

EPC7 Programme

Sunday, 25 August 2019

14.00–21.00	Registration	Lobby
19.00–21.00	Welcome Reception	Emerald room

Monday, 26 August 2019

8.00–12.00	Registration	Lobby
8.30–9.00	Opening Ceremony	Oleander room

9.00–10.00	Plenary Lecture	Oleander room
	Assaf Vardi	
	The metabolic cross-talk of algal-pathogen arms race at sea	

10.00–10.30	Coffee Break	
10.30–13.00	Symposia 10, 6 and 7	

Symposium 10:	Paris room
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Microbial friends and enemies of algae

Co-Convenors: Claire Gachon and Miguel Frada

10.30–11.00 Catharina Alves-de Souza – Coexistence of generalist and specialist parasites in the plankton: interplay between different infective strategies and environmental constraints (10KN.1)

11.00–11.30 Einat Segev – Bacterial effects on algal life, death, and geology (10KN.2)

11.30–11.45 Pedro Murúa - Multi-layered and conserved defence mechanisms of Phaeophyceae against phylogenetically unrelated pathogens (10OR.1)

11.45–12.00 José Pintado - The effect of light on *Phaeobacter gallaeciensis* biofilms on *Ulva ohnoi* (Ulvales, Chlorophyta) (10OR.2) – transfer to poster 10PO.9

12.00–12.15 Yoav Avrahami - Detection and characterization of mixotrophy in coccolithophores (10OR.3)

12.15–12.30 Claire M.M. Gachon - Single-cell molecular analyses demonstrate the polyphyly of the genus *Ectrogella* and shed light on the distribution and ecology of oomycete parasites of marine diatoms. (10OR.4)

12.30–12.45 Matthieu Garnier - How bacteria can drive haptophytes through vitamin B12 metabolism (10OR.5)

12.45–13.00 Je Jin Jeon - Why does the red algal host *Pyropia yezoensis* respond differentially to three *Olpidiopsis* species? (10OR.6)

Symposium 6:

Emerald room

Biofilms and microphytobenthos: community composition, physiology, functional aspects, interactions with bacteria

Co-Convenors: Peter Kroth and Angela Wulff

- 10.30–11.00 Nicole Poulsen – A sticky situation: understanding the molecular mechanism of diatom underwater adhesion (6KN.1)
- 11.00–11.30 Michael Köhl – Near-infrared light driven oxygenic photosynthesis in biofilms - novel insight to the ecology of cyanobacteria with far-red absorbing chlorophylls (6KN.2)
- 11.30–11.45 Adrien Lapointe - Interactions between diatoms and bacteria in freshwater photoautotrophic biofilms (6OR.1)
- 11.45–12.00 Áron Lukács - Colonization of benthic algae under stable and unstable environmental conditions - functional approaches (6OR.2)
- 12.00–12.15 Willem Stock - The ecological consequences of specificity in diatom bacteria associations (6OR.3)
- 12.15–12.30 Anna Fricke - Phytobenthic bloom dynamics within a tropical mesocosm seagrass community (6OR.4)
- 12.30–12.45 Vona Méléder - Coupling PAM fluorometry, C-fluxes and reflectance to estimate microphytobenthos primary production by hyperspectral remote sensing (6OR.5)
- 12.45–13.00 **Sunčica Bosak** - Metagenomic characterization of the surface biofilm on Mediterranean loggerhead sea turtles (6OR.6)

Symposium 7:

Oleander room

Algae in a changing environment: perception of environmental signals, physiological changes, changes in community composition

Co-Convenors: Inka Bartsch and Christian Wilhelm

- 10.30–11.00 Heiko Wagner – Statistical modeling of aquatic primary production and water monitoring (7KN.1)
- 11.00–11.30 Francisco JL Gordillo – Performance of polar macroalgae in a changing environment: A seasonal perspective and implications for the future (7KN.2)
- 11.30–11.45 Sònia de Caralt - Effects of pollution on populations of *Cystoseira crinita* (7OR.1)
- 11.45–12.00 Guillermo Diaz-Pulido- Crustose coralline algae and ocean acidification: the role of evolutionary history (7OR.2)
- 12.00–12.15 Sylvain Faugeron - Drivers of thermal tolerance of a cosmopolitan kelp species: habitat suitability, population quality or local adaptation? (7OR.3)
- 12.15–12.30 Raul Golo - The boom-bust invasion by *Lophocladia lallemandii* has a lower impact than expected on native ecosystems (7OR.4)
- 12.30–12.45 Jana Verdura - Can thermal history shape the thermotolerance response of Mediterranean marine habitat-forming macroalgae? (7OR.5)
- 12.45–13.00 Cristina Piñeiro-Corbeira - Ecophysiological responses of six intertidal seaweeds exhibiting contrasting abundance shifts over the last few decades under the influence of multiple stressors (7OR.6)

