competition (6Or.5)
- 17.15–17.30 Joerg Wiedenmann – Local adaptation of *Symbiodinium thermophilum*-associated corals to the extreme environment of the Persian / Arabian Gulf (6Or.6)
- 17.30–17.45 Eslam Osman – Physiological response of *Symbiodinium* populations adapted to different thermal regimes in the Red Sea (6Or.7)
- 17.45–18.00 Joerg C. Frommlet – *Symbiodinium* - The first dinoflagellate known to drive microbial-algal calcification (6Kn.3)

18:30–19:30 **BPS Presidential Address – Christine Maggs**

Main Hall

19:30-21:00 **BPS Annual General Meeting**

Main Hall

Tuesday, 25 August 2015

8.55–9.00 **General announcements**

9.00–10.00 **Plenary Lecture**

Main Hall

Ellen Van Donk

Chemical information transfer in plankton communities

10.00–10.30 **Coffee/Tea Break**

10.30–12.30 **Symposia 7, 8 and 9**

Symposium 7:

Room 1

Molecular Cell Biology

Co-Convenors: Maria Mittag and Marek Eliáš

10.00–10.30 Tilman Kottke – Unexpected Diversity of Cryptochrome Photoreceptors from Algae (7Kn.1)

10.30–11.00 George Witman – The *Chlamydomonas* flagellum as a model for human disease (7Kn.2)

11.30–12.00 Kateřina Bišová – Green algae dividing by multiple fission – potent tool (not only) for cell cycle studies (7Kn.3)

12.00–12.15 Arash Kianianmomeni – Cell-type specific photoreceptors and associated light-signaling pathways in the multicellular alga *Volvox carteri* (7Or.1)

12.15–12.30 Angela Falciatore – The circadian clock in the diatom *Phaeodactylum tricornutum* (7Or.2)

Symposium 8:

Room 2

Algal biodiversity and ecosystem function: new scenarios in coastal systems

Co-Convenors: Lars Gamfeldt and Fabio Rindi

10.30–11.00 Lars Gamfeldt – The consequences of changes in algal biodiversity (8Kn.1)

11.00–11.30 Rosa M Viejo – Structure and dynamics of the southern range limit of a canopy-forming alga and the consequences for the coastal ecosystem functioning (8Kn.2)

11.30–11.45 Kristian Spilling – Changes in phytoplankton community composition affect biogeochemical fluxes; an indirect effect of global change (8Or.1)

11.45–12.00 Nurul Redzuan – Influence of sediment biofilm “phase of growth” on high microphytobenthos (MPB) variability on an intertidal flat (8Or.2)

12.00–12.15 Jana Wegbrod – Influence of interspecific competition on photosynthetic rates of algal communities (8Or.3)

12.15–12.30 Rebecca L Atkins – Habitat characteristics driving species richness in rock pools (8Or.4)

Symposium 9:

Room 3

Algae in stressful environments in coastal systems

Co-Convenors: Angela Wulff and Richard J Geider

- 10.30–11.00 Thomas Mock – Extensive genetic diversity and differential bi-allelic expression in a Southern Ocean diatom (9Kn.1)
- 11.00–11.30 Eva Leu – From eternal dark to high light stress: Microalgae in the high Arctic and the challenge of different extremes (9Kn.2)
- 11.30–11.45 Anique Stecher – Biodiversity assessment and transcriptomic analyzes of eukaryotic sea ice diatoms of the central Arctic Ocean (9Or.1)
- 11.45–12.00 Graham JC Underwood – Adaptation of diatom extracellular polymeric substance (EPS) production in response to temperature and salinity stress in sea ice environments (9Or.2)
- 12.00–12.15 Martina Pichrtová – Vegetative survival and stress tolerance of *Zygnema* spp. (Zygnematophyceae, Streptophyta) in polar regions (9Or.3)
- 12.15–12.30 Thomas Leya – Snow algae all over Svalbard? - An(other) attempt to explain their distribution patterns (9Or.4)

