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Editorial: Special issue on “emerging biotechnology”

The main objective of this special issue from the conference is to understand emerging biotechnologies for the benefit of human welfare and nurture the students and researchers to develop entrepreneurship in biotechnology platform. The International conference on emerging areas in biotechnology for human welfare and bioentrepreneurships (ICEBHE) was held on September 11–12, 2018 at B.S. Abdur Rahman Crescent Institute of Science and Technology (BSACIST), Chennai, Tamil Nadu, India. The presentations were made from young researchers, academicians, industrialist, entrepreneurs, and stakeholders and shared their research experiences and eventually concluded with exchange of knowledge in the areas of emerging biotechnology. Biocatalysis and Agricultural Biotechnology consented to publish significant articles presented in the conference under the special issue entitled as “Emerging Biotechnology”. All the papers presented in oral and poster presentations were invited for the journal peer review process. On the whole, more than 150 papers were received from India, Mexico, China, Brazil, Portugal, Argentina, Israel, Korea, Indonesia, Viet Nam, Saudi Arabia and Malaysia. Maximum numbers of article were received from India followed by China. From the received articles, with the help of Guest Editors and Reviewers, it was carefully evaluated for the technical content, scope, followed by peer review process. This editorial process brought exciting exchange of knowledge of reading and evaluating more thought-provoking manuscripts. We are well equipped to deal with this new phase of Biotechnology as we have a fantastic team of Guest Editors and Reviewers. The submitted articles included research articles, reviews and short communications. The articles are focused on various fields of biotechnology from plant biotechnology to nanobiotechnological research. Prof. S. Hemalatha, BSACIST, handled all the plant science related research papers and made significant input to this issue. Importantly, Dr. K. Saravanakumar acted as instrumental in this issue, reviewed almost fifty percent of the articles received. His critical evaluation on the manuscripts, those are related to agriculture, molecular biology, and nanobiotechnology. Invariably, Prof. N.Thajuddin has contributed significantly on the expertise in the agriculture, microbiology and microalgae related articles. He has published groundbreaking papers on the microalgal biofuel and use of eco-friendly bioremediation studies. The role played by the Editors of a BAB journal is an outstanding one as the editors played as a gateway to the journal; choosing only the significant and outstanding papers for publication, that proven the grade after peer review. The authors at the various levels significantly contributed to this issue. Some of the outstanding contributions are highlighted. Khalid et al. (2019) reported the biosynthetic perspectives of carotenoids and its application to human health. Kathiresan et al. (2019) reported that the efficient technique for the stimulating the mangrove growth, which dealt with

novel technique was reported for the cultivation of *Rhizophora* sps. Similarly, an efficient nucleic acids extraction protocol for *Elettaria cardamomum* was reported by Palani et al. (2019). This conventional and molecular techniques used for the understanding of particular species and pave a way to the extension of research in detail. Interestingly, some of the article dealt with microalgal biocatalysis and utilization in biotechnology. For instance, Jyoti et al. (2019) reported that the optimization and partial characterization of cyanophycin synthetase from a thermophilic cyanobacterium, *Chlorogloeopsis fritschii* and transcript analysis of hydrogenase A in an indigenous microalga, *Coelastrella* sp. M-60 studied by Karpagam et al. (2019); biofuel production (Mathimani and Pugazhendhi, 2019) and biomass harvesting (MubarakAli, 2019). Some of the metabolites and phytochemicals played significant role in promotion of plant growth by influencing the enhancement of phytochemical contents and antioxidant capacity, abate saline stress, and reduce heavy metal contamination (Vasantharaja et al., 2019; Khan et al., 2019; Singh et al., 2019; Coimbra et al., 2019) and preparation of fruit by-products of *Bromelia antiacantha* Bertol. as a potential additive for laundry detergents (Bersi et al., 2019). In contrast, volatile compounds, protein, industrially important enzymes and glycolipids from goat, gut of insect and bacteria for the benefit of agricultural and biotechnological value were also reported (Sankarganesh et al., 2019; Kannan et al., 2019; Hema et al., 2019). This special issue summarizes predominately on the potential of emerging biotechnological aspects of microbes to the plant. The plant and /or microbial products such as metabolites, enzymes and polymers which are involved in the emerging bio industrial applications.

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