



Lake 2016: Conference on Conservation and Sustainable Management of Ecologically Sensitive Regions in Western Ghats

[THE 10TH BIENNIAL LAKE CONFERENCE]

Date: 28-30th December 2016

Venue: V.S. Acharya Auditorium, **Alva's Education Foundation**, Sundari Ananda Alva Campus, Vidyagiri, Moodbidri, D.K. Dist., Karnataka, India – 574227, Phone: +91 8258 238105
Symposium Web: <http://alvascollege.com/upcoming-events/lake2016>

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

E Mail: lake2016@alvascollege.com; lake2016@ces.iisc.ernet.in;
 lake2016symposium@gmail.com; cestvr@ces.iisc.ernet.in; energy@ces.iisc.ernet.in

Organised by

Energy and Wetlands Research Group [<http://ces.iisc.ernet.in/energy>],
 Centre for Ecological Sciences, Indian Institute of Science, Bangalore 560012

Alva's College Moodbidri & Alva's Institute of Engineering and Technology, Mijar, Moodbidri, Dakshina Kannada – 574227, Karnataka, India, Phone: 08258-250275, 236531, 08258- 250200 to 207
 Fax: 08258-237341, principal@alvascollege.com

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 NRDMS Division, The Ministry for Science and Technology (DST), Government of India

Lake 2016: Conference on Conservation and Sustainable Management of Ecologically Sensitive Regions in Western Ghats

Introduction: Symposium focusing on lakes/wetlands popularly known as “**Lake Symposium**” was initiated by the Energy & Wetlands Research Group at Centre for Ecological Sciences, Indian Institute of Science, Bangalore in the year 1998. The theme was broadened in 2000 (Lake 2000) with a wider participation of education institutions, Governmental and non-governmental organisations, etc. The basic idea of the symposium was to bring out the trends in ecosystem conservation, restoration and management including the hydrological, bio-physical, people’s participation and the role of non-governmental, educational and the governmental organizations and the future research needs. **Lake 2016** will be the 10th Biennial Lake Conference focusing on “**Conservation and Sustainable Management of Ecologically Sensitive Regions in Western Ghats**” will be held at foothills of Western Ghats. The theme of World Wetlands day 2016 is **Wetlands for our Future: Sustainable Livelihoods** to demonstrate the vital role of wetlands for the future of humanity and specifically their relevance towards achieving the new Sustainable Development Goals. Lake 2016 conference provides a unique opportunity to increase understanding of the role of wetlands in sustaining the food, water and human livelihood with the challenges faced by these fragile ecosystems.

Wetland ecosystems are cradles of biological diversity, providing water and primary productivity upon which countless species of plants and animals depend for survival. The degradation of these vital ecosystems is linked to continuing problems of land cover changes, deforestation, habitat fragmentation, pollution, indiscriminate disposal of liquid and solid wastes, and issues related to economic productivity and ecological security. The structural changes in the ecosystem due to land cover changes, will influence the functional aspects namely hydrology, bio-geo chemical and nutrient cycle, which are evident in many regions in the form of conversion of perennial streams to seasonal and disappearance of water bodies leading to a serious water crisis. There is growing evidence that biological diversity will be severely threatened by rapid climate change. Also, hydrological changes could be the dominant effect of climate change, as snowmelt increases, as evaporation rates increase and as droughts, storms and floods intensify. Much of the hydrological changes will be reflected in changes in freshwater ecosystems including most of the wetland areas. The biological impacts include dwindling of the biodiversity, habitat damage and loss of spawning grounds of aquatic organisms, reduction in inland fisheries resources and loss of vegetation. Conservation of natural resources through sustainable ecosystem management and development is the key to our secured future. Formulation and implementation of action plans that best conserve wetland resources require an understanding of issues, concerns and threats to water resources. Approaches towards this direction include:

- Fostering participation of all stakeholders to ensure that individuals and organizations are provided an opportunity to participate in the development of aquatic resources conservation activities;
- Encouraging intergovernmental initiatives through partnerships between communities and non-profit organizations;
- Identifying significant natural, recreational, economic, cultural, scenic resources and aquatic ecosystem values;
- Identifying potential threats to aquatic resources and values;
- Recommending policies and actions that can be undertaken to restore, maintain or enhance aquatic and terrestrial resources.
- Recommending policies and action plan towards the conservation and sustainable management of ecologically sensitive regions in Western Ghats – water tower and food bowl for peninsular India.