12.30–13.30 **Lunch**

Chablis suite

13.30–16.00 **Continued Symposia 1, 2, 7, 8 and Manton Symposium**

Room 1

Irène Manton Student Prize Competition (BPS)

Chair: Juliet Brodie

- 13.30–13.45 Marine Vallet – Biodiversity, secondary metabolome and ecological role of fungal endophytes associated with the brown algae *Laminaria digitata*, *Ascophyllum nodosum*, *Saccharina latissima* and *Pelvetia canaliculata* (Manton.1)
- 13.45–14.00 Kenny Bogaert – Two-phased cell polarisation in the brown alga Dictyota (Manton.2)
- 14.00–14.15 Leanne A. Melbourne – The importance of revealing cryptic diversity in relation to assessing the structural integrity of the maerl bed habitat (Manton.3)
- 14.15–14.30 David Russo – Multidisciplinary analysis of a freshwater lake microbial community under differing nutrient regimes (Manton.4)
- 14.30–14.45 Laura Vitale – Mating type related genes in *Pseudo-nitzschia multistriata* (Manton.5)
- 14.45–15.00 Sohail K Pinto – Diversity and phylogeny of the dinoflagellate genus *Testudodinium* (Dinophyceae) (Manton.6)
- 15.00–15.15 Raquel Sánchez de Pedro – Nutrient and light responses in two estuarine rhodophytes: implications for their zonation (Manton.7)
- 15.15–15.30 Francesco Paolo Mancuso – Bacterial diversity changes to simulated local and global stressors on the canopy-forming alga *Cystoseira compressa* (Manton.8)
- 15.30–15.45 Julie AZ Zedler – Investigating the feasibility of high value compound production in microalgae (Manton.9)
- 15.45–16.00 Manoj Kamalanathan – Use of heterotrophy and mixotrophy for algal biomass production (Manton.10)

Symposium 7 (continued)

Room 2

Molecular Cell Biology

Co-Convenors: Maria Mittag and Marek Eliáš

- 13.30–13.45 Andreas Holzinger – Desiccation tolerance in streptophytic green algae: New insights from transcriptomics and Fatty Acid Methyl Ester (FAME) analysis (7Or.3)
- 13.45–14.00 Charlotte Walker – The structure and function of coccolith associated polysaccharides: implications for their role in calcification (7Or.4)
- 14.00–14.15 Lili Chu – Characterisation of Nucleotide Transporter Proteins in complex plastids (7Or.5)
- 14.15–14.30 Anna Vanclova – Investigating signal domains and translocases involved in protein import into euglenid plastid (7Or.6)
- 14.30–14.45 Burkhard Becker – Function of the Contractile Vacuole in *Chlamydomonas*: A Systems Biology Approach (7Or.7)
- 14.45–15.00 Marie JJ Huysman – Molecular regulation of the diatom cell cycle (7Or.8)
- 15.00–15.15 Hiroyuki Sekimoto – A receptor-like kinase, related with cell wall sensor of higher plants, is required for sexual reproduction in the unicellular charophycean alga, *Closterium peracerosum-strigosum-littorale* complex (7Or.9)
- 15.15–15.30 Susana M Coelho – Unusual features of the pseudoautosomal region of a U/V pair of sex chromosomes (7Or.10)
- 15.30–15.45 Adva Shemi – Conservation of the autophagy pathway in phytoplankton and its role during phosphorous stress (7Or.11)
- 15.45–16.00 Yong Zou – The role of an animal-like cryptochrome in the life cycle of the unicellular green alga *Chlamydomonas reinhardtii* (7Or.12)

Symposium 2 (continued)

Room 3

Shedding new light on photosynthesis and its role in global biogeochemistry

Co-Convenors: Elly Spijkerman and John Raven

- 13.30–13.45 David J Hughes – Nitrogen availability drives variability of the electron requirement for carbon fixation in coastal phytoplankton communities (2Or.3)
- 13.45–14.00 M Rosario Lorenzo – Effects of increased CO₂ and iron availability on the mechanisms of carbon assimilation and calcification during a bloom of the coccolithophore *Emiliania huxleyi* (2Or.4)
- 14.00–14.15 Samuel R Scoma – The Role of Carbon Concentrating Mechanisms in Macroalgal Responses to Ocean Acidification (2Or.5)
- 14.15–14.30 Janet E Kübler – Limits to the Positive Effect of Ocean Acidification on Macroalgal Production (2Or.6)

