

Program

Sunday, March 08.03.2020

from 12.00 on Registration

Poster location

15.30 - 16.00 Coffe Break



Herman-Josef Saal

16:00 Welcome M.Mittag/B. Becker

Lecture Hall

Session 1: Habitats and Flora (Chair: Kai Bischof)

Lecture Hall

16:10 – 16:40

The Algal Populations in Eifel National Park

K.-H. Linne von Berg

16:40-17:00

Epiphytic diatoms on macroalgae of the South Shetland Islands (Antarctica): sociology and morphometry through time

A. M. Burfeid Castellanos, R. P. Martin

17:00-17:20

Grit Crust: a novel type of soil biocenosis, forming the coastal Atacama Desert's living skin

P. Jung, K. Baumann, L. Lehnert, E. Samolov, S. Achilles, M. Schermer, L. Wraase, K.-U. Eckhardt, M. Bader, P. Leinweber, U. Karsten, J. Bendix, B. Büdel

17:20 – 17:40

Phytoplankton assessment – a “chronosequence” of phototrophs and determination approaches at a Baltic Sea lagoon

M. Albrecht, R. Schumann



17:40 – 18:00

Introduction of the DFG Priority Program „Antarctic Research“ with an emphasis on Polar algae

U. Karsten

18:00 – 19:00 Dinner

Refectory

Session 2 (Chair: M. Mittag)

Lecture Hall

19:30 – 20.15 Preisverleihung Schülerwettbewerb

20:15 – 20:45 Invited Lecture

***Chlamydomonas* entering the era of Synthetic Biology**

M. Schroda

Monday, March 9, 2020

7:30 – 9:00 Breakfast

Refectory

Session 3: Light perception and signaling (Chair: M. Lohr)

Lecture Hall

09:00-09:20

Antenna complexes are photosystem-specific in the diatom *Thalassiosira pseudonana*

C. Calvaruso, A. Rokka, E.-M. Aro, C. Büchel

09:20-09:40

Characterization of Aureochromes - Novel Blue Light Photoreceptors in Diatom

S. H. Im, S. Madhuri, M. Serif, B. Lepetit, P. Kroth

09:40-10:00

Characterization of the blue-light photoreceptor CRY-DASH1 in *Chlamydomonas*



reinhardtii

J. Petersen, A. Rredhi, M. Schubert, S. Oldemeyer, L. Wei, W. Li, T. Kottke, M. Mittag

10:00 – 10:30 Coffee Break



Herman-Josef Saal

Session 4: Algal Ecology (Chair: P. Kroth)

Lecture Hall

10:30-10:40

Impacts of combined temperature and salinity stress on the endemic Arctic brown seaweed *Laminaria solidungula* J. Agardh

N. Diehl, U. Karsten, K. Bischof

10:40-11:10

Winter is leaving: A crucial role for laminarin in High-Arctic kelp facing global warming during the polar night

L. Scheschonk, S. Becker, J.-H. Hehemann, N. Diehl, U. Karsten, K. Bischof

11:10-11:30

A UV-inducible sunscreen pigment found in the extracellular mucilage of aerophytic green algae (Zygnematophyceae)

A. Busch, S. Hess

11:30-11:50

Genetic diversity and distribution of xanthophycean algae across the young barrier island Schiermonnikoog

S. Epkes, A. B. Müller, S. Dultz, N. Rybalka

11:50 – 12:10

10KP: A PhyloDiverse Genome Sequencing Project

M. Melkonian, B. Melkonian

12:10 – 13:30 Lunch

Refectory



Session 5: Taxonomy and Phylogeny (Chair: B. Büdel)

Lecture Hall

13:40-14:00

Establishing metabarcodes for the rapid unambiguous identification and assessing phylogeographic structures in freshwater red algae (Rhodophyta)

J.-J. Waniek, N. Rybalka, S. Epkes, A. Gutowski, F. Freymann, E. Hoehn, J. Knappe⁶, T. Friedl

14:00-14:20

Investigating the taxonomic status of *Stichococcus* Nägeli based on ecophysiological, morphological, and molecular data

A. Van

14:20-14:40

Barcoding the green supralittoral zone: molecular identification of German *Blidingia* species indicates their distribution, phenotypic plasticity and reveals new species

S. Steinhagen, L. Duesedau, F. Weinberger

14:40-15:00

All you need to know about *Gomphonella*

W.-H. Kusber, N. Abarca, O. Skibbe, J. Zimmermann, A. T. Van, K. Buczkó, R. Jahn

15:00-15:20

Combining culture-dependent and culture-independent approaches to study diversity and distribution of Xanthophyceean algae

N. Rybalka, A. B. Müller, S. Epkes, S. Dultz

15:20 – 15:50 Coffee Break



Herman-Josef Saal

Session 6: Plant terrestrialisation (Chair: Ulf Karsten)

Lecture Hall

15:50 – 16:00



***Draparnaldia* (Chaetophorales, Chlorophyceae) – new chlorophyte model for comparative analyses of terrestrialization**

L. Caisova

16:10-16:300

Streptophyte algae: top-down comparative analyses and an inference of the biology of the earliest land plants

J. de Vries

16:30 – 18:00 Poster Session

Poster 1: CRISPR-Cas9 mediated gene-editing in Diatoms

N. Herrmann, M. Venne, M. Eudenbach, C. Büchel

Poster 2: Are Aureochromes involved in regulating diel biological rhythm of *Phaeodactylum tricornutum*?