Scope: Lake 2016– ‘*Wetlands for our Future: Sustainable Livelihoods*’ would demonstrate the vital role of wetlands for the future of humanity and specifically their relevance towards achieving the new Sustainable Development Goals. Lake 2016 conference provides a unique opportunity to increase understanding of the role of wetlands in sustaining the food and water with the challenges faced by these fragile ecosystems. Lake 2016 would focus not only on updating of the current knowledge of the scientific community and also would bring in awareness among students, teachers and public. This would provide a platform for interaction among researchers, policy makers, academics and NGOs and address the issues related to wetlands and biodiversity in an era of climate change. This would help in developing a stronger network among experts and institutions in order to develop efficient strategies for the conservation and management of fragile ecosystems. As a part of the conference it has been decided to have theme based lead lectures by the eminent scholars, paper and poster presentations by researchers, school and college students.

Objectives: Focus of **Lake 2016** would be (i) assessment of the present status and conservation aspects of wetlands, lakes, tanks, ponds, swamps, streams and rivers in the Western Ghats, (ii) presentation by researchers, practitioners, students of case studies focusing on biodiversity, ecology, present status, threats, conservation measures required, (iii) discussion of current programmes on restoration, conservation and management of wetlands, (iv) role of education institutions, non-governmental organisations, religious organisations, (v) discussion of people’s livelihood and fundamental right towards equitable resource allocation through scientific assessment of ecosystem goods and services, (vi) presentation by students (schools and colleges) based on documentation focusing on wetlands – biodiversity, present status, ecology, conservation and protection needs, (vii) allocation of financial and human resources to conserve and protect ecologically fragile ecosystems, (viii) proposals by students and non-governmental organisations for conservation, protection, restoration and sustainable management of aquatic ecosystems, (ix) discussion on research gaps and activities to be initiated by researchers to evolve appropriate strategies towards conservation of ecosystems in Western Ghats, and (x) developing strategies for conservation and sustainable management of ecologically sensitive regions in Western Ghats to sustain water, food and human livelihood.

THEMES: Papers are invited on the following themes from researchers, planners, development managers, economists and social scientists, school (VIII – XII students) and college students, school and college teachers.

Topics for Paper Presentation/ Poster in Lake 2016:

1. Wetlands for future: sustainable livelihood;
2. Food and water security, people's livelihood;
3. Climate Change and Ecological Sensitiveness of Western Ghats;
4. Biodiversity& Ecology: Western Ghats;
5. Wetlands and swamps: Restoration, Conservation and Management;
6. Aquatic and Terrestrial Ecosystems: Linkages
7. Land use, Land cover dynamics in Western Ghats
8. Carrying Capacity of Western Ghats;
9. Carrying capacity of river basins in Western Ghats;
10. Valuation of Ecosystem Goods and services;
11. Sacred Groves (*kans, devarakadu*) and Myristica Swamps;
12. Eco-Tourism in Western Ghats and Carbon sequestration;
13. Application of Geoinformatics in Wetland Management;
14. Natural and Anthropogenic disasters;
15. Limnology, aquatic ecology, biodiversity and prospects of bio-monitoring;
16. Pollution –terrestrial and aquatic - Monitoring and Management, bioremediation;
17. Sustainable Agriculture and organic farming;
18. Coastal ecosystems – Biodiversity, Ecology, Productivity and livelihood aspects;
19. Prospects of Renewable Energy (solar, biofuel, bioenergy) and Energy Conservation;
20. Environmental Education and Sustainable Development;
21. Environment Ethics and Green Technology;
22. Environment Literacy.

There are **three awards in students and teachers category**— High School (VIII, IX, X); College (XI, XII and UG) and Teachers (school and college). Awards for the best paper presentation would include a Certificate and a Memento. The best posters would be similarly, awarded.