Symposium 8 (continued)

Room 3

Algal biodiversity and ecosystem function: new scenarios in coastal systems

Co-Convenors: Lars Gamfeldt and Fabio Rindi

- 14.30–14.45 Stacy A Krueger-Hadfield – Unconscious uncoupling: life cycle plasticity facilitates macroalgal invasions (8Or.5)
- 14.45–15.00 James Murphy – Modelling the population dynamics of invasive *Undaria pinnatifida* using an individual-based approach. (8Or.6)
- 15.00–15.15 Udo Nitschke – The integral role of Phaeophyceae to drive coastal iodine fluxes: case studies from Ireland (8Or.7)
- 15.15–15.30 Dagmar B Stengel – Bridging the gap between algal ecology and biotechnology – more than just learning a new language (8Or.8)

Symposium 1 (continued)

Room 3

Algal diversity and species delimitation: new tools, new insights

Co-Convenors: Frederik Leliaert and David G Mann

- 15.30–15.45 João Neiva – Phylogenetic and biogeographical patterns of allopolyploid speciation in an intertidal fucoid seaweed assemblage (1Or.3)
15.45–16.00 Sabrina Le Cam – Elucidating unresolved invasion history with genome-wide sequencing approach: the case of the global invader *Sargassum muticum* (1Or.4)

16.00–16.30 **Coffee/Tea Break**

16.30–18.15 **Continued Symposia 1, 3, 4, 6**

Rooms 1-3

Symposium 3 (continued)

Room 1

Algal Lipids not just for burning

Co-Convenors: Michele Stanley and Philippe Soudant

- 16.30–16.45 Judith Rumin – Lipid accumulation in *Phaeodactylum tricornutum* obtained by a mutation-selection procedure (3Or.5)
16.45–17.00 Michael J Cohrs – Characterization of Lipids in Algae Utilizing an imaging flow cytometer (FlowCAM) (3Or.6)
17.00–17.15 Michele Stanley – Unlocking nature's treasure-chest: screening for oleaginous algae (3Or.7)
17.15–17.30 Xiaolin Chen – Ionic liquid assisted subcritical water promotes the extraction of lipids from wet microalgae *Scenedesmus* sp. (3Or.8)
17.30–17.45 Amir Neori – Algae are the centerpiece of world aquaculture, feeding fish and cleaning water (3Or.9)
17.45–18.00 Dominik J Patzelt – Microalgae as a renewable raw material cultivated in an urban area (3Or.10)

Symposium 4 (continued)

Room 2

Algae-microbiome interactions: integrative overview from biology to chemistry

Co-Convenors: Soizic Prado and Télesphore Sime-Ngando

- 16.30–16.45 Daniella Schatz – Life cycle strategies of a large virus that infects the bloom forming *Emiliania huxleyi* (4Or.9)
16.45–17.00 Martina Strittmatter – Disease resistance in brown algae: mechanisms and heritability (4Or.10)

Symposium 6 (continued)

Room 2

***Symbiodinium* as model organism**
Co-Convenors: David Suggett and Mark Warner

- 17.00–17.15 Brian M Hopkinson – Inorganic carbon scarcity and limitation of *Symbiodinium* in hospite: environmental limitation or host control (6Kn.4)
- 17.15–17.30 Thomas Krüger – NanoSIMS isotopic imaging - Deciphering the nature of coral-symbiont metabolic interactions (6Or.8)
- 17.30–17.45 Pierre Cardol – Critical role of oxygen photoreduction downstream of PSI in *Symbiodinium*: photoprotection, energetic adjustment and ROS production (6Or.9)
- 17.45–18.00 Tom D Hawkins – Metabolic responses to chronic nutrient stress differ between *Symbiodinium* phylotypes (6Or.10)

