

Preface

The National Conference on “Biology and Bioinformatics of Economically Important Plants and Microbes (BBCon2012)”, was held from 17th to 19th of February, 2012 at the Department of Botany, University of North Bengal, Siliguri, West Bengal. The conference brought together a multinational body of scientists and experts to deliberate on global developments in various aspects of Biology and Bioinformatics and to discuss their findings and seek new opportunities.

Bioinformatics is fast emerging as an important discipline for academic research and industrial applications. Research and development in bioinformatics and computational biology requires the co-operation of specialized personnel from the field of general Biology, Computer science, Statistics, etc. The overall goal of the subject is to elucidate cell function and physiology from a comprehensive set of measurements. Various computational methods are being widely used to address a broad spectrum of problems including the research development and management of economically important plants, and microbes. The importance of research in the field of economically important plants, especially medicinal plants and plants for herbal products, and cosmetics and whole lot of bacterial community used for biotechnological purposes for the production of medicines, vaccines, etc. are much more relevant today than the last century. Keeping this in view, the conference aimed at gathering scientists from various disciplines for fruitful discussion and recommendation on the research and management of economically important plants and microbes through techniques of bioinformatics and general biology.

The scientific sessions of the conference contained keynote address, plenary and invited lectures and poster presentation by contributory authors. The diversified theme of the conference was focused on the following areas: Sustainable Utilization of Plant and Microbial Resource, Physiology and Biochemistry of Medicinal Plants, Taxonomy of Economically Important Plants and Microbes, Plant Growth Promoting Rhizobacteria, Biology and Bioinformatics of Diazotrophs, Genomics and Proteomics, Structural Bioinformatics, Data Mining and Machine Learning, Systems Biology, Model Design and Evaluation, Next Generation Sequencing, Pharmaceutical Applications, Immuno- and Chemo-informatics and Transcriptomics. In this special issue of the Indian Journal of Biotechnology, forefront research on various aspects of Biology and Bioinformatics is illustrated by selected peer-reviewed papers of the over 100 papers received during the Conference.

The organizing Committee of BBCon2012 is grateful to the invitees and delegates for their overwhelming response for the conference and actively participating in the discussions. Thanks are also due to the session coordinators, chairpersons, members of National and International advisory board and local organizing committee for their help and support received for the smooth conducting of the conference. The organizers also duly acknowledge the various funding agencies for providing the financial help without which it would have been very difficult to make suitable arrangements for the conference.

We are ever grateful to the Director, NISCAIR, New Delhi, and Dr M A A Khan, Editor, Indian Journal of Biotechnology who courteously agreed to our proposal to bring out the special issue of the journal based on peer-reviewed papers. We recognize our sincere gratitude to the reviewers who evaluated the manuscripts in a timely fashion. We are also thankful to all others at the Editorial Office associated with the publication of this special issue.

Arnab Sen
(Guest Editor)

