

**WORKSHOP
ON
URBAN LAKE MONITORING & MANAGEMENT (23rd -25th Sept 09)**

**Brainstorming Session on Conservation & Management of Urban Lakes
26th Sept 09**

Urban lakes depend on various interdependent and inter-related factors that are vital for its existence and role in the maintenance of ecological balance. Concern for the declining water quality and impaired ecological conditions in many aquatic ecosystems caused by various anthropogenic activities has necessitated greater stress for monitoring and sustainable management. Understanding the nature and extent of the problems, quantified sources of pollution, and relationships for determining the response of aquatic ecosystems to various levels of pollution is required for formulating a variety of control and restoration measures. Integrated studies are required to understand the full range of human impacts on aquatic ecosystems.

In this course the participants are taught how lakes / wetlands are defined, categorized, and distributed locally and globally; their patterns of development; their ecological and biogeochemical functions; their values to human society; the causes of wetland degradation and destruction; concepts and techniques in wetland restoration and creation; and issues in wetland management, key research areas in wetland science and policy issues in the context of rapid urbanisation.

Workshop structure

Environmental Management - A case with Aquatic ecosystems: Introduction to Environmental Management focusing on urban lakes

Introduction to Wetlands: Introduction, Wetlands, Functions, Biodiversity, Restoration, Urban Wetlands, Movie on Freshwater Ecosystem

Wetlands Monitoring: Introduction, Wetlands Monitoring Why and How?

Urban Wetlands – A overview on current status of Bangalore Lakes

Biological Monitoring: Introduction, History of Biological Monitoring, Case studies Diatoms, Insects, Molluscs, Amphibians, and Birds

Geoinformatics in wetland monitoring: Introduction to Geoinformatics, data collection, spatial analysis, Visualisation of physical, chemical and biological data.

Monitoring lakes: How to Collect Data, Different ecological Monitoring techniques, Ecological Sins, process and Analysis in Wetlands studies, Introduction to some of the free data analysis softwares (PAST, R, BIODIVERSITY R)

Field Visit: Field visit to Bangalore lakes and data collection exercises

Lab session: **Environmental Chemistry Lab:** Basic Physico Chemical Analysis of Water and Biological Analysis Methods. **Computer Lab:** GIS lab sessions with QGIS, PAST, and BiodiversityR Softwares demo.

Lectures: lab sessions: 75:25

Faculty: IISc Faculty will deliver the lectures and lab sessions will be handled by research scholars and project staff.

Date: 23 -25th September, 2009

Brainstorming Session on Conservation & Management of Urban Lakes: 26th Sept 09

Venue: C/STUP seminar Hall (SID Building), IISc campus (location details are available at <http://cistup.iisc.ernet.in>)

Workshop schedule: 9 30 am to 6.30 pm

Eligibility: The workshop is meant for Research Scholars and Master students. The age of the participant be less than 30 as of 30 August 2009 (no registration and accommodation charges for selected young researchers). All the applicant should send a write-up (less than 750 words each) on "Need and challenges of wetland Monitoring and Management in India" and "how wetland monitoring workshop would benefit their career" (One page on each title). Application and write-up is to be routed through their institution. Selected outstation candidates will be paid Rupees 500/- as their travel support and accommodation and food during the workshop will be taken care by the organisers.

Workshop Registration Fee:

There is no registration fee for the selected young Research Scholars and Master students (< 30 years) and unemployed women graduates.

Officials deputed from government agencies: Rs 2500

Individuals from Non-Governmental organisations: Rs.1000

University Faculty (ISTE members): Rs 500

University Faculty (non ISTE members): Rs.1000

Individuals deputed from industry and consultancy agencies: Rs.5000

Demand draft to be drawn in favour of "Urban lake monitoring and management, CISTUP, IISc" payable at Bangalore

Accommodation: Single room accommodation is available at the Hoysala/Jawahar Guest house on the campus. The participants have to request in advance along with the registration form for such accommodation. Accommodation charges would be Rs 150 per person per day.

Application Submission: Intending applicants may use the attached application form (or a photocopy of the same) and submit to the below address

Deadlines: Completed Application form with other enclosures should reach us on or before 5th September 2009

Intimation of Selection: 9th September 2009.

Please mail the application form along with other enclosures to

Dr. T.V. Ramachandra,

Convenor, Urban Ecology, Environment and Policy Research Group

Centre for infrastructure, Sustainable Transportation and Urban Planning (C/STUP), Indian Institute of Science, Bangalore 560 012

Email: cestvr@cistup.iisc.ernet.in, cestvr@ces.iisc.ernet.in

Tel: 91-080- +91-80-2293 2521, 2293 3099; Fax: 080-23601428

Website: <http://ces.iisc.ernet.in/energy/>

<http://cistup.iisc.ernet.in>

REGISTRATION FORM
(Please mail to reach before 5th September 2009)

Name: _____

Institution: _____

Address: _____

Permanent Address _____

E Mail: _____

Tele (+ STD Code): _____ Fax (+ STD code): _____

Mobile: _____ Date of Birth: _____

(attach a copy of attested SSLC marks card – young researchers)

Sex : Male / Female

Highest Academic Qualification and subject (with proof) _____

Professional Experience: _____

Research Interest: _____

Accommodation required: YES / NO

Registration (Research Scholar/) / (non-teachers)

I agree to abide by the rules of the C/STUP, IISc. If selected I shall participate in the workshop for the entire duration.

Date

Place

Signature

Name:

(Photocopy of this form may be used).

The applicant Mr. / Ms./Dr. _____ from our institution will be permitted to attend the workshop – **URBAN LAKE MONITORING & MANAGEMENT** at C/STUP, Indian Institute of Science, Bangalore, if selected for the same.

Date

Place

Signature of the Research Supervisor/Head of the institution with seal.