Symposium 1 (continued)

Room 3

Algal diversity and species delimitation: new tools, new insights

Co-Convenors: Frederik Leliaert and David G Mann

- 16.30–16.45 Viviana Peña – Evolutionary origin of coralline red algae (Corallinophycidae, Rhodophyta) inferred from multilocus time-calibrated phylogeny (1Or.5)
- 16.45–17.00 Claire Gachon – The pathogens of brown algae *Anisolpidium ectocarpii* and *Anisolpidium rosenvingei* define a new class of marine anteriorly uniciliate oomycetes (1Or.6)
- 17.00–17.15 Rosa Trobajo – A molecular approach to *Nitzschia*: establishing a framework for classifying a highly diverse and taxonomically difficult diatom group (1Or.7)
- 17.15–17.30 Marc Krasovec – The origin of diversity in green algae (1Or.8)
- 17.30–17.45 John Bolton – Chemistry meets biosystematics: parallel studies on the diversity of the *Laurencia* complex (Rhodomelaceae, Rhodophyta) in South Africa (1Or.9)
- 17.45–18.00 Showe-Mei Lin – Species diversity and molecular phylogeny of the crustose coralline algae (Corallinales, Rhodophyta) from the warm water western Pacific Ocean with an emphasis on species from Taiwan (1Or.10)
- 18.00–18.15 Jazmin J Hernandez-Kantun – *Lithophyllum congestum* (Corallinales, Rhodophyta) what are you and what aren't you? Receiving some inner signals from DNA and morpho-anatomy to clarify our understanding on the species (1Or.11)
- 18.00–19.00 **Poster Session (1Po.21-35, 5Po.1-5, 6Po. 1-3, 7Po.1-8, 8Po.1-12, 9Po.21-40)**

19:45–21:00 **Public Lecture**

Main Hall

Jason Hall-Spencer

How will marine life cope with ocean acidification?

Wednesday, 26 August 2015

09.00 Workshops / Individual programs / Midcongress excursions

Thursday, 27 August 2015

8.25–8.30 **General announcements**

9.00–10.00 **Plenary Lecture**

Main Hall

Georg Pohnert

Microalgal chemical signals that shape community interactions and structure the marine environment

10.00–10.30 **Coffee/Tea Break**

10.30–12.30 **Symposia 10, 11 and 12**

Symposium 10:

Room 1

Global change and algal assemblages: the fate of our seas

Co-Convenors: Gwenael Piganeau, Nessa O'Connor and Laura Airoidi

10.30–11.00 Laura Airoidi – Vanishing forests of canopy algae: a global problem with local solutions? (10Kn.1)

11.00–11.30 Lutz Beck – Eco-evolutionary dynamics in plankton communities (10Kn.2)

11.30–11.45 Line Le Gall – Investigating temporal changes in seaweed communities of Brittany (10Or.1)

11.45–12.00 Chris J. Williamson – NE Atlantic *Corallina* (Rhodophyta) in a high CO₂ world (10Or.2)

12.00–12.15 Michael J Roleda – The weakest link: are the microscopic stages of seaweeds most susceptible to climate change? (10Or.3)

12.15–12.30 Sheree Yau – Insights from *Ostreococcus* into coping in a sea of viruses and competitors (10Or.4)

Symposium 11:

Room 2

Genetic engineering in algae: novel molecular tools and novel model species

Co-Convenors: Angela Falciatore, Marie Huysman and Jean-Paul Cadoret

10.30–11.00 Peter G Kroth – Diatoms as model system for algae with secondary plastids (11Kn.1)

11.00–11.30 J Mark Cock – Development of forward genetic and genomic approaches to identify key regulatory genes in the brown algae (11Kn.2)

11.30–12.00 Saul Purton – Algal chloroplast engineering: new tools, technologies and applications. (11Kn.3)

12.00–12.15 Alastair W Skeffington – The Development of Genetic Tools for coccolithophores (11Or.1)