ACCOMMODATION:

- Key speakers and invited delegates would be accommodated at Guest house in the college campus.
- Students and teachers would be accommodated at Student's Hostel on campus
- Delegates whose paper is accepted for technical session will be accommodated at hostel on first come first serve basis.
- Delegates requiring accommodation need to mention the requirement in the registration form. Room rent is required to be paid by the delegates as per the tariff in the respective hotel (Rs. 1000/person/day – non AC room and Rs 1500/person/day for AC room).

REGISTRATION FEE

- Delegates*: Rs. 2,500/-, Accompanying person: Rs. 1500/-
- Research scholars and University faculty*: Rs.2000/-
- **Masters students***: INR 1000/- (mandatory to attend all three days)
- **UG students***: INR 500/- (mandatory to attend all three days)
- Representatives* from NGO: Rs. 5,000/-, Industry:10.000/-, Govt Agency: 5,000/-
- School and College students: Free. The organizing committee has decided to waive registration fee to school students and school teachers whose papers are accepted for presentation in the technical session.

Demand draft be drawn in Favour of the ‘Lake 2016, Alva’s College, Moodbidri, Dakshina Kannada. DD to be sent along with duly filled in registration form.

*Mandatory to attend all the 4 days to get the conference certificate.

The registration fee would include registration kit, working lunch and tea during the symposium. Accompanying person will have access to all technical sessions and hospitality as per delegates except registration kit.

EXHIBITION STALL:

An exhibition of software and hardware related to Restoration and Monitoring technologies, Water quality analysis, Geographic Information System (GIS), Global Positioning System (GPS), Remote sensing, Image processing and Cartography, as well as products and services of other organizations and agencies working in the area related to the theme of the conference, will be organised. Organisations / Agencies can participate in the exhibition on payment of fee of INR 25,000. Registered agencies would be allowed to make 10 minutes presentation. Interested agencies may contact the working President, Lake 2016 and remit the fee through DD drawn in favor of "**Lake 2016, Alva’s College**" payable at Moodbidri.

Lake 2016 SPONSORSHIP DETAILS:

Lake 2016 welcomes the support through sponsorship. Logo & Name of Sponsors will be displayed appropriately in Backdrop, Stands & Souvenir of Lake 2016. Sponsors will be given adequate mileage thru coverage.

Category of Sponsor	Fee	Complementary delegates & stall
Diamond Sponsor	Rs. 5,00,000/-	(4 delegates, 12sqm exhibition stall)
Gold Sponsor	Rs. 2,50,000/-	(4 delegates, 6 sqm exhibition stall)
Silver Sponsor	Rs. 1,50,000/-	(2 delegates, 4 sq m exhibition stall))

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LAKE 2016 Organising Committee:

Honorary President: Dr. M. Mohan Alva, Chairman, Alva's Education Foundation®, Moodbidri

President: Mr. Vivek Alva, Trustee, Alva's Education Foundation®, Moodbidri

Working President: Dr. Kurian, Cellphone: +919740668967, principal@alvascollege.com

Chairman: Dr. T.V. Ramachandra, EWRG, CES, IISc, Bangalore 560012

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National Scientific Committee	Local Organising Committee
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Call for papers

Call for Scientific Papers: Delegates interested in presenting papers as oral or poster need to submit the scientific paper as per the guidelines given below.

Guidelines for Paper Preparation: The full text paper (e-version preferably in a CD and one hard copy) formatted to A4 (210 mm x 297 mm) size, after having been scrutinized and accepted, will be printed as received, by offset process. Therefore, the text of the paper in English must conform strictly to the following requirements and be free from errors.

Template as per: <http://wgbis.ces.iisc.ernet.in/energy/lake2014/proceedings.php>

Top/bottom margin	25 mm (on first page 35 mm)
Left/right margin	25 mm (all pages)
Typing area	160 mm x 247 mm (including folio), single space single column
Total pages	8 -10 pages including figures, tables, photographs, references etc., if any.
Font type	Times New Roman/Arial
Title	14 point BOLD CAPITALS
Author's Name	12 point Bold Upper-Lower (Do not prefix name with/Ms./Dr./Prof.)
Affiliation (designation, organisation and place)	<i>11 point italics</i>
E Mail ID, Telephone number and Mobile	11 point
Organisation web URL	11 point
Main headings	10 point BOLD CAPITALS
Subheadings	10 point Bold Upper-Lower
Text	10 point normal
Print	Laser Print or letter quality