S. Madhuri, B. Lepetit, A. Fürst, S. H. Im, P. G. Kroth

Poster 3: Ecophysiological response of Baltic Sea benthic diatoms to changing environmental conditions with reference to sea-land exchange processes

L. R. Prella, A. Graiff, S. Gründling-Pfaff, V. Sommer, K. Kuriyama, U. Karsten

Poster 4: Biodiversity of Benthic Baltic Sea Diatoms

P. T. Mutinova, K. Kuriyama, L. Prella, S. Forster, U. Karsten

Poster 5: First steps towards the growth of *Chlamydomonas reinhardtii* in a natural-like environment

T. Vuong, S. Chowdhury, R. Mukherji, P. Stallforth, M. Mittag

Poster 6: Stress response dynamics in the closest algal relatives of land plants

J. Fürst-Jansen, J. de Vries

Poster 7: Zygo spores of *Mougeotia disjuncta* from the Austrian Alps investigated by light-, polarizing microscopy, scanning- and transmission electron microscopy

C. Permann, A. Holzinger



Poster 8: From the field to the laboratory: Collection, conservation and transportation of samples for isolation of xanthophycean strains and metabarcoding studies

A. Müller, S. Epkes, S. Dultz, N. Rybalka

18:00 – 19:00 Dinner

Refectory

19:00 – 20:00 General Meeting Phycology Section

Lecture Hall

20:00 – 21:30 Auction/Silent Auction of Phycological Memorabilia

Lecture Hall

Tuesday, March 10, 2020

7:30 – 9:00 Breakfast

Refectorium

Session 6: Applied Phycology (Chair: I. Lang)

Lecture Hall

09:00-09:20

Improved potential of microalgae as biofactories – introducing heterologous glucose transporters in *Phaeodactylum tricornutum*

L. C. Krämer, D. Wasser, C. Büchel

09:20-09:40

***Fucus* aquaculture in the Baltic Sea – receptacle formation and fouling are the main challenges**

R. Meichßner, P. Krost, R. Schulz

09:40-10:00

Using *Chlamydomonas* Mutants to Simplify a Biotechnological Approach for Glycolate Production

S. Rössler, A. Schad, H. Wagner, C. Wilhelm



10:00-10:20

A novel application concept of microalgae: Green algae and cyanobacteria as a living cover for the restoration of potash tailings piles

V. Sommer, K. Glaser, U. Karsten

10.30 – 11:00 Coffee Break



Hermann-Josef Saal

Session 7: Biotic Interactions (Chair C. Büchel)

Lecture Hall

11:00-11:20

Interactions between diatoms and bacteria in freshwater photoautotrophic biofilms

A. Lapointe, L. Dow, D. Spiteller, P. Kroth

11:20-11:40

The role of LRR protein receptors for diatom-bacteria interaction

R. Yang, N. Yamada, B. Schulz, M. Buhmann, P. Kroth

11:40-12:00

Shedding Light on Microalgal-Bacterial Interactions

V. Hotter, Y. Hou, S. Sasso, M. Mittag

12:00 – 13:30 Lunch

Refectory

Session 8: Applied Phycology and Algal Physiology (Chair: S. Sasso) Lecture Hall

13:30-13:50

Microalgae-based metabolites as biolubricant additives

A. Gavalás-Olea, I. Mannot, A. Siol, J. Köser, Y. Sakka, J. Filser, J. Thöming, S. Mesing³, R. Larek, T. Koch, R. Gläbe, I. Lang



13:50-14:10

An algal enzyme being key in the biosynthesis of the most abundant marine carotenoids

O. Dautermann, D. Lyska, J. Andersen-Ranberg, M. Becker, J. Fröhlich-Nowoisky, H. Gartmann, L. C. Krämer, K. Mayr, D. Pieper, L. M. Rij, H. Wipf, K. K. Niyogi, **M. Lohr**

14:10-14:30

Selection of Cyanidiales strains for Phycocyanin Production

J. Kuhnholz, R. Krüger, **I. Lang**

14:30 – 15:00 Coffee Break



Herman-Josef Saal

15:30 Departure of bus to National Park Eifel/Burg Vogelsang

19:30 Congress Dinner

Schafstall

Presentation of the Pringsheim Prize, Förderpreis and the Poster prizes

Wednesday, March 11, 2020

7:30 - 9:00 Breakfast

Refectory

Departure or start of algal identification training course (13:00)

Kapitelsaal