

## **JEB - Special Issue**

### **Recent Advances in Environmental Science and Pollution Research**

#### **Preface**

This Special Issue of *Journal of Environmental Biology* include research articles presented at International Conference on Civil, Mechanical, Chemical Engineering and Technologies (ICCMCT 2018) held at SVS College of Engineering, Coimbatore, India during February 23-24, 2018. ICCMCT 2018 served as a technical platform for multidisciplinary groups of scientists and researchers to present and exchange their research works related of Environmental and Biotechnology to Civil, Mechanical, Chemical and Allied areas of engineering. This technical conference witnessed participation from researchers, academicians and students from various institutions and research organizations. After preliminary screening and technical review, 100 papers were accepted for presentation.

The Editors are grateful to Editor-in-Chief of *Journal of Environmental Biology*, a peer-reviewed, leading International Journal publishing original research papers dealing with all aspects of Environmental Sciences and Environmental Engineering for expressing consent to publish only select 17 papers from ICCMCT 2018 as a **Special Issue**. This Special Issue covers broader focus on environmental related problems and their solutions as reported by the authors covering sustainable water and environmental engineering aspects. It also deals comprehensively with waste management, bioenergy, treatment of pollutants, bio-and-nanotechnological applications in the environment. This special edition will serve as a reference for undergraduate and postgraduate students, faculty, and researchers in the civil, chemical, environmental engineering, environmental science, agriculture and ecological fields of environmental management. It is a collective work of contributors from various fields. Each topic has been discussed to provide adequate information on each topic.

The topics covered in Special Issue include characterization study on squid pens extracted beta-chitosan coated magnetite nanoparticles; Utilizing *Borassus flabellifer* sprout peel sugars by *Pseudomonas fluorescense* for degradation of textile effluent; Biosorption of chromium from aqueous solution by *Chaetomorpha antennina* sp., Phytoremediation of *Bacopa monnieri* in heavy metal; Physico-chemical characteristics analysis of solid waste dump site; Grey relational analysis in the optimization of adsorption process; Production of bioethanol from lignocellulosic banana peduncle waste using *Kluyveromyces marxianus*; Characterization of calcium oxalate crystals isolated from *Beta vulgaris* root; Anaerobic treatment of coir retting wastewater for phenol degradation and chemical oxygen demand analysis; Air quality assessment of an urban area and epidemiological investigations in Chennai mega city; Degradation of hydrocarbon oil spills by using isolated fungal species with laccase activity; Biodiesel from jojoba oil using ultra sonicator; Modification of cement strength using rice husk; Production of anti-microbial adhesives; Biosorption of synthetic dyes from textile industrial effluent using waste papaya latex; Photocatalytic degradation of methylene blue dye using dysprosium oxide/bismuth oxide (Dy<sub>2</sub>O<sub>3</sub>/Bi<sub>2</sub>O<sub>3</sub>) nanocomposite.

The Guest Editors of this Special Issue also thank the authors who have tirelessly contributed to the publication through various stages of rigorous review process. It is great pleasure to acknowledge Mr. M. Dineshkumar, Assistant Professor, SVS College of Engineering, Coimbatore, India for his commitment in bringing the research articles into this special issue. We also extend our sincere thanks to all the advisory board members of the conference, key note speakers and reviewers for their valuable guidance and technical support. We thank the R&D Division and the entire team of JEB for their excellent job in bringing out this Special Issue.

We extend our sincere thanks to the Management, Head of the Institution and other supporting staff members for their encouragement and motivation towards this Special issue.

**Date:** June 30, 2019

**Professor G. Manjula**  
Department of Civil Engineering,  
SVS College of Engineering,  
Coimbatore, India

**Professor M. Seenuvasan**  
Department of Chemical Engineering,  
Hindusthan College of Engineering and Technology,  
Coimbatore, India