13.00–14.30 **Lunch**

14.30–17.00 **Symposia 7, 12 and 18**

Symposium 7 (continued):

Oleander room

Algae in a changing environment: perception of environmental signals, physiological changes, changes in community composition

Co-Convenors: Inka Bartsch and Christian Wilhelm

- 14.30–14.45 Concepción Iñiguez - Environmental factors shaping RuBisCo and carbon concentrating mechanism co-evolution across aquatic organisms (7OR.7)
- 14.45-15.00 Friedrich Kleiner -The role of voltage-gated ion channels in diatoms (7OR.8)
- 15.00-15.15 Guérin Sébastien - Effects of changing photoperiod on the regulation of photophysiology in the polar diatom *Fragilariopsis cylindrus* (7OR.9)
- 15.15-15.30 Marina Aboal - Why is the plastid bluegreen in the red alga *Chroothoece mobilis* Pascher & Petrová (Stylonematophyceae, Rhodophyta)? (7OR.10)
- 15.30-15.45 Tihana Novak - Global warming and oligotrophication synergy leads to greater phytoplankton lipid production (7OR.11)
- 15.45-16.00 Didier Baho - Ghost of the past: evidence of ecological memory in phytoplankton communities exposed to long-term herbicide application (7OR.12)
- 16.00-16.15 Koen Sabbe - Long-term phytoplankton change in a heavily impacted coastal area in the North Sea between the 1970s and 2000s (7OR.13)
- 16.15-16.30 Mia Cerfonteyn - The Icelandic marine ecosystem: mapping phytoplankton in a complex hydrographic environment (7OR.14)
- 16.30-16.45 Johann Lavaud - A brighter future? The photophysiological response of bottom-ice microalgal community during spring to summer transition in the Arctic (7OR.15)
- 16.45-17.00 Eva Leu - Tales from a melting Arctic: microalgal bloom phenology in an era of climate change (7OR.16)

Symposium 12:

Paris room

Planktonic and benthic Harmful Algal Blooms: a threat for human health and resources

Co-Convenors: Stefano Accoroni and Petra Visser

- 14.30–15.00 Stefano Accoroni – Role of environmental factors on dynamics and toxin production of benthic Harmful Algal Blooms (12KN.1)
- 15.00–15.30 Petra M. Visser – Cyanobacterial blooms in lakes: Ecology, prevention and control (12KN.2)
- 15.30–15.45 Solène Geffroy - Effect of salinity and temperature stresses on DMSP and PSTs content in *Alexandrium minutum* and *A. catenella* (12OR.1)
- 15.45–16.00 David M Hartnell - Seasonal monitoring of cyanobacteria and cyanotoxins by flow cytometry and liquid chromatography coupled to tandem mass spectrometry, in two lowland freshwater reservoirs situated in southern Britain (12OR.2)
- 16.00-16.15 Gaillard Sylvain - Culture of prey organisms of *Dinophysis* helps explain why its occurrence along the French Atlantic coast does not show trends over a 20-year period (12OR.3)

- 16.15-16.30 Francesco Pisapia - Study of growth and toxin production of cultured *Gambierdiscus* spp. strains from Macaronesia (12OR.4)
16.30-16.45 Judita Koreivienė - Effect of nutrients on native and alien nuisance cyanobacteria strains from temperate lakes and their interspecies competition (12OR.5)
16.45-17.00 Daniela Marić Pfannkuchen - *Pseudo-nitzschia*: the physiology of success in a highly structured and dynamic phytoplankton ecosystem (12OR.6)

Symposium 18:

Emerald room

EU Funding opportunities

Co-Convenors: Marie Huysman and Frank Marx

- 14.30–15.00 Frank Marx - Marie Skłodowska-Curie Actions
15.00–15.30 Marie Huysman - European Research Council (ERC) – Funding opportunities
15.30–15.45 Susana Coelho
15.45–16.00 Assaf Vardi
16.00-16.30 Round-table panel discussion and Q&A session, moderated by Marie Huysman