12.15–12.30 Tomas Morosinotto – Biotechnological optimization of light use efficiency in *Nannochloropsis* cultures (11Or.2)

Symposium 12

Room 3

Ecology, physiology and taxonomy of freshwater phytoplankton

Co-Convenors: Judita Koreiviene and Ellen van Donk

- 10.30–11.00 Karin Rengefors – Physical and biological dispersal barriers in bloom-forming microalgae (12Kn.1)
- 11.00–11.30 Dedmer B. Van de Waal – Blue-greens off balance? (12Kn.2)
- 11.30–11.45 Thomas Lines – Inorganic carbon acquisition characteristics of Australian freshwater microalgae from a subtropical reservoir (12Or.1)
- 11.45–12.00 Sabrina C Lachmann – Ecology matters: linking inorganic carbon acquisition to ecological preference in four species of microalgae (Chlorophyceae) (12Or.2)
- 12.00–12.15 Elly Spijkerman – Independent co-limitation for CO₂ and inorganic phosphorus (12Or.3)
- 12.15–12.30 Ashrafal Islam – Growth and physiology of toxic and non-toxic cyanobacteria in relation to light intensity (12Or.4)
- 12.30–13.30 **Lunch** Chablis Suite
- 13.30–14.30 **Poster Session (9Po.41-59, 10Po.1-16, 11Po.1-9, 12Po.1-8, 13Po.1-7, 14Po.1-9, 15Po.1-2, 16Po.1-4)**
- 14.30–16.30 **Continued Symposia 1, 5, 9, 12 and Student Symposium**

Symposium 9 (continued)

Room 1

Algae in stressful environments in coastal systems

Co-Convenors: Angela Wulff and Richard J Geider

- 14.30–14.45 Anne D Jungblut – Cyanobacteria and microbial mats in Antarctic terrestrial aquatic ecosystems: diversity, distribution and response to environmental variables (9Or.5)
- 14.45–15.00 Marco Cantonati – Benthic algae and cyanobacteria from Egyptian desert springs and wells: isolated, stressful, and impacted freshwater habitats (9Or.6)
- 15.00–15.15 Nicoletta La Rocca – Light and nutrient effects on ketocarotenoid synthesis in *Chodatodesmus australis* (9Or.7)
- 15.15–15.30 Alena Lukešová – Succession of algal and cyanobacterial communities after glacier retreats in alpine - high arctic climatic zones in Northern Europe (9Or.8)
- 15.30–15.45 Eugen Rott – Endolithic cyanobacteria communities within episodically dry waterfall tufa in a southern-central alpine dry valley (Vinschgau, European Alps) (9Or.9)
- 15.45–16.00 Siba P Adhikary – Biodiversity of stress tolerant cyanobacteria on exposed surfaces of monuments of cultural heritage, their biodeteriogenic activity and possible control for conservation (9Or.10)
- 16.00–16.15 Johann Lavaud – Response of benthic diatoms inhabiting intertidal flats to environmental stresses (9Or.11)
- 16.15–16.30 João Serôdio – Minimizing excess light absorption by benthic diatoms: comparative kinetics of vertical migration and non-photochemical quenching (9Or.12)

Room 2

Student Symposium

Co-Convenors: Anique Stecher and Chris Williamson

- 14.30–15.00 Angela Falciatore – Careers in phycology
- 15.00–15.30 Claire Gachon – EU funding
- 15.30–16.00 Michele Stanley – Linking academia with applied phycology

16.00–16.30 Ross Mounce – Open source software and reproducible research

Symposium 5 (continued)

Room 3

Phylogenomics: new approaches to solving old problems in algal evolution

Co-Convenors: Anna Karnkowska and John Archibald

- 14.30–14.45 Marie Pažoutová – Whole Genome Sequencing of the Antarctic Green Alga *Prasiola crispa* (5Or.7)
14.45–15.00 Pilar Díaz-Tapia – Tackling rapid radiations with chloroplast phylogenomics in the Rhodomelaceae (5Or.8)
15.00–15.15 Joana F Costa – Phylogenomics of the red algal order Nemaliales (5Or.9)
15.15–15.30 Linda K Medlin – Secondary structure alignment and multiple outgroups confirm the monophyly of the diatom classes using SSU RNA genes (5Or.10)

