

Preface

Fermentation Technology has emerged as one of the most challenging field to inculcate the indigenous products in Indian as well as global market. Fermentation based products are active ingredients processed through industrial fermentation techniques. They are used to manufacture various bio-based products and are environment friendly, thus are increasingly being employed in numerous industrial applications. Fermentation Technology has been successfully applied in manufacture of pharmaceutical products such as antibiotics, probiotics, monoclonal antibodies, recombinant proteins, and biosimilars *etc.*; production of organic acids & alcohols *viz.* acetone, ethanol, butanol; enzymes & amino acids; beverages like beer, spirits, and wine; food and feed products. According to Global Industry Analysis, Size, Share, Growth, Trends, and Forecast, 2017–2025, the global fermentation products market was valued at \$149,469 million in 2016, and is projected to reach at \$205,465 million by 2023, growing at a CAGR of 4.7% from 2017 to 2023.

Keeping in view the immense potential of fermentation based products and processes in global market, National Conference-cum-Industry Academia Meet was organized at CSIR-Indian Institute of Integrative Medicine with the theme of “*Opportunities and challenges in Fermentation based Industrial processes*” (IAMF 2018) during 13-14 September 2019. Participants from Indian industries, faculty and students from various universities and research institutes attended the two day event and shared their work and experiences with the audience. Special panel discussion was organized to discuss the challenges and explore the opportunities available to the industries and researchers working in the area of fermentation.

The peer-reviewed bimonthly SCI indexed journal of repute, *Indian Journal of Biochemistry and Biophysics* (IJBB), from the CSIR-National Institute of Science Communication and Information Resources, New Delhi has agreed to bring out a Special issue on the theme of IAMF 2018, “*Opportunities and Challenges in Fermentation Based Industrial Processes*” with selected papers discussed during the two day event after peer review. The articles published in this issue provide knowledge on recent developments in fermentation based processes. Overall, nine papers have been selected for publication in the special issue.

The special issue has been compiled with the hope to benefit the researchers working in the area of fermentation technology and Indian industries to make the ‘Make in India’ slogan of GOI successful. We greatly acknowledge all the authors for contributing to the special issue and reviewers for their constant support for the successful compilation of the issue. Our special gratitude is due to the Director, CSIR-Indian Institute of Integrative Medicine for his encouragement and constant support for getting the special issue published. We are grateful to the Director Dr Manoj Kumar Patariya, and Shri. RS Jayasomu Chief Scientist & Head, Research

Journals (Life Sciences), CSIR-NISCAIR, New Delhi for their unstinted support in publishing this special issue of IAMF 2018. Last but not least, we appreciate the support and extensive work done by the IJBB team (Editor Dr NK Prasanna Kumari and her team) in bringing out this excellent issue.

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