

KEY QUESTIONS

1. How can we better understand feedbacks between climate change and biodiversity?
2. How do we maintain a balance between bioresource management and socio-economic development?
3. Is spatial biodiversity special? - Geomatics perspective!
4. How do cryospheric changes in polar regions and high mountains affect biodiversity, water cycle and global climate?
5. How can we better predict and manage the natural hazards and extreme weather events?
6. How can we better understand the intricacies between terrestrial and marine bio-geochemical cycles?
7. What are the ways forward to achieve the net-zero targets through nature-based solutions?

THEMES/TECHNICAL SESSIONS

- I. Biodiversity and Land Cover Dynamics
- II. Geomatics and Data Analytics
- III. Forest and Agricultural Resources & Biotechnology
- IV. Climate, Extreme Weather and Natural Hazards
- V. Global Cryosphere and The Himalayas
- VI. Biogeochemistry - Terrestrial and Marine
- VII. Nature-based Solutions and Net-Zero Targets

MEMORIES OF BDCC-2010



BDCC-2023

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INTRODUCTION

Healthy ecosystems constitute healthy planet. In this connection, ecosystem restoration is a win-win strategy that is crucial to attain Sustainable Development Goals (SDGs) and climate targets of the Paris Agreement. The on-going climate change is unequivocally anthropogenic and together with other stressors like deforestation, land degradation, biological invasion, etc. has resulted in species losses and shifts in landscape dynamics. The carbon cycle and the water cycle, arguably the two most important large-scale processes for life on Earth, depend on biodiversity at genetic, species, and ecosystem levels and can yield feedbacks to climate change.

Geomatics and data analytics have revolutionized our understanding on the impacts of climate change and ecosystem responses. The effects of climate change are particularly felt in fragile ecosystems like that of the Himalayas which harbor rich biodiversity and support several dependent communities. Climate extremes and natural hazards are becoming more prevalent especially in vulnerable ecosystems. By joining hands with experts from various science arenas such as ecology, oceans, cryosphere and atmosphere, it would be easier to build climate change-resilient ecosystems as a way of nature-based solutions to realize SDGs and net-zero targets.

MEMORIES OF BDCC-2018



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Welcome to IIT Kharagpur



Commemorating the UN Decade on Ecosystem Restoration
3rd International Workshop on



BIODIVERSITY AND CLIMATE CHANGE -

Sustainable Development Perspective



3rd BDCC 2023
(16-19 February 2023)



Centre for Ocean, River, Atmosphere and Land Sciences
(CORAL)

Indian Institute of Technology Kharagpur

BDCC-2023

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Location: Situated about 120 km west of Kolkata, Kharagpur can be reached in about 2 hours by train from Howrah railway station or 3 hours from Kolkata Airport. The Institute is a 10-minute drive (5 km) from Kharagpur railway station. Private taxi, auto or rickshaw can be hired to reach the Institute.

Weather: Winter (October to February) is moderate and pleasant (10 to 25°C). Summer (March to June) is hot (25 to 40°C) and sometimes humid. Rains occur normally between June and September.

For more information: <http://www.iitkgp.ac.in/>

TENTATIVE SCHEDULE

16.02.2023

1400 hrs
1430-1630 hrsRegistration
Tutorial - I/II(Species Distribution Modelling using Machine Learning/
Soft Techniques in Environmental Geochemistry and Sediment Analysis)
Tutorial-III/IV [**Tea Break**]

1630-1830 hrs

(Geomatics and Data Analytics using Open Source - GEE/
A hierarchy of glacier models)