Symposium 1 (continued)

Room 3

Algal diversity and species delimitation: new tools, new insights

Co-Convenors: Frederik Leliaert and David G Mann

- 15.30–15.45 Juliet Brodie – Ripples of the past: how much endemism is there in seaweeds? (1Or.12)
15.45–16.00 Ricardo T Pereyra – Depauperate environments: cradle of speciation or evolutionary dead ends? (1Or.13)
16.00–16.15 Olivier De Clerck – Matching names and clades in the brown algal genus *Lobophora* (Dictyotales, Phaeophyceae): an effort to integrate type specimens in modern taxonomy (1Or.14)
16.15–16.30 Wiebe HCF Kooistra – Biodiversity in the planktonic diatom family Chaetocerotaceae (1Or.15)

16.30–17.00 **Coffee/Tea Break**

Symposium 9 (continued)

Room 1

Algae in stressful environments in coastal systems

Co-Convenors: Angela Wulff and Richard J Geider

- 17.00–17.15 Andrew Want – Fifty years after Powell: the distribution of *Fucus distichus anceps* on the extreme exposed rocky shores of Orkney and its role as an indicator species. (9Or.13)
17.15–17.30 Thierry Tonon – Comparative analysis of marine and freshwater brown algae: insights into the biology and evolution of an extremophile Ectocarpus (9Or.14)
17.30–17.45 Frauke Pescheck – How can *Ulva intestinalis* resist the sunlight while floating on the sea surface? (9Or.15)
17.45–18.00 Pamela A Fernandez – The physiological responses of giant kelp *Macrocystis pyrifera* to ocean acidification are modulated by internal nitrogen status. (9Or.16)

Symposium 12 (continued)

Room 2

Ecology, physiology and taxonomy of freshwater phytoplankton

Co-Convenors: Judita Koreiviene and Ellen van Donk

- 17.00–17.15 Elliot Shubert – Using correspondence analysis to determine relationships between abiotic factors and the density of *Desmodesmus* species in Polish lakes (12Or.5)
17.15–17.30 Tamar Zohary – Seasonality of intra-specific cell size in the phytoplankton of Lake Kinneret (12Or.6)
17.30–17.45 Franz Goecke – On the effect of rare earth elements on microalgae: pollutants and growth stimulants (12Or.7)
17.45–18.00 Yvonne Němcová – Silica-scaled chrysophytes on the salinity gradient (12Or.8)

Symposium 1 (continued)

Room 3

Algal diversity and species delimitation: new tools, new insights

Co-Convenors: Frederik Leliaert and David G Mann

- 17.00–17.15 Nataliya Rybalka – Microalgae communities in Antarctic soils: changes along soil developmental stages and testing for geographical distribution (1Or.16)
17.15–17.30 Sophie Steinhagen – Ulvales on German Baltic and North Sea coasts: About cryptic, alien and lost species (1Or.17)
17.30–17.45 Fabio Rindi – Old and new problems in the circumscription of Mediterranean species of *Lithophyllum* (Corallinales, Rhodophyta) (1Or.18)
17.45–18.00 Hiroshi Kawai – Taxonomic revision of *Papenfussiella* species in the Northern Hemisphere (1Or.19)
18.00–18.15 Orlando Necchi Jr – Revision of the section *Macrospora* Kumano of the genus *Batrachospermum* (Rhodophyta, Batrachospermales) (1Or.20)

20:00– **Conference Banquet**

Main Hall

Friday, 9 August 2015

8.25–8.30 **General announcements**

9.00–10.00 **Plenary Lecture**

Main Hall

Ester A Serrão

Extant or extinct tipping points – climate changes drive genetic diversity and dynamics of marine forests

10:00–10:30 **Coffee/Tea Break**

10.30–12.30 **Symposia 13, 14 and 15**

Symposium 13:

