



**Hydrobiological Institute
of the Academy of Sciences of the Czech Republic**
České Budějovice, Czech Republic

Centre for Cyanobacteria and Their Toxins
*RECETOX - EU-DG Research Centre of Excellence for
Environmental Chemistry and Ecotoxicology,
Masaryk University Brno, Czech Republic*

TOCOEN, s.r.o.

organise

THE 5TH INTERNATIONAL CONFERENCE ON RESERVOIR LIMNOLOGY AND WATER QUALITY

**“Reservoirs – establishing the balance
between human use and biotic
integrity“**

and the satellite workshop

**“Cyanobacterial water blooms:
effects,
consequences and management”**



**Hotel Continental, Brno, Czech Republic,
August 27 – September 2, 2006**

ANNOUNCEMENT

OBJECTIVES

Reservoirs have been built all over the world in naturally lakeless regions to increase availability of water resources. In many aspects they resemble natural lakes and host essentially the same type of aquatic ecosystem. However, organisms in reservoirs can be seriously constrained by operation actions that are necessary to provide designed reservoir uses, for example pool fluctuation (storage reservoirs), artificial mixing regime (pumping reservoirs), or increased trophic status (aquaculture). Apparently, a conflict is arising between the contemporary demands to improve ecological integrity and biodiversity of water bodies (e.g., EU Water Framework Directive, US Clean Water Act) and multiple, often contradicting reservoir uses.

The aim of conference is to bring together limnologists, environmentalists, and engineers to highlight ecological potential of reservoirs under nutrients load and sum up processes, mechanisms, and measures that can be employed in multipurpose, yet sustainable and close-to-nature reservoir management.

MAIN THEMES OF THE CONFERENCE (AUGUST 27 – 31, 2006)

Hydrodynamics – their impacts to spatial and temporal distribution of nutrients, organisms, and water quality; modelling approaches

Nutrients – natural background levels; response of trophic conditions to nutrient loading; biogeochemical cycles; retention; internal loading, ecological effects

Littoral communities – role of macrophytes, epiphytes and benthic algae in nutrient cycles and stabilisation of biomanipulation measures; benthos and its use in ecosystem assessment; pressures on littoral communities due to reservoir uses

Pelagic communities – phytoplankton assemblages as a result of nutrient availability, mixing, and light conditions; occurrence and control of phytoplankton toxic species; zooplankton, protists, and bacteria – mediating role in transferring the nutrients and energy between top and bottom ecosystem levels; indicators of structure of food webs

Fish – assessment of community structure; top-down control of the aquatic ecosystem; impacts of fisheries on the aquatic ecosystem

Long-term development of reservoir ecosystems and synthetic studies of the ‘*catchment-reservoir*’ ecosystem – aging of newly

impounded reservoirs; impacts of catchment land use and pollution control measures; effects of global climate change

Reservoir assessment – geographical specificity of aquatic ecosystem structure and vulnerability to human pressures; eco-region definition; setting up reference conditions; biodiversity and ecosystem integrity indicators; scoring systems to evaluate and compare ecological conditions

Reservoir management – allowable pool fluctuations for meeting water quality and aquatic ecosystem requirements; assessing the recreational carrying capacity; measures to control phytoplankton, macrophytes, and internal nutrient loading

MAIN THEMES OF THE WORKSHOP (SEPTEMBER 1 – 2, 2006)

Effects of cyanobacterial blooms and cyanotoxins on reservoirs use, biodiversity, human health, ecological stability, safety of drinking water production and recreational use, advances in methods and signalling systems for detection of cyanotoxins and water blooms (Subject 1 - 1st day)

Management and risks assessment of cyanobacterial blooms – ecological, social and economical consequences of cyanobacterial bloom development, Advanced methods and techniques for cyanobacterial bloom control, lake and catchments revitalisation scenarios and recommendations, protection against bioterrorism (Subject 2 – 2nd day)

The workshop will be organised as guided discussion between selected keynote speakers and participants. Monitored discussion, conclusions and recommendations as results of the workshop will be available at the end of workshop on web page.

PROGRAMME COMMITTEE

Hejzlar J. (Czech Republic)
Kennedy R. H. (USA)
Kubečka J. (Czech Republic)
Maršálek B. (Czech Republic)
Marsalek J. (Canada)
Matěna J. (Czech Republic)
Naselli-Flores L. (Spain)
Novotny V. (USA)
Šimek K. (Czech Republic)
Straškrábová V. (Czech Republic)
Suknik A. (Israel)

PROGRAMME

The programme includes plenary keynote lectures, single oral presentation sessions (no multiple stream sessions), poster presentation, and excursions to reservoirs in Moravia to see various problems *in situ*.

OFFICIAL LANGUAGE

The official language of the Conference, Workshop and Proceedings is English.

