CYANOCOST Final Conference in Amsterdam, September 2016

CYANOCOST completed its funded period, 2012-2016 with a final Conference held at the University of Amsterdam (UvA) on 28-30 September 2016. The event was organized locally by Petra Visser (UvA). A one-day open Symposium was also organized to address key topics and progress in cyanobacteria and cyanotoxins and the other by Jef Huisman on the effects of climate change on cyanobacteria. Ludek Blaha presented the overall outcomes of CYANOCOST and identified the current gaps in knowledge while Jussi Meriluoto, Rainer Kurmayer and Anastasia Hiskia presented the books for analysis, molecular tools and water treatment respectively. Els Faasen talked about cyanotoxins analysis with emphasis on BMAA and Kaarina Sivonen presented the state-of-the-art molecular tools for toxic cyanobacteria. Ifigenia Kagalou shared experiences from restoration of Lake Karla in Greece. Erik Weenink presented the well known hydrogen peroxide method for suppression of cyanobacteria that was developed in UvA. Geoff Codd discussed the various impacts and remedial measures while Bas Ibelings' talk on “what you see is what you get” sparked lively discussions during breaks. The Symposium was very successful as it was attended by more than 120 participants, about half of them non-CYANOCOST members.

CYANOCOST at ICTC10, China

Massive participation of CYANOCOST members at the 10th International Conference on Toxic Cyanobacteria, ICTC10, which was held on 23-28 October 2016 in Wuhan, China. 59 CYANOCOST members were listed as authors in one or more papers/posters presented in the conference. 17 oral presentations were made by CYANOCOST members. 13 posters were also presented by CYANOCOSTers.

Next stop for ICTC is Krakow, Poland, in 2019, organized by CYANOCOST member Dariusz Dziga!
The Hanbook of Cyano-analysis is published!

The CYANOCOST Handbook of Cyanobacterial Monitoring and Cyanotoxin Analysis, edited by Jussi Meriluoto, Lisa Spoof and Geoffrey Codd is published by Wiley (13 January 2017). This is a valuable handbook containing reviews, practical methods and standard operating procedures.

A valuable and practical working handbook containing introductory and specialist content that tackles a major and growing field of environmental, microbiological and ecotoxicological monitoring and analysis.


Wiley offers 25% discount to CYANOCOSTers!
E-mail Wiley’s Customer Service and quote “VBN49” (till April 2017)

Editors of the Handbook (from left to right, JM, GC, LS)

The CYANOCOST Special Issue in Aquatic Ecology

The CYANOCOST Special Issue in Aquatic Ecology, titled “Cyanobacterial blooms. Ecology, prevention, mitigation and control”, edited by Petra Visser, Bastiaan Ibelings, Jutta Fastner, Myriam Bormans is now available online. The Issue contains an editorial and 13 original research papers.

Each contribution answers questions like: what is the proposed or proven working mechanism of a given method? What have been the successes and failures? What are the reasons for success or failure? How is success linked to characteristics of the waterbody being treated? The Special Issue is concluded with contributions aiming at social and political aspects of bloom management.

The CYANOCOST Handbook of Cyanobacterial Monitoring and Cyanotoxin Analysis is published!

The CYANOCOST Special Issue in Aquatic Ecology

The funded period (2012-2016) of CYANOCOST is completed and the Action has successfully achieved all aims and objectives as described in the Memorandum of Understanding. A wide network involving more than 400 individuals has been established. For this reason, the Steering Group has decided to continue networking activities in order to promote further collaborations, disseminate information and explore new ways for funding. As a result, a new website/blog (www.cyanocost.net or www.cyanocost.eu) has been developed, together with the CYANOnews newsletter, to serve as the main networking tools, in addition to the book page and twitter. You are invited to connect and distribute those media to anyone who wants to join the network. You can send comments and suggestions using the “Contact” page in the website and your contributions to CYANOnews and to other media by e-mail to Tri Kaloudis.
MANTEL (Management of Climatic Extreme Events in Lakes & Reservoirs for the Protection of Ecosystem Services) is a Marie Skłodowska-Curie Action European Joint Doctorate Innovative Training Network (EJD ITN) that commences in January 2017. MANTEL opened a call for 12 Early Stage Researcher (ESR) PhD studentships (initial deadline for applications is the 31st January 2017).