Room 1

Omics and genetic resources towards algal domestication

Co-Convenors: Claire Gachon and J. Mark Cock

- 10.30–11.00 Nicolas Blouin – The *Porphyra umbilicalis* genome: Studies on the path from genome to grocery store (13Kn.1)
- 11.00–11.30 Gwang Hoon Kim – Omics in deciphering the evolutionary warfare between *Pyropia* and its pathogens (13Kn.2)
- 11.30–12.00 Duan Delin – Genome structure characterization of genome structure characterization of *Saccharina japonica* (13Kn.3)
- 12.00–12.30 Marie-Laure Guillemin – The domestication process in the red alga *Gracilaria chilensis*: rapid changes observed after only 30 years of intensive farming (13Kn.4)

Symposium 14:

Room 2

The fate of our marine forests in a changing ocean (xx)

Co-Convenors: Myriam Valero and Francisco Arenas

- 10.30–11.00 Dan A. Smale – The structure and functioning of kelp forest ecosystems under rapid environmental change (14Kn.1)
- 11.00–11.30 Marine Robuchon – Studying biodiversity by an integrative approach of population genetics and community ecology: a way to better predict the fate of our marine forests in a changing ocean? (14Kn.2)
- 11.30–12.00 Brezo Martínez – Combining knowledge on thermal niches to species distribution models in geographical projections in a changing ocean (14Kn.3)
- 12.00–12.15 Inka Bartsch – Changes in kelp forest biomass and depth distribution at Kongsfjorden (Spitsbergen) between 1996/98 and 2012-2014 reflect Arctic warming (14Or.1)
- 12.15–12.30 Thierry Thibaud – Loss of the habitat-forming *Cystoseira mediterranea* at its northern-limit of distribution in the Mediterranean Sea (14Or.2)

Symposium 15:

Room 3

Algae and Signalling - regulation of processes from cell to globe

Co-Convenors: Michael Steinke and Georg Pohnert

- 10.30–11.00 Eric Selander – Lipid signaling in plankton communities (15Kn.1)
- 11.00–11.15 Philippe Potin – Expression of a PKSIII gene and soluble phlorotannin synthesis in response to abiotic and biotic stresses in the brown alga *Fucus vesiculosus*: constitutive versus inductive protection. (15Or.1)
- 11.15–11.30 Florian Weinberger – Innate immunity regulates the excretion of anti-settlement compounds by *Fucus vesiculosus* and other brown seaweeds (15Or.2)
- 11.30–12.00 Assaf Vardi – A chemical arms race mediates host-virus interactions during algal blooms in the ocean (15Kn.2)
- 12.00–12.15 Anne Weiss – Signalling in bacterial-macroalgal symbiosis: Chemotaxis is involved in biofilm formation by *Roseobacter* sp. and *Ulva mutabilis* (Chlorophyta) (15Or.3)
- 12.15–12.30 Michael Steinke – Environmental Volabologics: Deciphering the chemical language that shapes aquatic health (15Or.4)

12.30–13.30 **Lunch**

Chablis Suite

Continued Symposia 9, 10, 14, 16

Symposium 9 (continued)

Room 1

Algae in stressful environments in coastal systems

Co-Convenors: Angela Wulff and Richard J. Geider

- 13.30–13.45 Haim Treves – The alga that never read the literature - Fastest growing, desiccation and photodamage tolerant alga, isolated from desert crust (9Or.17)
- 13.45–14.00 Angela Wulff – Autotrophs in Antarctic meltwater microbial mats - the tough survivors (9Or.18)
- 14.00–14.15 Emmanuelle Tastard – Expression of genetic transposable elements under thermal stress in the diatom *Phaeodactylum tricornutum* (9Or.19)
- 14.15–14.30 Lenka Caisová – A new green algal lineage isolated from a volcanic canyon in the Canary Islands (9Or.20)

Symposium 14 (continued)

