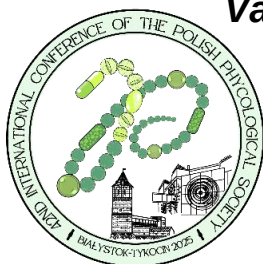




42nd International Conference of the Polish Phycological Society



Vast potential of algae and cyanobacteria – – from diversity to application



May 27th -30th, 2025
Białystok - Tykocin, NE Poland

PROGRAMME



**Tuesday, May 27, 2025 – Faculty of Biology, University of Białystok,
Ciołkowskiego 1J Street, Prof. Alina Myrcha Auditorium (No. 2003)**

- 9.00-12.30 Registration of the Conference Participants
- 12.30-15.00 Opening Ceremony with Plenary session, Chairman: **Elżbieta Wilk-Woźniak**
Aleksandra Rozumko, Edmund Baran, Weronika Mierzejewska, Aleksandra Syguła, Monika Supronik, Marta Nartowicz *Not only lectures and laboratories: the research of the Włodzimierz Chętnicki Biological Science Club*
Iwona Jasser, Agnieszka Pasztaleniec *The impact of Prymnesium parvum on the river ecosystem - insights from the ecological catastrophe on the Odra River in 2022 and beyond*
Judita Koreivienė *Advantages and bottlenecks in applied phycology: an example of environmental algal biomass*
- 15.30-16.00 Lunch at the “Pod Herbem” restaurant, Wiejska 49| Street
- 16.00-18.30 Sightseeing in Białystok
- 18.30-19.15 Transfer to Tykocin
- 20.00-23.00 Dinner at the Castle

Wednesday, May 28, 2025 – Castle in Tykocin, Poświętna 1 Street

- 7.30-9.00 Breakfast in the accommodation areas
- 9.30-11.30 Sightseeing in Tykocin
- 11.30-12.00 Coffee Break at the Castle
- 12.00-12.30 Joao Matos da Costa *Narew National Park, lecture*
- 12.30-14.30 **Session 1. Taxonomy and diversity of eukaryotic algae and cyanobacteria**, Chairman: **Elliot Shubert**
- 12.30-13.15 Plenary lecture: **Jan Kaštovský, Jan Pokorný, Jeffrey R. Johansen** *Hot stories: diversity, ecology and biogeography of thermal cyanobacteria*
- 13.15-13.35 Julia Sulkowska, Joanna Żelazna-Wieczorek *Diatom diversity in spring ecosystems of the Western Bieszczady Mountains*
- 13.35-13.55 Sulastris Arsad, Małgorzata Bąk, Romain Gastineau *Floristic insights into marine diatoms of the Gulf of Tomini, Indonesia*
- 13.55-14.15 Konrad Wołowski, Joanna Lenarczyk, Jolanta Piątek, Bartosz Kulig, Grzegorz Boczek, Paweł Pałka, Jarosław Koza, Andrzej



Chlebicki, Wojciech Spisak *Autochthonous algae in post-mining waters*

14.30-15.30 Lunch at the Castle

15.30-17.15 **Session 2. Applied phycology**, Chairman: **Barbara Pawlik-Skowrońska**

15.30-16.15 Plenary lecture: **Triantafyllos Kaloudis, Sevasti-Kiriaki Zervou, Sofia Iliakopoulou, Angelika-Ioanna Gialleli, Anastasia Hiskia** *Unveiling the chemical diversity of cyanobacteria through mass spectrometry-based metabolomics*

16.15-16.35 Marta Ceglowska, Hanna Mazur-Marzec *Baltic cyanobacterium Pseudanabaena galeata a source of anticancer agents*

16.35-16.55 Robert Konkel, Larbi Belyagoubi, Nabila Belyagoubi-Benahmmou, Mokhtari Soulimane, Nassima Amel, Marta Ceglowska, Waldemar Surosz, Anna Toruńska-Sitarz, Ilona Złoch, Hanna Mazur-Marzec *Antioxidant, antimicrobial and cytotoxic activities of the freshwater alga Spirogyra sp. from Algerian Desert*

16.55-17.15 Arūnas Stirkė, Kamilė Jonynaitė, Raimonda Celiešiūtė-Germanienė, Voitech Stankevič *Recent advancements in emerging physical processing technologies for sustainable algae biomass utilisation*

17.30-19.00 **Poster session**

20.00 Bonfire at the Castle

Thursday, May 29, 2025 – Castle in Tykocin

7.30- 9.00 Breakfast in the accommodation areas

9.00-10.50 **Session 3. Ecology of eukaryotic algae and cyanobacteria**, Chairman: **Jan Kaštovský**

9.00- 9.20 Dariusz Dziga *No stress, no life: cyanobacterial response to stress factors; the case of Raphidiopsis raciborskii*

