

Workshop „CyanoStop2017”

Date: from July 4rd to July 6th 2017

Title: Treatment techniques for cyanotoxin removal and control in reservoirs and drinking water

Chairman of Scientific Committee: Dariusz Dziga

Organizers of Local Committee: Anna Maksylewicz, Sylwia Marek, Magdalena Maroszek

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28 participants (lecturers, students and PhD students) from:

Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University
Department of Biochemistry, Åbo Akademi University, Turku,
Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad,
Faculty of Biology, Adam Mickiewicz University
Faculty of Oceanography and Geography, University of Gdansk
Faculty of Biology, University of Łódź,
University of Life Sciences in Lublin,
Laboratory of Algology and Microbial Ecology, Nature Research Centre, Vilnius

Main topics:

- The occurrence of cyanobacteria and cyanotoxins; dynamic of blooms in central Europe
- Cyanobacteria in terrestrial environments
- The role of cyanophage in population dynamics of cyanobacteria
- The biological methods for the cyanotoxins degradation/removal
- The molecular tools for investigating cyanobacteria, cyanotoxins and biodegradation processes
- The biotechnological application of cyanobacterial peptides and the biotechnological potential of terrestrial cyanobacteria
- The physiology of cyanobacteria
- The integration of best practices to block cyanobacterial overgrowth

Invited speakers:

J. Meriluoto, Z. Svircev, J. Mankiewicz-Boczek, H. Mazur-Marzec, S. Sulcius, I. Jasser, T. Dulić, T. Vazić, M. Kokociński and:

- Przemysław Malec (Jagiellonian University, Poland): The oligomerization of photosystem I in cyanobacteria – a biological phenomenon and its effects on carotenoid biosynthesis in *Synechocystis* PCC6803
- Kinga Kłodawska (Jagiellonian University, Poland): Protein – lipid homeostasis in thylakoid membranes of *Synechocystis* sp. PCC6803
- Pengcheng Fu (Hainan University, China): Study of Cyanobacterial Extremophiles

Laboratory trainings:

- microscopy analysis of cyanobacterial strains
- interpretation of MS spectra of cyanopeptides
- MC biodegradation assays and HPLC analysis of degradation products
- production of recombinant Mlr proteins – crucial steps
- purification of Mlr proteins by affinity chromatography
- electrophoresis and Western blot of Mlr proteins
- detection of genes involved in MC synthesis in environmental samples