17.00–19.00 **Poster sessions (6PO 1-16; 7PO 1-47; 10PO1-8; 12PO 1-6)** Oleander room

19.00-20.30 **Invited public lecture**

Oleander room

Mirko Orlić

Change of climate and occurrence of extremes

Tuesday, 27 August 2019

8.00–9.00 **Registration**

9.00–10.00 **Plenary Lecture**

Oleander room

Laura Airoidi

Seaweed conservation and restoration under rapid global change

10.00-10.30 **Student flash talks**

Oleander room

10.30–11.00 **Coffee Break**

11.00–13.00 **Symposia 2, 9, 5 and 1**

Symposium 2:

Paris room

Ecology and evolution of algal symbiosis

Co-Convenors: Fabrice Not and Francesco Dal Grande

- 11.00–11.30 Pierre-Marc Delaux - From water to land: Evolution of the arbuscular mycorrhizal symbiosis (2KN.1)
- 11.30–11.45 Norico Yamada - A 'missing link' dinoflagellate *Durinskia kwazulunatalensis* exhibits the conversion process of the kleptoplastids to permanent endosymbionts (2OR.1)
- 11.44–12.00 Guido Bonthond - Microbial communities associated to an invasive seaweed and how they vary across ecological scales (2OR.2)
- 12.00–12.15 Joost Mansour - Photosynthetic C & N uptake of symbiotic Radiolaria assessed by stable isotope analysis (2OR.3)

Symposium 5:

Paris room

Life cycles and life strategies of micro- and macroalgae

Co-Convenors: Wim Vyverman and Susana Coelho

- 12.15–12.30 Dorothee Kottmeier - Differences in acid-base regulation between the heavily calcifying diploid and the weakly calcifying haploid life cycle stage of the coccolithophore *Coccolithus braarudii* (5OR.1)
- 12.30–12.45 Inka Bartsch - Winter survival capacity of microscopic polar kelp stages (5OR.2)
- 12.45–13.00 Ante Žuljević - Sexual reproduction in *Ulva* – how does it look? (5OR.3)

Symposium 9:

Oleander room

Algae in their ecosystems: novel approaches to study algal ecology

Co-Convenors: Nico Salmaso and Christine Maggs

- 11.00–11.30 Suzanne Fredericq - DNA metabarcoding demonstrates the importance of rhodoliths for macroalgal ecology and biodiversity in Gulf of Mexico deep-water mesophotic habitats (9KN.1)
- 11.30–12.00 Isabelle Domaizon - Application of high-throughput metabarcoding in limnology and paleolimnology to characterize changes in micro-eukaryotic diversity facing environmental pressures (9KN.2)
- 12.00–12.15 Nico Salmaso - Unveiling the hidden diversity of photosynthetic and mixotrophic protists in a large and deep subalpine lake using a high throughput sequencing approach (9OR.1)
- 12.15–12.30 Lydia A. Papanikolopoulou - Survey of phytoplanktonic allelopathic interactions (9OR.2)
- 12.30–12.45 Maria Kahlert - Connecting the molecular species concept of the genus *Fragilaria* (Bacillariophyta) to ecology (9OR.3)
- 12.45–13.00 Matt P. Ashworth - On the shoulders of giants: what epizoic diatoms are teaching us about diatom evolution (9OR.4)

Symposium 1:

Emerald room

Phylogeny in the 'omics' era

Co-Convenors: Olivier de Clerck and Frederik Leliaert

11.00–11.30 Heroen Verbruggen – Diversification trends in the Archaeplastida inferred from chloroplast genome data (1KN.1)

11.30–12.00 Mick Van Vlierberghe - Automated bioinformatics approaches to evaluate the relative contribution of endosymbiosis and kleptoplasty in the evolution of complex red algae (1KN.2)

12.00–12.15 Chung Hyun Cho - Facilitated mitochondrial evolution of an extremophilic red algae (1OR.1)

12.15–12.30 Pilar Diaz-Tapia - Phylogenomics of the red algal order Ceramiales: implications for family level classification (1OR.2)

12.30–12.45 Ryoma Kamikawa - “Rappemonads” is the third lineage of Haptophyta (1OR.3)