PRESENTATIONS

The organizers invite all professionals and researchers to present a paper relating to one of the themes of the Conference or Workshop. Let others know about your work and results through an oral or poster presentations – see the Abstract submission form on the conference web site.

All contributions will be included in the conference Proceedings.

Selected contributions focused to conference themes will be published after *peer review* process in an issue of *Hydrobiologia* or *Water Science and Technology*. A NATO-series book will be published from the contributions of workshop on cyanobacteria.

VENUE

The 5th International Conference on Reservoir Limnology and Water Quality will take place in the Hotel Continental, Brno, Czech Republic, **August 27 - 31, 2006**. The satellite workshop *Cyanobacterial Water Blooms: Effects, Consequences and Management* will take place in the Hotel Continental, Brno, Czech Republic, **September 1 - 2, 2006**.

ACCOMMODATION

The accommodation will be available in the Hotel Continental (online booking only) and in the student hostel Garni (see the Accommodation form on the conference web site).

REGISTRATION

Registration and abstract submission is via the conference web site.

FEE

The full registration fee is 300 EUR per person and 190 EUR for students before July 1, 2006. The registration fee after July 1, 2006 will be EUR 360 and EUR 210 (students). Registration for a single event (conference or workshop) is possible.

BRNO THE CITY

Brno – history and present

Brno is a metropolis in South Moravia and it is the second largest city in the Czech Republic with population of more than 400 000 and it is the administrative, cultural and economic centre of the region.

In 2003, Brno celebrated 760th anniversary of the conferment of city rights. It emerged through the slow development of settlement in the Brno basin by domestic inhabitants and colonists from Western Europe. The first written reference to Brno dates back to the year 1091. The basic city rights were conferred upon it in 1243 by the Czech King Václav I. In the 14th century, under Charles IV, Brno was protected as a royal town by the royal Špilberk castle. After 1641 Brno became the capital of Moravia. In the 17th century, during the Thirty-Year War, it successfully resisted a long siege by the Swedish army. In the 19th century, the city experienced a dynamic development of industry and became one of the most important industrial centres of the Austro-Hungarian Empire and after collapse of the empire, the capital of the Moravian-Silesian Province. In the inter-war period Brno experienced substantial growth and all-round development becoming one of the country's most important centres of business, industry, science, technology, education, arts, and sports.

Brno is known for its many famous citizens, such as Johann Gregor Mendel, naturalist and founder of modern genetics, or Leoš Janáček, world-renown composer.

The city is home of the Moravian Museum, art galleries, an opera house, several theatres and philharmonic orchestra, many churches and fine Renaissance and Baroque buildings, and of the counties most important international trade fairs. In 1928 the core of the Brno Exhibition Centre was developed for the occasion of the Exhibition of Contemporary Culture. Brno is also a prominent centre of higher education; the Masaryk University, the Technical University, the University of the Veterinary Medicine and Pharmacy, the Agricultural University, and the Janáček Academy of Music and Drama are situated in Brno. Today, it is the seat of the Supreme Court, the Constitutional Court and the State Assembly. The city is an important crossroad of rail, road and air transportation and industrial and trade centre of South Moravia. (<http://www.brno-city.cz/main/index-en.htm>)

Masaryk University

The university is named after T. G. Masaryk, the first Czechoslovak president, whose continuous and strong support of the cause has played a decisive role in the establishing of the university. The university was established on January 28, 1919 as a

second Czech university. At present, the university is divided into 9 faculties, with around 130 departments, institutes and clinics. The university has about 2,794 teaching staff, of which some 500 are associate and full professors. Student enrolment is approximately 25,000. (<http://www.muni.cz>)

TRAVEL TO BRNO

Brno is located between Prague and Vienna (Austria) and has convenient connections. Travelling by air – it is possible daily to Prague or Vienna and from there by bus or rail to Brno (approximately two and half-hours). By road - Brno is linked by motorway to Prague and Vienna (about 200 km from each). Limited connection to Brno by air also exists.

The Hotel Continental is located in the centre of the city (see web site <http://www.continentalbrno.cz>).

SECRETARIAT OF THE CONFERENCE AND THE CONTACT ADDRESS (for registration, accommodation and all other organizational problems)

**Irena Holoubková, TOCOEN, Ltd.; Kamenice 126/3,
625 00 Brno, Czech Republic
Phone: + 420 549 494 519
Cell phone: + 420 754 259 856
Fax: + 420 549 492 840
E-mail: holoubkova@recetox.muni.cz**

DEADLINES TO REMEMBER

Abstract submission: **January 31, 2006**
Selection of oral and poster presentations: **April 15, 2006**
Registration and early bird payment: **May 1, 2006**
Submission of manuscript for journals: **September 2, 2006**

INFORMATION

Full information about the registration, the presentation and the accommodation on the conference and the workshop you can found at

<http://www.reslim2006.cz>