1900-2200 hrs

Interactions & Kick-off Dinner

17.02.2023

0800-0920 hrs
0925-1130 hrs

Breakfast

Inauguration

Tea Break

1130-1200 hrs

Plenary Talks

1200-1330 hrs

Lunch Break/ Award Contest- POSTER

1330-1430 hrs

Campus visit/ Networking/ **Tea Break**

1430-1600 hrs

Technical Session /Plenary Talks

1630-1830 hrs

Cultural Program

1900-2030 hrs

GALA Dinner

2030-2200 hrs

18.02.2023

0800-1030 hrs

Breakfast / Technical Session

1100-1130 hrs

Tea Break

1130-1330 hrs

Technical Session

1330-1430 hrs

Lunch Break

1430-1630 hrs

Technical Session/ Journal SIs Meeting

1600-1630 hrs

Tea Break

1630-1800 hrs

Technical Session Keynote Talks

1800-2000 hrs

Valedictory and Feedback

2030-2200 hrs

Dinner

19.02.2023

0630 Onwards -Field visit (Similipal BR/Sundarbans/) - To be Confirmed

Best Oral & Poster Award Contest: Prizes will be awarded in each category.

Registration (including food, excluding Accommodation)

Before 10/02/2023 After 10/02/2023

For Scientists/officials
from academia/others:

Rs. 6000/-

Rs. 7000/-

For Students:

Rs. 4500/-

Rs. 5000/-

(*approval certificate required)

Accommodation*: (in IIT Guest House/ TGH, Limited)

Double Room with double occupancy : Rs. 1500/- + 12% GST per day (approx.)

Single Room with single occupancy : Rs. 1000/- + 12% GST per day (approx.)

Hostel Accommodation for Students : Rs. 700/- per day (approx.)

Important Dates

Abstract Submission Deadline Upto 05th February, 2023

(Up to 500 words in MS Word/PDF format)

Abstract Acceptance Intimation Upto 06th February, 2023

Publication in Peer-reviewed International Journals: Selected papers shall be published in Peer-reviewed International Journals.

Application Procedure: Fill in your details and submit your Abstract Title, keywords, affiliations at 12 Times New Roman Font through <https://forms.gle/hacPix4fDEw6qQz6A> or via email to bdccit2023@gmail.com. *Students need (i) to send/carry a certificate from their University/Institute or copy of Valid ID card and (ii) to specifically mention if their paper to be considered for ORAL/POSTER Award contest (iii) May apply for one tutorial each day.*Registration Fee: DD in favor of 'CEP-STC, IIT Kharagpur' (or) Electronic transfer to Name: CEP-STC, Savings A/C No: 95562200002955, IFSC: CNRB0019556 & inform with detail proof to bdccit2023@gmail.com.For more information, visit <https://sites.google.com/view/bdcciitkgp2023/home>Contact Information: M.D. Behera, Organizing Secretary
3rd BIODIVERSITY AND CLIMATE CHANGE WORKSHOP
CORAL, Indian Institute of Technology Kharagpur
Tel. 91-3222-281802/1822/1806, FAX: 91-3222-255303Centre for Ocean, River, Atmosphere and Land Sciences (CORAL) at IIT Kharagpur was established on 16th March, 2005. The important mission of the Centre is to identify & address the challenges of the Earth Systems Science & Technology.

Vision

To impart quality education in Earth System Science & Technology to meet the national requirement

Advance research and technology development on multi-disciplinary aspects of Environmental & Climate Sciences and Land-Ocean related issues

Special Issues in Elsevier/ Springer Journals Proposed

1. Journal of Environmental Management
2. Biodiversity and Conservation
3. Remote Sensing Applications: Society and Environment
4. Marine Pollution Bulletin
5. Applied Geography
6. Environmental Monitoring and Assessment
7. Tropical Ecology

In Association with

1. Indian Society of Geomatics, Kharagpur Chapter
2. International Society of Tropical Ecology, Varanasi
3. CSIR-National Botanical Research Institute, Lucknow
4. IESD, Banaras Hindu University, Varanasi
5. GB Pant National Institute of Himalayan Environ., Almora
6. Dr. Harisingh Gour Vishwavidyalaya (A Central Univ.), Sagar
7. Central University of Odisha, Koraput
8. National Institute of Ecology, New Delhi

Session In-Charge

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MK Dash, IIT Kharagpur
AK Rai, IIT Kharagpur
N Pal, IIT KharagpurJ Kuttippurath, IIT Kharagpur
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