**Associate Professor, Ecohydrology, School of Natural Resources and the Environment, University of Arizona** (the position opened on 22/12/2016).

**Faculty position in freshwater molecular ecology (open rank), Department of Biological Sciences, Institute on Research and Education in Energy, Environment and Water (RENEW) at the University at Buffalo** (deadline February 15, 2017).

**Scientific Multimedia Faculty Assistant, The National Socio-Environmental Synthesis Center (SESYNC), Annapolis, USA** (deadline January 13, 2017).

**Postdoc Position in Microalgae Biotechnology, ALGATECH Centre, Trebon, Czech Republic** (deadline 14 January 2017).

**Research Post-doc position** for the project “Interaction between algae and grazers: sensing the menace and responding to it”, ALGATECH Centre, Trebon, Czech Republic (deadline 31 January 2017).

**Research Associate Environmental Chemistry Modeller, NERC Centre for Ecology & Hydrology, Lancaster UK** (deadline 18 January 2017)

**PhD Student in the field of environmental DNA analyses of plankton, Alfred-Wegener-Institut, Germany** (deadline 10 February 2017)

### CYANOevents

10th Symposium for European Freshwater Sciences (SEFS), 2-7 July 2017, Oломouc, Czech Republic.

**ASLO 2017 : “Mountains to the Sea”, Feb 26- Mar 3 2017, Honolulu, Hawaii**

2nd International Water & Health Congress, 13-17 February, Antalya, Turkey

**Gordon Research Conference : Mycotoxins and Phycotoxins, 18-23 June, Easton, MA, USA**

**US EPA “Inland HABs” Webinar, February 14, 2017, Online**

International Conference on Chemistry and the Environment, ICCE 2017, 18-22 June 2017, Oslo, Norway, including a Satellite Event “Algae toxins: Methods and challenges”

### CYANOworld

There is a lot going on in USA after the Toledo water crisis regarding cyanobacteria and cyanotoxins research and regulations. Recently the US EPA published the National Lakes Assessment (NLA) 2012 report, that highlights nutrient pollution as a widespread problem across US and an increase in detection of microcystin. On December 2016, US EPA released the final version of the Fourth Unregulated Contaminant Monitoring Rule that forces public water systems to monitor microcystins (LR, RR, YR, LA, LF, LY, total MCs), nodularin, anatoxin-a, and cylindrospermopsin according to specified analytical methods. Also EPA has identified draft recommended concentrations of the cyanotoxins to protect human health while swimming or participating in other recreational activities in and on the water. If you are interested in what is going on in USA, you can subscribe to the Newsletter “Freshwater HABs News” by sending an e-mail to the editor, Dr. Lesley V. D’Anglada, US EPA.
CYANOResearch
This column features on-going research projects by CYANOCOST members.

Kristel Panksep: Toxic cyanobacteria in Estonia

Kristel is a PhD student in the Estonian University of Life Sciences. She is interested in DNA based biological monitoring in aquatic environments with focus on the molecular based identification and quantification of potentially toxic cyanobacteria. Continuing eutrophication of Estonian waterbodies has led to the changes in phytoplankton communities and due to that the occurrence of bloom-forming and potentially toxic cyanobacteria is more and more widespread. Kristel got fascinated with toxic cyanobacteria in 2012, when she spent three months at the University of Helsinki working with Kaarina Sivonen's group in a short-term scientific mission funded by CYANOCOST. As no one in Estonia was studying toxic cyanobacteria with molecular methods at that time, she had a great opportunity to implement these techniques after returning home. Currently she studies the role of toxic cyanobacteria in aquatic food webs and how they impact the biodiversity of Estonian large lakes under different stressors in a changing environment. She is a member of CYANOCOST network and since 2016 member of COST Action CA15219: Developing new genetic tools for bioassessment of aquatic ecosystems in Europe (DNAqua-Net).

CYANOpapers
This column features papers that acknowledge CYANOCOST (in random order). A list of all publications can be downloaded from www.cyanocost.net (updated regularly).


Henna Savela, Markus Vehniäinen, Lisa Spoof, Sonja Nybom, Jussi Meriluoto, Urpo Lamminmäki (2014), “Rapid quantification of mcyB copy numbers on dry chemistry PCR chips and predictability of microcystin concentrations in freshwater environments”, Harmful Algae, pp. 280-286. http://dx.doi.org/10.1016/j.hal.2014.08.007