12.45–13.00 Jong Im Kim - Comparative plastid genomics of non-photosynthetic Chrysophytes: Genome reduction and compaction (1OR.4)

13.00–14.30 **Lunch**

14.30–17.00 **Symposia 5, 9, 14 and 16**

Symposium 9 (continued):

Oleander room

Algae in their ecosystems: novel approaches to study algal ecology

Co-Convenors: Nico Salmaso and Christine Maggs

14.30–14.45 Domenico D’Alelio - Exploiting omics potential to face the complexity of plankton communities: from present challenges and limitations to an integrative pipeline (9OR.5)

14.45–15.00 Jorge Santamaría - Learning takes time. *Sarpa salpa*’s preferential feeding on the invasive alga *Caulerpa cylindracea* shifts throughout the invasion process. (9OR.6)

Symposium 14:

Oleander room

Public outreach and citizen science

Co-Convenors: Domenico D’Alelio and Silvia Angles

15.00-15.30 Juliet Brodie - The big seaweed search: science, lessons and inspiring the citizens (14KN.1)

15.30-15.45 Anna Maria Mannino - Citizen science: a successful tool for monitoring marine biodiversity (14OR.1)

15.45-16.00 Luca Russo - Food for fish, oxygen for all: bottom-up communication of phytoplankton relevance (14OR.2)

16.00-16.15 Fiona Tomas - Teaching in order to learn about distribution of invasive macrophytes in the Mediterranean Sea: using outreach and citizen science (14OR.3)

16.15-16.30 Roberta Skukan - Find invasive seaweed: an outdoor game to engage children in science activities that detect marine biological invasion (14OR.4)

16.30-16.45 Hrvoje Čižmek - Need for increased effort - could recreational divers enhance efficiency of sea grass monitoring? (14OR.5)

Symposium 5 (continued):

Paris room

Life cycles and life strategies of micro- and macroalgae

Co-Convenors: Wim Vyverman and Susana Coelho

- 14.30–15.00 Mark Cock – Evolution of life-cycle-related developmental processes in the brown algae (5KN.1)
- 15.00–15.30 Miguel Frada – Life cycle complexities of the bloom-forming coccolithophore *Emiliana huxleyi* (5KN.2)
- 15.30–15.45 **Olivier Vallon -The genome of a unicellular green alga reveals traits associated with multicellular plants and animals (8PO.8 in abstract book/5OR.10)**
- 15.45–16.00 Felipe Benites - Evolution of mating types in mamiellophycean green algae genomes (5OR.5)
- 16.00-16.15 Christophe Destombe - Sexual and asexual reproduction in rhodophyta: the example of *Gracilaria gracilis* and *G. dura* sibling species (5OR.6)
- 16.15-16.30 Joost de Vries - Coccolithophore life cycles: understanding physiological and ecological differences between life cycle phases (5OR.7)
- 16.30-16.45 Angela Pelusi - High cell density and viral infection trigger formation of resting stages in the marine diatom *Chaetoceros socialis* (5OR.8)
- 16.45-17.00 Stephen Maberly - Sex in *Asterionella formosa*? (5OR.9)

Symposium 16:

Emerald room

Algal culture collections in the 'omics' age

Co-Convenors: Maike Lorenz and Christine Campbell

- 14.30–15.00 Willie Wilson – How can we make culture collections sustainable? (16KN.1)
- 15.00–15.30 Muriel Gugger – Cyanobacteria from genomic perspectives reveal unprecedented chemical diversity (16KN.2)
- 15.30–15.45 Ian Jameson - The ANACC and Australian perspectives on delivering research impact from an algal culture collection (16OR.1)
- 15.45–16.00 Jozef I. Nissimov - Aquatic virus culture collection: an initiative for the future (16OR.2)
- 16.00-16.15 Annick Wilmotte - BCCM/ULC: genomic research on Polar cyanobacteria (16OR.3)
- 16.15-16.30 Angelo Del Mondo - ACUF: The microalgal collection at the University of Naples Federico II (16OR.4)
- 16.30-16.45 Maike Lorenz - The Nagoya protocol on access and benefit sharing: implementation status in algal biological resource centres (16OR.5)

17.00–19.00 **Poster sessions: (1PO1-5; 2PO1-2; 4PO1-12; 5PO1-8; 9PO1-14; 14PO1; 15PO1-11; 16PO1-22)**