The paper title, name(s) of author(s), affiliation and address, center justified, should be typed in a space of 50 mm from the top margin on the first page. The paper should begin with a synopsis of not more than 200 words describing the aim(s) of the work, methods, results obtained and conclusions. Type the headings, subheadings and paragraphs aligned with the left-hand margin (Align Left). Text justified on both sides is preferred. Use double space between paragraphs, and between section headings/subheadings and paragraphs. Do not number paragraphs, but number section and sub-sectional headings except synopsis, in conformity with established convention. The manuscript should be prepared by using MS Word (suitable for Windows). Figures should be drawn in black Indian Ink on translucent paper or acetate material (Gateway Tissue) with lettering of appropriate size using stencils. The figures should be placed nearest to the first reference in the text. Photographs on glossy paper may be included, if absolutely necessary. The authors must send brief bio-data (100 words) and the recommendations that they would like to be considered as a part of the conference based on their presentations.

Posters: Size A 0 and template as per

Programme Details:

Date	Morning Session (9.00 am – 1.00 pm)	Afternoon Session (2.00 pm – 7.30 pm)
Day 1	Inauguration, Presidential Address, Release of Conference Proceedings, Chief Guest address, Keynote – Fragile Ecosystems of Western Ghats: Conservation and Management	Wetlands in Central Western Ghats: Success Stories Session on Temple Ponds Cultural Programme - Yakshagana
Day 2	Western Ghats Biodiversity, Ecology and Livelihood. Technical Sessions: Western Ghats – Biodiversity, Eco-Economics, Energy, Geo-visualisation, Livelihood, Environmental Ethics and 9 th and 8 th Students presentation (parallel sessions)	Technical sessions: Terrestrial Ecosystem, Aquatic Biodiversity, Wetlands Ecosystem, Aquatic Toxicology and Waste Water Treatment and 9 th and 8 th Students presentation (parallel sessions)
Day 3	Conservation and Sustainable management of ecologically sensitive regions in Western Ghats Technical Sessions: Urban Dynamics, Hydrology and Soil and Teachers presentation (parallel sessions)	Technical Sessions: Coastal Ecosystem Interactive Session, Panel Discussion, Cultural programme, <i>Sahyadri Young Ecologist Award 2016</i> (student) and <i>Sahyadri Ecologist Award 2016</i> (teacher), Valedictory, prize and certificates distribution.
Day 4	<i>Field Visit</i>	

Dates to Remember

Registration [Registration form].	15th September 2016
Submission of scientific papers (full length / extended abstract), posters with the Registration Form (with the registration fee, depending on the category) – delegates presenting papers/posters.	15th September 2016
Review of Papers and posters by the committee	30th September 2016
Final submission of the revised manuscript (based on review)	30th October 2016
Notification of Acceptance of Papers (on web)	15th November 2016
Lake 2016 Conference	28-30 th December 2016
Field work	31 st December 2016

Paper Acceptance details at:

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

E Mail: lake2016@alvascollege.com; lake2016@ces.iisc.ernet.in;
lake2016symposium@gmail.com; cestvr@ces.iisc.ernet.in; energy@ces.iisc.ernet.in

**LAKE 2016: Conference on Conservation and Sustainable Management of
Ecologically Sensitive Regions in Western Ghats**

Registration form:

1	Name		
2	E mail		
3	Mobile		
4	Phone		
5	Fax		
6	Designation		
7	Department		
8	Institution		
9	Organisation Address		
10	Correspondence Address		
12	Presenting -	Paper	poster
13	Title (paper / poster)		
	If Yes, Title of the paper /Poster		
	Enclosed: Abstract / Paper (e-version and hard copy): (Please ensure CD is virus free)		
	e-version of the Abstract and paper may also be sent to	lake2016@ces.iisc.ernet.in; lake2016symposium@gmail.com	
14	Registration fee	Amount:	DD No:
	Bank		
15	Accommodation	Required	YES / NO
	Accommodation Charges	Amount:	DD No:
	Bank		
16	Travel Details	Arrival	Date & time
		Departure	Date & time

