



Editorial

Biological Chemistry: Opportunities and Challenges

As we navigate into the third decade of the 21st century, it is impossible to ignore the remarkable strides made in biological chemistry, particularly contributions increasingly gaining the attention that touches every aspect of our lives, from climatic changes/challenges to personal health, drug development and beyond.

Biological chemistry now stands at a critical juncture, holding the dual responsibility of both generating new knowledge and translating existing research into innovative, impactful technologies to benefit the society. It necessitates a continuous dialogue with the knowledge creators and exchange of ideas between various stakeholders. With this spirit, Birla Institute of Technology and Sciences (BITS), Pilani, K K Birla Goa Campus, hosted the prestigious 92nd Annual Meeting of the Society of Biological Chemists - India, SBC(I), and organized an International Conference on “Biological Chemistry: Opportunities, Challenges and the Way Forward” from December 18-20, 2023. Recognizing the significance of this conference, we at the CSIR-National Institute of Science Communication and Policy Research (NIScPR), New Delhi, agreed to bring out a Special Issue on the theme, “**Biological Chemistry: Opportunities, Challenges and the Way Forward**” in the Indian Journal of Biochemistry & Biophysics (IJBB), the flagship journal of the CSIR-NIScPR.

IJBB, a monthly premier peer-reviewed research journal in the subject area of Biochemistry, Biophysics and Biotechnology, with the JIF score of 1.5, ranks first among all the CSIR-NIScPR research journals across the disciplines. With the able guidance and active support of Editorial Board with reputed national/international experts, IJBB has been receiving considerable attention from biomedical researchers and academicians in the area of biochemistry, biophysics and biotechnology worldwide. This Special Issue with 10 select papers, including nine review articles, and one original research paper from renowned subject experts, runs into 143 pages broadly covering the “Opportunities and Challenges in Biological Chemistry”.

Overall, the articles discuss about cancer, diabetes, tuberculosis, protection of mitochondria from protein misfolding stress, phenotypic antibiotic resistance: involvement of genes and additional factors, and advances in myogenic differentiation.

Biological chemistry has captivated a diverse array of scientists and pharmaceutical industry professionals, from biochemists and biophysicists to biotechnologists and cell/molecular biologists, as well as researchers in molecular evolution and medicine. This growing interest reflects the crucial role of chemistry in understanding complex biological processes. Addressing this surge in attention, this Special Issue of the IJBB offers readers a valuable insight of the most recent advancements in the critical discipline of biological chemistry, providing a timely and insightful overview of cutting-edge research in the area.

Publication of this Special Issue was possible only with the intensive support of Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, New Delhi, and able guidance of the Editorial Board comprising globally renowned experts Prof. Stephen Dimitrov (Chief Editor, IJBB), Dr D Narasimha Rao (Executive Editor, IJBB), Guest Editors Prof. Suman Kundu and Prof Meenal Kowshik, from BITS, Goa, and the initiative taken by Dr. NK Prasanna, Scientific Editor, IJBB. We appreciate the kind encouragements from Dr Charu Verma, Head, Research Journals. Contributions from authors, peer-reviewers, and the technical support provided by the print production team of the CSIR-NIScPR for successful and timely publication of this issue deserves special mention.

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