Oleander room

19.00-21.00 **EPC7 social event – Silent Auction:**

Oleander room

Wednesday, 28 August 2019

9.00 **Mini Workshops / Algae culture collections meeting / Mid-congress excursions**

9.00-13.00 **Mini Workshop 1:** Oleander room

Chlorophyll fluorescence as a popular tool to study the physiological status

Co-Convenors: Bernard Lepetit and Jacco Kromkamp

9.00–9.30 Bernard Lepetit - Pulse amplitude modulated (PAM) fluorometry: The measurement principle, the parameters, the relation to electron transport rates and its use to study Non-Photochemical Quenching (NPQ) (W1KN.1)

9.30–10.00 Jacco Kromkamp - Application of Fast Repetition Rate Fluorometry (FRRF) in primary productivity studies: a tutorial (W1KN.2)

10.00–10.20 Benjamin Bailleul - Combining fluorescence and absorption spectroscopy to investigate cyclic electron flow around photosystem I in various microalgae (W1KN.3)

10.20-10.50 Coffee break

10.50–11.10 Ondrej Prasil - The fluorescence-based estimations of gross and net primary productivity in a marine diatom- the effects of dynamic nutrient stress (W1KN.4)

11.10–11.30 Scarlett Trimborn - Photophysiological strategies to iron limitation and high light differ between two Antarctic key phytoplankton (W1KN.5)

11.30–11.45 Erhard Pfündel - Effects of PS I fluorescence and chloroplast relocation on chlorophyll fluorescence (W1OR.1)

11.45 –12.00 Dany Croteau - Blinded by the light: Darkness reveals the complexity of Arctic diatoms photoadaptative strategy (W1OR.2)

12.00–12.15 Thomas Lacour - The role of sustained photoprotective non-photochemical quenching in microalgae (W1OR.3)

12.15–12.30 Silke Thoms - Enhancement of photosynthesis in *Synechococcus bacillaris* by sponge-derived Ageladine A: a theoretical perspective (W1OR.4)

12.30-13:00 closing discussion

Poster session (WPO1-2)

9.00-13.00 Workshop 2: Paris
room

Handling large genomic datasets

Co-Convenors: Thomas Mock, Mark Cock

9.00–9.30 Gernot Gloeckner – Assembly and analysis of the *Laminaria digitata* genome and transcriptome (W2KN.1)

9.30–10.00 Uwe John – Eco-evolutionary drivers affect life cycle changes and microevolution of the *Emiliania/Gephyrocapsa* species complex (W2KN.2)

10.00–10.30 Gareth Pearson – Leveraging sequence and expression information from *de novo* transcriptomes; strategies and case studies from the brown algae (W2KN.3)

10.30–11.00 Hwan Su Yoon - Expansion of phycobilisome linker gene families in a mesophilic red alga, *Porphyrodium purpureum* (W2KN.4)

11.00–11.15 Simon Dittami - Using genome scale metabolic networks to study algal biology and evolution (W2OR.1)

11.15-11.45 Igor Grigoriev – Fueling the future with algal genomics (W2OR.2)

9.00-16.00 **Algae Culture Collections meeting**

Emerald room

18.00-22.00 EPC7 Social event Exhibition opening - “The Beauty in Detail, Transformation and Structure – Adriatic Coccolithophores” in Galerija Šira, Galerija Forum, Institut français de Croatie

Thursday, 29 August 2019

8.00–9.00 **Registration**

Lobby

9.00–10.00 **Plenary Lecture:**

Oleander room

Debashish Bhattacharya

Using *Paulinella* to decipher how organelles are integrated into host biology

10.00–10.30 **Coffee Break**

10.30–13.00 **Symposia 3, 4 and 8**

Symposium 3:

Oleander room

Biodiversity and biogeography of algae

Co-Convenors: Pilar Díaz-Tapia and Wiebe Kooistra

10.30–11.00 Shruti Malviya – Unfolding the global biodiversity patterns and structure of marine planktonic diatom communities in the world ocean (3KN.1)

11.00–11.30 Frederik Leliaert – Patterns and drivers of seaweed biodiversity: speciation and dispersal of the red algal genus *Portieria* and brown algal order Dictyotales (3KN.2)