9.20- 9.40 Martyna Budziak, Doris Ilicic, Hans-Peter Grossart, Wojciech Krztoń, Edward Walusiak, Janusz Fyda, Elżbieta Wilk-Woźniak *Phytoplankton under pressure – the role of environmental drivers in parasitism*

9.40-10.00 Beata Messyas, Natalia Kuczyńska-Kippen *Periphyton patterns in ponds: forest vs. field catchment type influence*

10.00-10.20 Jaroslav Kubin *Ecology of free-living freshwater heterotrophic euglenoids: Are there any (aut-)ecological phenomena among heterotrophic euglenoids?*

10.20-10.40 Joanna Mankiewicz-Boczek, Arnaldo Font Nájera, Magdalena Kluska, Francisco Josué López Hun, Milena Skóra, Michał Seweryn, Rebecca Gorney, Jerome Wai Kit Kok, Shu Harn Te, Mikołaj Kokociński, Jennifer Graham, Karina Yew-Hoong Gin,



- Dominik Strapagiel *Toxigenic blooms composed of Microcystis, Aphanizomenon or Planktothrix and related bacteria – potential ecophysiological interaction?*
- 10.40-10.50 Agata Błaszczyk, Maja Majcher, Anita Lewandowska *Airborne cyanotoxins - preliminary studies on inland transport of aerosolized toxins*
- 11.00-11.30 Coffee Break at the Castle
- 11.30-12.30 **Session 4. Varia**, Chairman: **Konrad Wołowski**
- 11.30-11.50 Daniel Parsons, Elliot Shubert *Exploring genome evolution of the green alga, Desmodesmus*
- 11.50-12.10 Jeffrey R. Johansen, Brian M. Jusko, Nicole Pietrasiak, Prashant Singh *Revision and expansion of the genus Spirirestis (Tolypothricaceae, Cyanobacteria)*
- 12.10-12.20 Maciej Karpowicz, Magdalena Grabowska, Andrew Dzialowski *Transfer efficiency of carbon, nutrients, and polyunsaturated fatty acids in planktonic food webs under different environmental conditions*
- 12.20-12.30 Jan Żeruń, Andrzej Bajguz *Around brassinosteroids in microalgae*
- 12.30-13.00 **Session 5. Harmful blooms**, Chairman: **Waldemar Surosz**
- 12.30-12.40 Arnoldo Font Najera, Magdalena Kluska, Francisco Josué López Hun, Milena Skóra, Michał Seweryn, Rebecca Gorney, Jerome Wai Kit Kok, Shu Harn Te, Jennifer Graham, Karina Yew-Hoong Gin, Ahn Chi-Yong, Dominik Strapagiel, Joanna Mankiewicz-Boczek *Cyanobacterial blooms as potential hotspots for antibiotic resistance genes – an intercontinental comparative study*
- 12.40-12.50 Agnieszka Pasztaleniec, Iwona Jasser *The sensitivity of haptophytes and cyanobacteria to the application of hydrogen peroxide in riverine experiment conditions*
- 12.50-13.00 Tümer Orhun Aykut, Robin Michael Crucitti-Thoo, Agnieszka Rudak, Iwona Jasser *Year-on-year observations of invasive cyanobacterial dynamics and water quality assessments based on the environmental parameters in post-glacial temperate lakes in Northeastern Poland*
- 13.30-14.30 Performance of amateur theater at the market square in Tykocin
- 14.30-15.30 Lunch at the Castle
- 15.30-16.30 **Session 6. The practical aspect of phycology**, Chairman: **Judita Koreivienė**
- 15.30-15.50 Iwona Bogusz, Marek Bogusz, Beata Borowska, Łukasz Szleszkowski, Joanna Żelazna-Wieczorek *A critical assessment of the diatom test of rib bone marrow as a supporting procedure in the case of drowning*



- 15.50-16.10 Ewa A. Dembowska *River phytoplankton and its importance in environmental assessment*
- 16.10-16.30 Elżbieta Zębek *Legal protection of inland surface waters. A case study of an ecological disaster in the Oder River*
- 16.30-17.00 Coffee Break at the Castle
- 17.00-18.30 **Poster session**
- 18.30-19.00 Meeting of the Polish Phycological Society
- 20.00 Conference banquet at the Castle

Friday, May 30, 2025

- 7.30-8.30 Breakfast in the accommodation areas
- 8.30 Transport to the railway station in Białystok

Posters:

1. Małgorzata Bąk *The planned Lower Odra Valley National Park – what do diatoms "say" about it?*
2. Marta Cegłowska, Judita Koreivienė, Hanna Mazur-Marzec *Biological activity of cyanobacterial biomass collected during blooms in Lithuanian inland waters*
3. Jan Cichoński, Karolina Węglarz, Jakub Guła, Daniel Broda, Grzegorz Chrzanowski *The effect of salicylate treatment and light duration on the growth and biosynthesis of valuable metabolites within green microalga *Chlorella sorokiniana**
4. Wioleta Ciempiel, Izabela Krzemińska *Bioremediation potential of extracellular polymers produced by unicellular microalgae in mixotrophic growth conditions*
5. Joanna Czerwik-Marcinkowska, Anna Maria Ociepa, Krzysztof Piksa, Adam Stebel, Anna Wojciechowska *Algae and cyanobacteria adapting to the cave habitats – green puzzles in the environmental jigsaw in the Mroźna Cave (Tatra Mountains, Poland)*
6. Danuta Drzymulska, Magdalena Fiłoc, Mirosława Kupryjanowicz *Changes in the trophic state of Lake Suchar II in Wigry National Park over the past 12 000 years – a subfossil algae proxy*
7. Alicja Faszczewska, Alicja Piotrowska-Niczyporuk, Joanna Karpińska *The effect of high-density polyethylene on oxidative stress and antioxidant response in two green algae *Chlorella vulgaris* and *Scenedesmus quadricauda**



8. Akmaral Issayeva, Nargis K. Atabayeva, Dilshat T. Mirtalipov, Beata Messyas *Algal diversity in urban water bodies of Uzbekistan as an ecological status indicator*
9. Izabela Jesionowska *Can diatoms adapt to human-altered conditions?
A model of an urban park pond*
10. Kamilė Karaliūtė, Jūratė Karosienė *Influence of temperature and pH on the stability of food-grade phycocyanin extracted from wild cyanobacteria
Aphanizomenon flos-aquae biomass*
11. Jūratė Karosienė, Simona Spudulytė, Kamilė Karaliūtė *Accumulation potential of phycobiliproteins in bloom-forming cyanobacteria: effects of temperature and light intensity*
12. Jūratė Kasperovičienė, Vilija Kalibartaitė *Mechanical/physical disruption of Microcystis cell wall for biocomponent extraction*
13. Anna Kozak *Diversity changes in the phytoplankton composition in the final part of the Cybina River*
14. Justyna Kowalczyk, Ildiko Domonkos, Chuan Ku, Przemysław Malec *Initial characterization of acetolysis-resistant polymers from algae cell walls with scanning and transmission electron microscopy*
15. Izabela Krzemińska, Marlena Szymańska, Magdalena Kusiak, Wioleta Ciempiel, Magdalena Czemierska, Anna Jarosz-Wilkolazka *Evaluation of the influence of bacterial exopolymers on microalgal cells*
16. Tomasz Lenard, Jukka Horppila, Leena Nurminen, Salla Rajala, Kari Sainio, Satu Estlander *Effects of water colour on phytoplankton diversity and biomass in boreal lakes*
17. Wanessa Lewandowicz, Adam Więcko, Magdalena Grabowska *Seasonal changes of diatom communities in urban springs*
18. Zuzanna Lewandowska, Marta Cegłowska *Anticancer potential of two Baltic filamentous cyanobacteria – Limnorphis sp. CCNP1424 and Spirulina subsalsa CCNP1310*
19. Beata Messyas, Bogusława Łęska, Radosław Pankiewicz *Ecological shifts in algal communities following Cladophora glomerata biomass removal in an eutrophic freshwater lake*
20. Karolina Mierzyńska, Piotr Zieliński *Submerged macrophytes as microplastics trap in lowland river*



21. Gediminas Petrėnas, Danguolė Montvydienė, Živilė Jurgelėnė, Sergej Šemčuk, Jūratė Karosienė *Effect of graphene oxide (GO) on diatom Nitzschia palea*
22. Gabrielė Šiurkutė, Izabelė Šuikaitė *Impact of salinization on cyanobacterium Sphaerospermopsis aphanizomenoides invasion in freshwater ecosystems*
23. Wojciech Pęczuła, Agnieszka Szczurowska *Phytoplankton communities in six reservoirs of coal mining-subsidence genesis (Polesie Zachodnie, eastern Poland) at different stages of succession*
24. Małgorzata Poniewozik, Jaroslav Kubín, Josef Juráň *Taxonomic significance of the Trachelomonas hispida lorica – study under laboratory and environmental conditions*
25. Katarzyna Puczek, Elżbieta Jekatierynczuk-Rudczyk *Diatoms as bioindicators of water quality in the hyporheic zone of urban springs*
26. Dorota Richter, Mirosława Pietryka¹, Grabowski Tomasz, Pulikowski Krzysztof *The importance of microalgae in wastewater treatment processes using natural substrate*
27. Julia Sulkowska, Joanna Żelazna-Wieczorek *The key role of springs in diatom biodiversity conservation*
28. Assel Tleukeyeva, Akmaral Issayeva *Cultivation of green microalgae on phosphorus-containing wastewater*
29. Marta Ziółek, Małgorzata Poniewozik, Franczak Łukasz, Kończak Magdalena *Summer phytoplankton of shallow freshwater lakes, West Spitsbergen*