



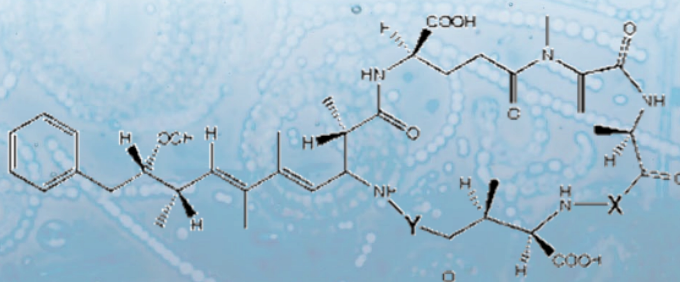
## WORKSHOP

### Cyanotoxins in Fresh Waters

#### Advances in Analysis, Occurrence, Treatment

**Monday, May 5<sup>th</sup> 2014**

09:00—16:00



### NCSR Demokritos Conference Center

P. Grigoriou & Neapoleos, Ag. Paraskevi Attikis

**Free admission — Registration on-site**

Organized by:

**NCSR Demokritos**, Institute of Nanoscience and Nanotechnology, Laboratory of Nanomaterial-Based Photocatalytic Processes and Environmental Analysis

**CyanoWater** - “Cyanotoxins in Fresh Water. Advances in Analysis, Occurrence and Treatment”, The Operational Programme “Education and Lifelong Learning”, Action “ARISTEIA”.

**CYANOCOST** - Cyanobacterial blooms and toxins in water resources: Occurrence, impacts and management” COST Action ES1105

Contact—Info:

Dr Anastasia Hiskia, NCSR Demokritos

Tel: 2106503633

hiskia@chem.demokritos.gr

**Cyanotoxins** comprise a large group of potent toxins (e.g. peptides, alkaloids, amino-acids) produced by cyanobacteria that are common in surface waters and tend to form blooms in lakes and other freshwater bodies. Exposure through drinking or bathing in waters containing cyanotoxins can seriously affect human and animal health: cyanotoxins may damage the liver, kidneys, central nervous system or may cause respiratory and gastrointestinal problems. Cyanotoxins are now recognized as an important emerging threat for water resources by WHO, USEPA and other authorities.



**Program**

08:30-09:00 **Registration**

09:00-09:15 **Welcome and Introductory Remarks**

Representatives of NCSR Demokritos and General Secretariat for Research and Technology of Greece  
Dr. Anastasia Hiskia, Research Director at NCSR Demokritos, Coordinator of CyanoWater, GH of CYANOCOST

*Session 1, Chairs: A. Hiskia, D. Dionysiou*

09:15-09:45 **Treatment of cyanotoxins and contaminants of emerging concern in water using Advanced Oxidation Processes**

*Prof. Dionysios (Dion) Dionysiou, University of Cincinnati, USA*

09:45-10:15 **Rapid chromatography – mass spectrometry of microcystins and nodularins**

*Dr. Jussi Meriluoto, Åbo Akademi University, Finland*

10:15-10:45 **Cyanobacterial blooms in Serbia – Epidemiological studies and health risk assessment**

*Prof. Zorica Svirčev, University of Novi Sad, Serbia*

10:45-11:15 Coffee break

*Session 2, Chairs: J. Meriluoto, Z. Svircev*

11:15-11:45 **Integrated LC-HRMS workflow for target, suspect and non-target screening of polar emerging contaminants in the aquatic environment**

*Prof. Nikolaos Thomaidis, National and Kapodistrian University of Athens, Greece*

11:45-12:15 **Cyanotoxin research in NCSR “Demokritos” – Overview of projects and activities.**

*Dr. Anastasia Hiskia, NCSR Demokritos, Greece*

12:15-12:45 **CYANOCOST: An international network for cyanobacteria and cyanotoxins in water resources**

*Dr. Triantafyllos Kaloudis, EYDAP SA, Chair of CYANOCOST*

12:45-13:45 Lunch

*Session 3, Chairs: N. Thomaidis, T. Triantis*

13:45-14:15 **CyanoWater: From the analysis of cyanotoxins to advanced water treatment and purification**

*Dr. Theodoros Triantis, NCSR Demokritos, Greece*

14:15-14:30 **Method development for the analysis of cyanotoxins in water**

*Sevasti Zervou, NCSR Demokritos, Greece*

14:30-14:45 **Photocatalytic degradation of cyanotoxins and taste-odor compounds in water using modified TiO<sub>2</sub> and polyoxometalates**

*Theodora Fotiou, NCSR Demokritos, Greece*

14:45-15:00 **Preparation and characterization of novel POM-TiO<sub>2</sub> photocatalysts for water purification**

*Dr. Christophoros Christophoridis, NCSR Demokritos, Greece*

15:00-15:15 **Importance of cyanobacteria and cyanotoxins for loess formation in semi-arid environments**

*Tamara Dulic, University of Novi Sad, Serbia*

15:15-15:45 **Prospects and opportunities for young researchers in the field**

*Open discussion with students and early-stage researchers*

15:45-16:00 **Concluding remarks**

*Dr. Anastasia Hiskia, NCSR Demokritos, Greece*