11.30–11.45 Eveline Pinseel - Global colonisation and diversification in the terrestrial diatom species complex *Pinnularia borealis* (3OR.1)

11.45–12.00 Wiebe HCF Kooistra - Metabarcoding diversity and seasonality in the marine planktonic diatom family Chaetocerotaceae (3OR.2)

12.00–12.15 Christine A. Maggs - Stabilizing the sea lettuces: DNA sequences from type specimens of *Ulva* (chlorophyta) illuminate nomenclature and biogeography (3OR.3)

12.15–12.30 Giuseppe C. Zuccarello - Speciation in the endemic Lake Baikal Cladophorales species flock (3OR.4)

- 12.30–12.45 Pavel Škaloud - Speciation in protists: Spatial and ecological divergence processes cause rapid species diversification in a freshwater chrysophyte (3OR.5)
12.45–13.00 Viviana Peña - Evolutionary history of coralline red algae (Corallinophycidae, Rhodophyta) inferred from a multilocus time-calibrated phylogeny (3OR.6)

Symposium 4:

Paris room

Algal cell biology: making sense of cell structure

Co-Convenors: Zoe A. Popper and Antonio Calado

- 10.30–11.00 Andreas Holzinger – Terrestrialization in the streptophyte *Zygnema*: involvement of cell wall components and transcriptomic changes (4KN.1)
11.00–11.30 Øjvind Moestrup – New studies on the Warnowiaceae (Dinophyceae), some of the most extraordinary marine flagellates known (4KN.2)
11.30–11.45 Frithjof C. Küpper - Nano X-ray fluorescence tomography (SR-nXRF) for imaging element distribution at the subcellular level in algae (4OR.1)
11.45–12.00 Burkhard Becker - Evolution of the MIP (aquaporin) protein family within the Viridiplantae: A story of gains and losses (4OR.2)
12.00–12.15 Ji Woong Lee - Differential involvement of cellular machinery in photomovement of *Spirogyra varians* (4OR.3)
12.15–12.30 Eun Young Shim - Reactive oxygen species (ROS) signal triggers fertilization in the red alga *Bostrychia moritziana* (4OR.4)
12.30–12.45 Gwang Hoon Kim - Cell repair and intercellular nutrient transfer in filamentous red algae *Griffithsia monilis* and *Heterosiphonia japonica* (4OR.5)
12.45–13.00 Gábor Borics - Biovolume calculation for planktonic algae by using 3-dimensional models (4OR.6)

Symposium 8:

Emerald room

Omics and genetic tools for algal model organisms: understanding the biology of algae using metabolomic, proteomic, and genomic approaches

Co-Convenors: Maria Immacolata Ferrante and Angela Falciatore

- 10.30–11.00 Olivier De Clerck – *Ulva*, a model system for green seaweeds (8KN.1)
11.00–11.30 Maria Immacolata Ferrante – Molecular mechanisms regulating sexual reproduction and mating type determination in the diatom *Pseudo-nitzschia multistriata* (8KN.2)
11.30–11.45 Agnieszka P. Lipinska - V for sex chromosome (8OR.1)
11.45–12.00 Shvaita Madhuri - Aureochromes: The blue box of diatoms (8OR.2)
12.00–12.15 Charlotte Nef - How haptophyte microalgae manage vitamin B12 limitation (8OR.3)
12.15–12.30 Manuel Serif - DNA-free genome editing using CRISPR/Cas9 in the diatom *Phaeodactylum tricornutum* (8OR.4)
12.30–12.45 Thierry Tonon - New insights into algal mannitol biosynthetic pathways. (8OR.5)
12.45–13.00 Konstantinos Anestis - Toxin biosynthesis in *Prymnesium parvum*: from structure to genes (8OR.6)

13.00–14.30 **Lunch**

14.30–17.00 **Symposia 3, 15, 17 and 18**

Symposium 3 (continued):

Oleander room

Biodiversity and biogeography of algae

Co-Convenors: Pilar Díaz-Tapia and Wiebe Kooistra

14.30–14.45 Bart Van de Vijver - Pronounced geographic structuring and endemism in freshwater diatoms of the Antarctic realm (3OR.7)

14.45-15.00 Sabrina N. Kalita - Bridging functional and phylogenetic diversity of marine heterotrophic protists via single-cell transcriptomics (3OR.8)