Room 1

The fate of our marine forests in a changing ocean

Co-Convenors: Myriam Valero and Francisco Arenas

- 14.30–14.45 Chris Yesson – Can we monitor changes in coastal habitats from our desktops? (14Or.3)
- 14.45–15.00 Balsam Al-Janabi – Tolerance to climate change of early life-stage *Fucus vesiculosus* varies among sibling groups (14Or.4)
- 15.00–15.15 Sandra Heinrich – Transcriptomic acclimation in *Desmarestia anceps* (14Or.5)
- 15.15–15.30 Luisa Mangialajo – Recovery of large brown algae forests after destructive fishery: ecological restoration insights (14Or.6)
- 15.30–15.45 Emma Cebrian Pujol – New method for restoring degraded *Cystoseira* forests (14Or.7)
- 15.45–16.00 Catriona L Hurd – Slow flow habitats as refugia for coralline algae from ocean acidification (14Or.8)

Symposium 10 (continued)

Room 2

Global change and algal assemblages: the fate of our seas

Co-Convenors: Gwenael Piganeau, Nessa O'Connor and Laura Airoidi

- 13.30–13.45 Francisco Arenas – Warm & Acid: Changes on species interactions in the new ocean (10Or.5)
- 13.45–14.00 Ljiljana Iveša – Recovery of *Cystoseira* forests along the west Istrian Coast (northern Adriatic Sea, Croatia) (10Or.6)
- 14.00–14.15 Catharina Alves-de-Souza – Temporal beta-diversity of small eukaryote phytoplankton in an eutrophized tropical coastal lagoon (10Or.7)
- 14.15–14.30 Angelika Graiff – Effects of warming and acidification on a benthic community in the Baltic Sea – Kiel Benthocosms (10Or.8)
- 14.30–14.45 Guillermo Diaz-Pulido – Recent progress in the physiology, mineralogy and ecology of coralline algae in the Great Barrier Reef and impacts of future ocean change (10Or.9)

- 14.45–15.00 David G Mann – Are there any alien marine diatoms? (10Or.10)
 15.00–15.15 Frithjof C Küpper – Exploration of Arctic and Antarctic seaweed biodiversity in the context of polar climate change (10Or.11)
 15.15–15.30 Marina Montesor – Temporal and spatial population structure and genetic diversity during a bloom of the marine diatom *Pseudo-nitzschia multistriata* (10Or.12)
 15.30–15.45 Sonia Blanco – Iron limitation in the cyanobacteria *Synechococcus* sp.: from gene expression to physiological responses (10Or.13)
 15.45–16.00 Klervi Le Lann – Biochemical adaptation of the invasive *Gracilaria vermiculophylla* along a gradient of temperature, from Portugal to Norway (10Or.14)

Symposium 16:

Room 3

Special Symposium “Phycomorph”: Morphogenesis and Development of Macroalgae

Convenor: Bénédicte Charrier

- 13.30–14.00 Thomas Wichard – Exploring bacteria-induced morphogenesis in the green macroalga *Ulva* (Chlorophyta): A combined chemical and genetic approach (16Kn.1)
 14.00–14.30 Rafael R Robaina – Plant hormones and reproduction in red seaweeds: from the chemicals to transcriptomics (16Kn.2)
 14.30–15.00 Dan Chitwood – Comparative analysis of *Caulerpa* and land plant transcriptomes: implications for Kaplan's organismal theory (16Kn.3)
 15.00–15.30 Silje Forbord – Successful seaweed aquaculture based on fundamental biological knowledge - what are the main challenges? (16Kn.4)
 15.30–16.00 Bénédicte Charrier – Macroalgal development and morphogenesis: deploying a new international initiative to advance knowledge and transfer (16Kn.5)

16.00–16.30 **Coffee/Tea Break**

Closing Ceremony

Main Hall

Co-Presenters: Jane Lewis, Elliot Shubert,
 Olivier De Clerck, Peter Kroth,
 Gil Martin & Christos Katsaros

- 16.30–16.45 Burkhard Becker – A scientific wrap-up
 16.45– Concluding remarks and announcements