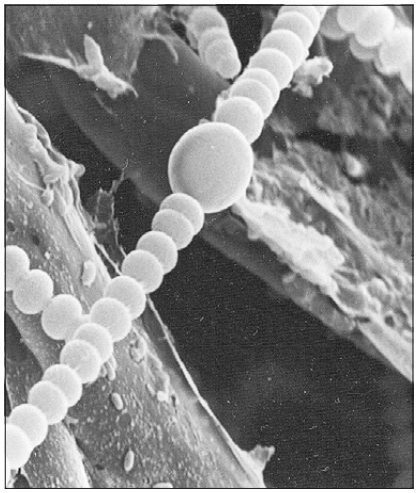
Laboratory for Paleoenvironmental Reconstruction - LAPER

BLOCDUST, GoL, cyanotoxins, biomarkers, recultivation

LAPER is recognized for establishing two new theories – the BLOCDUST model based on a role of cyanobacterial activities in the process of loess formation in semi-arid regions and Graph of Life Theory, a new concept and definition of life and living system. High-quality research focused on cyanobacteria, both in aquatic and terrestrial environments, is based on international collaboration with more than 20 countries and verified through publishing in highly-cited journals. LAPER also stands out by finding solutions for some of the biggest environmental problems of today (decline in water quality, desertification, human exposure to natural toxins, etc) and by applying the results of its fundamental research. LAPER members are also engaged in the reconstruction of past aquatic and terrestrial ecosystems.

The main topics of research: Cyanotoxin research and epidemiological study; Cyanobacterial culture collection; Cyanobacterialdatabase in Serbia; Ecoremediation; Recultivation;Paleoenvironmental and paleoclimate reconstruction; Cyanobacterial sedimentary biomarkers.



SELECTED PROJECTS

Title: *Cyanobacterial blooms and toxins in water resources: Occurrence, impacts and management*
Type: COST Action ESSEM (ES1105)
Duration: 2012-2016
Contact person:
Prof. dr Zorica Svirčev

Title: *Comparative study of past climate changes at multi-timescale in East Asian monsoon region and Westerly zone*
Type: Bilateral cooperation China-Serbia
Duration: 2017-2019
Contact person:
Prof. dr Slobodan Marković

Title: *Transformation of geospace in Serbia - past, current problems and solution proposals*
Type: National
Duration: 2011 - today
Contact person:
Prof. dr Slobodan Marković

SELECTED EQUIPMENT

- BMG Labtech Nitrogen Evaporator 12 position Oasis heating system;
- BUCHI Rotavapor® R-215;
- Vacuum Pump V-700;
- Autoklav LabCompanion ST-85G;
- Microplate reader SPECTRstar Nano, BMG Labtech.

COLLABORATIONS

- Faculty of Science and Engineering, Åbo Akademi University, Turku, Finland
- Cyprus University of Technology, Limassol, Cyprus

CONTACT PERSON

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