



Abstracts of International Conference on Current Perspectives on Extremophiles and Their Biomolecules

CUPEB 2025

Organized by

Sarojini Naidu Government Girls PG (Autonomous) College,
Bhopal-462012 (MP), India



24-26 March 2025

Editor

Dr. Sanjay Sahay



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Sanjay Sahay
(Editor)

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Professor

Sarojini Naidu Government Girls PG (Autonomous) College,
Bhopal-462012 (MP), India

Conference Organizer

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About the Conference

The International Conference on Current Perspectives on Extremophiles and their Biomolecules takes place from March 24-26, 2025, in a hybrid format. Organized by Sarojini Naidu Government Girls PG (Autonomous) College, Bhopal, the conference brings together experts to explore the unique adaptations and biomolecules of extremophiles from polar regions, thermal springs, deserts, hypersaline water bodies, and deep-sea floors. These organisms provide valuable insights for industrial applications, sustainable agriculture, bioremediation, and even astrobiology. The conference facilitates the exchange of ideas and research findings to address climate change and advance scientific understanding

This Conference provides a valuable platform for experts worldwide to share their latest research, exchange ideas, and explore new opportunities in the field of extremophiles. By bringing together specialists in biotechnology, microbiology, and environmental science, the conference aims to drive innovation and address global challenges like climate change and sustainable development. Researchers, industry professionals, and students will have the chance to learn about the latest advancements and practical applications of extremophile research.

The conference covers a wide range of topics related to extremophiles and their biomolecules. Key areas include the isolation of extremophiles such as Archaea, Bacteria, and Fungi, and the study of extremozymes and bioprocesses. Discussions will also explore pharmacologically important biomolecules, the role of extremophiles in climate-resilient crops, biofuel production, and bioremediation. Additionally, the conference highlights the significance of extremophiles in astrobiology and other biotechnological fields, including nanotechnology.

About the Editor

Dr Sanjay Sahay has thirty years of teaching and research experience currently posted as Professor and Head, Department of Botany, Biotechnology and Agriculture. His main areas of research interests are Extremophiles, Extremozymes, Soil Microbiome, and Biofuels. He has published about forty peer reviewed research papers, and has two patents and two edited books viz., Handbook of Biofuels (Academic Press) and Extremophilic Fungi: Ecology, Physiology and Applications (Springer) to his credits. He has been selected as Research Award (University Grants Commission, India) and Biotechnology National Associate (Department of Science & Technology, Government of India).

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