15.00-15.15 Luka Šupraha - Studies on the biodiversity of arctic protists – bridging the gap between morphological and molecular approaches (3OR.9)

15.15-15.30 Line Le Gall - Are seaweeds from the Mediterranean Sea and Atlantic Ocean sister? (3OR.10)

15.30-15.45 Andrzej Witkowski - Species composition of epiphytic diatoms confirm marine biogeographical provinces in South Africa (3OR.11)

15.45-16.00 Lenka Raabová - Hidden genera within the Oscillatoriales in Polar Regions (3OR.12)

16.00-16.15 Dovilė Barcytė - Biogeography and ecology of the Chloromonadinia phylogroup (Chlorophyceae) (3OR.13)

16.15-16.30 Daniel Pousa Kurpan Nogueira - Evolution of sulfur metabolism in phytoplankton (3OR.14)

16.30-16.45 Maxim Kulikovskiy - Molecular phylogeny and evolution of diatom genera from the family Stauroneidaceae D.G. Mann (3PO.40 in abstract book/3OR.18)

16.45-17.00 Myung Sook Kim - Cryptic diversity in the widespread intertidal red algae, *Gloiopeltis furcata* (Gigartinales, Rhodophyta) from the Northwestern Pacific (3OR.16)

Symposium 15:

Emerald room

Evolutionary genetics and genomics in macro- and microalgae

Co-Convenors: Myriam Valero and Mikael Le Gac

14.30–15.00 Susana Coelho – The evolutionary dynamics of brown algal sex chromosomes (15KN.1)

15.00–15.30 Anke Kremp – Genetic diversity, phenotypic variation and the role of complex life cycles in evolutionary adaptation of Baltic phytoplankton populations (15KN.2)

15.30–15.45 Sofie Vranken - Unravelling asexual reproduction in two sympatric morphs of the Australian kelp (*Ecklonia radiata*) using genomics (15OR.1)

15.45–16.00 Klara K. E. Wolf - Revealing population and selection dynamics in an Arctic diatom to assess adaptive potential to climate change (15OR.2)

16.00-16.15 Stacy A. Krueger-Hadfield - Subtle differentiation maintains haplodiplontic life cycles ... until it doesn't (15OR.3)

16.15-16.30 Mickael Le Gac - Phenotypic plasticity versus genetic structuration in dinoflagellate natural populations (15OR.4)

16.30-16.45 Sabrina Heiser - Potential mechanisms driving the geographic distribution pattern of secondary metabolites in the highly chemically-defended red seaweed *Plocamium "cartilagineum"* (15OR.5)

16.45-17.00 Fabio Nauer - Polyphasic approach to address multiple species concepts for *Hypnea pseudomusciformis* (Gigartinales, Rhodophyta) (15OR.6)

Symposium 18:

Paris room

Student symposium

Co-Convenors: Sunčica Bosak and Nikola Koletić

14.30–16.00 Meet the Editors - Debashish Bhattacharya, Frederik Leliaert, Christine Maggs and Juliet Brodie - Round-table panel discussion and Q&A session, moderated by Sunčica Bosak

16.00–17.00 Grants & Funding opportunities of EU research infrastructure access programs – Wiebe Kooistra

17.00–19.00 **Poster sessions (3PO1-44; 8PO1-7; 11PO1-35; 13PO1-2)** Oleander room

20:00 **Group Photo**

20.30-23.00 **Gala dinner:**

Oleander room

23.00-4.00 **Party at the club – congress venue Esplanade Club**

Friday, 30 August 2019

8.00–9.30 **Registration**

9.30–10.30 **Plenary Lecture**

Oleander room

Myriam Valero

Evolution of haploid-diploid life cycles and mating systems in benthic algae: empirical approaches in several brown and red seaweeds

10.30–11.00 **Coffee Break**

11.00–13.30 **Symposia 11, 13**

Symposium 11:

Emerald room

Biotechnological applications of algae: algae as a source of food, drugs, energy

Co-Convenors: Dagmar Stengel and Freddy Guihéneuf

- 11.00–11.30 Freddy Guihéneuf – Recent advances in microalgal biotechnology with an emphasis on biofilm cultivation (11KN.1)
- 11.30–12.00 Michael Lakatos – Transition from aquatic to terrestrial systems: a paradigm change in Algae Biotechnology? (11KN.2)
- 12.00–12.15 Christian Wilhelm - Chlamydomonas can be converted into an efficient and continuously working glycolate-production machine without forming biomass (11OR.1)
- 12.15–12.30 Julie A. Z. Zedler - Protein scaffolding for next-generation cyanobacterial cell factories (11OR.2)
- 12.30–12.45 Ana Marques - Marine macroalgae as functional food towards genome protection – from aquaculture to human health (11OR.3)
- 12.45–13.00 Mariana Carneiro - The effect of led lighting on night biomass losses of *Nannochloropsis oceanica* grown in outdoor pilot scale raceways (11OR.4)
- 13.00–13.15 Izabela Michalak - Freshwater macroalgae as a sustainable raw material for the production of agrochemicals (11OR.5)
- 13.15–13.30 **Charlotte Falaise** - *Haslea ostrearia*-like diatoms or ‘la vie en bleu’ (11OR.6)

Symposium 13:

Paris room

Lessons from local experiences: the Adriatic Sea

Co-Convenors: Ante Žuljević and Cecilia Totti

- 11.00–11.30 Adriano Sfriso – Macroalgae in the lagoon of Venice: long-term changes, alien taxa and environmental impact (13KN.1)
- 11.30–12.00 Michele Giani - Long-term impact of riverine discharges and nutrients loads in the northern Adriatic Sea (13KN.2)
- 12.00–12.15 Sonia Giulietti - *Pseudo-nitzschia* spp. in the NW Adriatic Sea: morphological and molecular characterization, seasonal distribution and toxin content (13OR.1)
- 12.15–12.30 Ljiljana Iveša - Effects of increased seawater temperature and benthic mucilage formation on shallow *Cystoseira* forests of the west Istrian Coast (northern Adriatic Sea) (13OR.2)
- 12.30–12.45 Ana Baričević - Hidden diatom diversity of the northern Adriatic through metabarcoding (13OR.3)
- 12.45–13.00 Nataša Kužat - Centric diatoms response to nutrient limitation in Northern Adriatic (13OR.4)
- 13.00–13.15 Martina Orlando-Bonaca - Changes in macroalgal richness and abundance in the infralittoral belt of northern Adriatic Sea (13OR.5)
- 13.15–13.30 Fabio Rindi - Diversity patterns and long-term changes in the benthic macroalgal vegetation of the northern Adriatic Sea (13OR.6)

13.30–14.30 **Lunch**

14.30–16.00 **Symposia 11, 6HBS Croatian Phycological section**

Symposium 11 (continued):

Emerald room

Biotechnological applications of algae: algae as a source of food, drugs, energy

Co-Convenors: Dagmar Stengel and Freddy Guiheneuf

14.30–14.45 Evmorfia Kilimtzidi - Enhanced phycocyanin and protein content of *Arthrospira* by applying neutral density and red light shading filters: a small-scale pilot experiment (11PO.28 in abstract book/11OR.13)

14.45-15.00 David A. Russo - Efficient secretion of a lytic polysaccharide monooxygenase in a fast-growing cyanobacterium (11OR.8)

15.00-15.15 Seungbeom Seo - Increasing biomass and lipid productivity by engineered *Phaeodactylum tricornutum* (11OR.9)

15.15-15.30 Gergely E. Lakatos - Rapid screening test to estimate microalgae viability using photosynthesis measurements (11OR.10)

15.30-15.45 Hui-Yin Yeong - Effect of culture medium on the biomass production and biochemical composition of selected Malaysian Thraustochytrids (11OR.11)

15.45-16.00 Ana I. Barros - Heterotrophy as a tool to enable large scale microalgae cultivation for CO₂ mitigation (11OR.12)

14.30-16.00 6HBS Croatian Phycological section:

Paris room

Sixth Croatian Botanical Symposium, 6HBS (<http://www.imp-du.com/sesti-hrvatski-botanicki-simpozij/invitation>) will be held on 30-31 August 2019 in the Esplanade Hotel in Zagreb, Croatia. The purpose of the 6HBS is to promote cooperation and exchange of scientific and professional knowledge and experiences among the domestic botanists and phycologists and colleagues from other countries.

Croatian Phycology section is open to all EPC7 participants and program is available here: <http://www.imp-du.com/sesti-hrvatski-botanicki-simpozij/programme>

16.00-16.30 Closing remarks

Emerald room