



JAMAL MOHAMED COLLEGE (AUTONOMOUS)

PG AND RESEARCH DEPARTMENT OF BOTANY

TIRUCHIRAPPALLI 620 020

REPORT

National Seminar on Data science and emerging Computational tools for sustainable Management of Biodiversity and Environment 10 & 11, December 2024

The PG and Research Department of Botany organized a National Seminar on Data Science and Emerging Computational Tools for Sustainable Management of Biodiversity and Environment (DCSMBE 2024) in Hybrid Mode from December 10-11, 2024. Approximately 200 academic and research students participated in the seminar. Dr. H. Syed Jahangir, Head of the Department of Botany, welcomed the gathering. Dr. K. Selvabhuvaneswari, Head of the Department of Computer Science, University College of Engineering, Kancheepuram, inaugurated the seminar. Shri A. Periyasamy IFS, Chief Conservation of Forest (Additional Charge), Tamil Nadu Forest Department, served as Guest of Honor and delivered a special address. Dr. C. Sudhakarreddy, Scientist SG-Head, Forest Ecology Division, National Remote Sensing Agency, ISRO, delivered the Keynote Address via an online platform. In the technical session, Dr. K. Selvabhuvaneswari presented AI and ML Applications for Ecological Data Analysis. Dr. B. Balaguru, Organizing Secretary, proposed the vote of thanks. Dr. P. Chellapandi, Professor and Head, Department of Bioinformatics, School of Life Sciences, Bharathidasan University, Tiruchirappalli, discussed Systems Biology and its Applications. This was followed by Dr. Owais Ali Wani from Sher-E Kashmir University of Agricultural Sciences & Technology, Srinagar, Jammu and Kashmir, who delivered a lecture on AI and ML for Monitoring Soil Organic Carbon (SOC) for Climate Change Studies through online mode. Twenty participants presented their research in the form of oral presentations. On December 11, 2024, Dr. TH. Shanta Kumar from the Department of Computer Science and Engineering, Girijananda Chowdhury University, Assam, presented on Detecting and Removal of Outliers for Better Prediction through online mode. This was followed by a special session on the Environment for Jamal Mohamed College students (Poster presentation), where approximately ten students presented their research. Dr. P. Jeganathan, Scientist, Nature Conservation Foundation (NCF) Tamil Nadu, delivered a lecture on How Citizen Science Data Can Help in Saving Nature through offline mode. In the afternoon session, Dr. J. Saravanavel, Professor, Department of Remote Sensing, Bharathidasan University, Tiruchirappalli, delivered a lecture on Geodata for Disaster Management. Dr. A. Shajahan, Dean of Research and Consultancy, welcomed the gathering, and Dr. A. Ishaq Ahamed, Additional Vice Principal, presided over the function. Dr. J. Saravanavel delivered the valedictory address. Dr. B. Balaguru, Organizing Secretary DCSMBE 2024, summarized the seminar proceedings, and Dr. A. Ahamed Sherif, Co-Organizing Secretary, proposed the vote of thanks.

10-12-2024 (Tuesday)

Special Address (11:00 am – 11:20 am)
 Shri. A. PERIASAMY IFS
 Chief Conservator of Forests, Villupuram Circle
 Chief Conservator of Forests Trichy Circle (Addl. Charge)
 Tamil Nadu Forest Department, Tamil Nadu



Keynote address (11:30 am – 12:15 pm)
 Dr. C. SUDHAKAR REDDY
 Scientist-5G & Head
 Forest Biodiversity and Ecology Division, NRSC-ISRO, Hyderabad



Topic: Mapping Biodiversity in the Anthropocene: Computational Tools for Biodiversity Estimation and Conservation

Technical Session 1

Invited Lecture 1 (12:30 pm – 1:15 pm)
 Dr. K. SELVA BHUVANESWARI
 Head, Department of Computer Science and Engineering
 University College of Engineering Kancheepuram
 Kanchipuram



Topic: AI and ML Applications for Ecological Data Analysis

Lunch Break (1:20 pm -2:20 pm)

Technical Session 2

Invited Lecture 2 (2:30 pm - 3:15 pm)
 Dr. P. CHELLAPANDI
 Professor and Head, Department of Bioinformatics
 School of Life Sciences, Bharathidasan University,
 Tiruchirappalli



Topic: Systems Biology and its Applications

Technical Session 3

Invited Lecture 3 (3:30 pm - 4:15 pm)
 Dr. OWAIS ALI WANI
 Sher-E Kashmir University of Agricultural Sciences & Technology,
 Srinagar, Jammu and Kashmir



Topic: AI and ML for Monitoring Soil Organic Carbon (SOC) for Climate Change Studies

Participants Presentation : Offline/Online - Oral (4:15 pm - 5:00 pm)

11-12-2024 (Wednesday)

Technical Session 4

Invited Lecture 4 (10:00 am - 10:45am)
 Dr. TH. SHANTA KUMAR
 Department of Computer Science and Engineering,
 Girijananda Chowdhury University, Assam



Topic: Detecting and Removal of Outliers for Better Prediction

**Special Session : Student Presentation on Environment
 Offline Oral/Poster (10:45 am – 12:30 pm)**

Invited Lecture 5 (12:40 pm - 1:25 pm)
 Dr. P. JEGANATHAN
 Scientist, Nature Conservation Foundation (NCF)
 Tamil Nadu



Topic: How citizen's science data can help saving nature?

Lunch Break (1:30 pm - 2:30 pm)

Technical Session 5

Invited Lecture 6 (2:30 pm- 3:15 pm)
 Dr. J. SARAVANAN
 Professor, Department of Remote Sensing,
 Bharathidasan University,
 Tiruchirappalli



Topic : Geodata for Disaster Management

