

# BioSC International Workshop

## „Sustainable solutions for closing nutrient loops using algae“

September 19<sup>th</sup>, 2019 | NGP<sup>2</sup> | Forckenbeckstraße 51, 52074 Aachen

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| 9:30  | Registration and Welcome Coffee  |  |  |
| 10:00 | Welcome and organization   | <b>Ladislav NEDBAL</b><br>Forschungszentrum Jülich, Germany  |  |
| 10:15 | Summary of the 2018 workshop conclusions                                   | <b>Patrik JONES</b><br>Imperial College London, UK<br><b>Dean CALAHAN</b><br>Forschungszentrum Jülich, Germany<br><b>Tania V. FERNANDES</b><br>Netherlands Inst. Of Ecology (NIOO-KNAW), Wageningen, The Netherlands   |  |
| 11:00 | Summary of the ATS pre-workshop  | <b>Dean CALAHAN</b><br>Forschungszentrum Jülich, Germany   |  |
| 11:30 | Pitch presentations  | <b>Alshawamreh Loay</b><br><b>Baldassarre-Svecova Eva</b><br><b>Dombinov Vitalij</b><br><b>Hasport Nils</b><br><b>Hofmann Diana</b><br><b>Jablonowski Nicolai David</b><br><b>Kant Josefina</b><br><b>Kuchendorf Christina</b>   |  |
| 12:00 | <b>Lunch</b>   |  |  |
| 13:00 | Pitch presentations  | <b>Mansouri Hakimeh</b><br><b>Mau Lisa</b><br><b>Müller Andreas</b><br><b>Portius Eva</b><br><b>Ruff Anna Joelle</b><br><b>Schrey Silvia</b><br><b>Theilen Ulf</b><br><b>Valton Marine</b><br><b>Vasilieva Svetlana</b><br><b>Weber Sophie</b><br><b>Willbold Sabine</b> |  |
| 13:45 | Summary information about the virtual special issue of Algal Research 2019 | <b>Patrik JONES</b><br>Imperial College London, UK<br><b>Ladislav NEDBAL</b><br>Forschungszentrum Jülich, Germany  |  |

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| 14:00 | <b>Lecture I: Microalgae-based wastewater treatment</b><br><i>Session chair: Patrik Jones, Imperial College London, UK</i>                                    |  |
|       | Closing cycles from wastewater by microalgae: future challenges   | <b>Tania V. FERNANDES</b><br>Netherlands Inst. Of Ecology (NIOO-KNAW), Wageningen, The Netherlands |
|       | The immediate future of ATS in Germany  | <b>Dean CALAHAN</b><br>Forschungszentrum Jülich, Germany   |
|       | Treatment of hydroponic greenhouse effluent with Nordic microalgae  | <b>Sema SIRIN</b><br>University of Turku, Finnland   |
|       | Phos4You - Chlamydomonas acidophila as an alternative for Phosphorus recovery from wastewater   | <b>Ania ESCUDERO</b><br>Glasgow Caledonian University, Scotland                                    |
| 15:00 | <b>Lecture II: Microalgae physiology</b><br><i>Session chair: Ladislav Nedbal, Forschungszentrum Jülich, Germany</i>  |  |
|       | Intracellular storage of P absorbed by microalgae during luxury uptake  | <b>Alexei SOLOVCHENKO &amp; Alexandr LUKYANOV</b><br>Lomonosov Moscow State University, Russia     |
|       | Raman microscopy of microalgae: A useful tool for rapid monitoring of energy- and nutrient-storing structures at the single-cell level                        | <b>Peter MOJZEŠ</b><br>Charles University, Czech Republic  |
|       | Dynamics of P and N reserves in algal cells as revealed by Raman microscopy (biology)   | <b>Lu GAO</b><br>Forschungszentrum Jülich, Germany   |
|       | Solid-state sulture, no biomass production  | <b>Yagut ALLAHVERDIYEVY-RINNE</b><br>University of Turku, Finnland                                 |
|       | tba   | <b>Patrik JONES</b><br>Imperial College London, UK   |
| 16:15 | <b>Coffee Break</b>   |  |
| 16:45 | <b>Lecture III: Microalgae application</b><br><i>Session chair: Tania v. Fernandes, Netherlands Inst. Of Ecology (NIOO-KNAW), Wageningen, The Netherlands</i> |  |
|       | The ValuePP process – Biotechnological phosphate recycling from canola seed press cake into food-grade polyphosphate  | <b>Jonas Johannes CHRIST</b><br>RWTH Aachen University, Germany                                    |
|       | Biofertilization of wheat with algal biomass reducing soil nitrous oxide emission without yield penalty in desert agroecosystems                              | <b>Ilya GELFAND &amp; Inna KHOZIN-GOLDBERG</b><br>Ben Gurion University, Israel                    |
|       | Algae technology in rural areas and development projects  | <b>Diana REINECKE-LEVI</b><br>Forschungszentrum Jülich, Germany                                    |
|       | Global Challenges – Regional Solutions „BioökonomieREVIER Rheinland“  | <b>Holger KLOSE</b><br>Forschungszentrum Jülich, Germany   |
| 17:45 | Wrap-up   |  |
| 18:00 | <b>Dinner</b>   |  |
| 19:00 | <b>Networking</b>   |  |