(All fields must be filled) *DD in favour of Lake 2016, Alva's college, Moodbidri

Signature of Participant

Signature of HOD/Principal

Energy & Wetlands Research Group, CES, Indian Institute of Science, Bengaluru

The Energy and Wetlands Research Group at the Centre for Ecological Sciences (CES), is actively involved in studies and training on issues related to environment, water resources, energy, ecology, wetlands, geographic information systems, environmental impact assessment and natural resource management. The Centre for Ecological Sciences, founded in 1983 with the support of Ministry of Environment and Forests offers exciting opportunities for research in a variety of areas in ecology. Over the past 25 years, and more, CES have instilled a tradition of rigorous enquiry in diverse areas of ecology, evolution and behavior. The projects of CES are often integrative which uses multiple approaches, from theoretical and laboratory studies to field-based research, to explore the research questions. A number of CES research areas are breaking new ground in ecology while others have significant roles in conservation. Details at <http://ces.iisc.ernet.in/energy>
https://www.researchgate.net/profile/T_V_Ramachandra/publications

Indian Institute of Science (<http://www.iisc.ernet.in>)

The Indian Institute of Science (IISc) was founded in 1909 as a result of the joint efforts of Jamsetji Nusserwanji Tata, the Government of India, and the Maharaja of Mysore. In 1886, Jamsetji Tata conceived of a university of science that will work for the benefit of India, and in 1898 created an endowment for establishing such an institution.

Over the 105 years since its establishment, IISc has become the premier institute for advanced scientific and technological research and education in India. Beginning with 2 departments and 21 students in 1911, today IISc has 39 departments, units, or centres, 3500 students, and about 500 academic and scientific staff, supported by 600 administrative personnel. Out of this population of students, about 2200 are in various PhD programs, almost 900 are enrolled for various Masters degrees, whereas about 400 are registered in the newly established, research oriented, four-year Bachelor of Science (Research) programme, of which the first batch graduated in 2015.

Alva's Education Foundation (R) Moodbidri (<http://alvas.org/>)

Alva's Education Foundation (R) Moodbidri, was established in 1995 by visionary chairman Dr. M. Mohan Alva to provide the quality education to the rural students mainly in and around Moodbidri. He has succeeded in developing Moodbidri as education hub in South Canara with 20 various Educational Institutions. These educational Institutions are characterized by quality education across a broad range of disciplines in the field of Medicine and Allied health Sciences, Arts, commerce, Business & Management, Basic Sciences, Engineering & Technology, Social Science, Education, Physical Education, Pre University Courses and Primary Education. The Foundation also organizes many cultural and literary events like "Alva's Virasath" and Alva's Nudisiri" and festivals of all communities to infuse rich meaning in to the contemporary social life which is otherwise fraught with modern monotony and mundane fullness. Alva's Pragati is a mega job fair which provides job to job seeker across the state and have provided more than 25,000 jobs since the inception.

Address for Communication

Dr. Kurian

Working President, Lake 2016
 Principal, Alva's College
 Vidyagiri, Moodbidri, Dakshina Kannada – 574227
 Moodbidri, Karnataka, India,
 Phone: 08258-250275, 236531,
 08258- 250200 to 207,
 Cellphone: +919740668967
 Fax: 08258-237341,
 principal@alvascollege.com
<http://alvascollege.com/upcoming-events/lake2016>

Dr. T.V. Ramachandra

Chairman, Lake 2016
 Energy and Wetlands Research Group, TE 15,
 Centre for Ecological Sciences
 Third Floor, E wing, New Bioscience Building
 [Near D Gate], **Indian Institute of Science**,
 Bangalore 560012
 Phone: 91-080-22933099/2293 3503 (extn. 101/107)
 E mail: cestvr@ces.iisc.ernet.in, lake2016@ces.iisc.ernet.in
Lake2016symposium@gmail.com
 Conference Web: <http://ces.iisc.ernet.in/energy>



Glimpses of 2014 conference @ Sirsi, Uttara Kannada

LAKE 2014, Conference on Conservation and Sustainable Management of Wetland Ecosystems in Western Ghats
13-15 November 2014



