

Preface

During the last few years, chemical engineering is changing its facet towards increasingly a multidisciplinary approach due to the demand for safer, cleaner technologies and novel materials. The industrial practice and academic research are oriented towards the development of better strategies on management of energy, raw materials and the environment. Research and practice in the field of chemical engineering applies the knowledge of mathematics, physics, chemistry, biology and engineering to solve any technical challenges safely and economically. The advances in chemical engineering are towards developing novel materials and processes. Realizing the need for spread of knowledge on advances in the area of chemical engineering, the **Department of Chemical Engineering at National Institute of Technology Karnataka (NITK), Surathkal** has taken initiatives in organizing a global event to commemorate its Golden Jubilee year in 2015. The **International Conference on Advances in Chemical Engineering (ICACE - 2015)** was held during 20–22 December 2015 at NITK and more than 250 delegates attended and presented their papers. The full-length papers were reviewed by experts from pioneering academic and research organizations from India and abroad and the selected papers under the broad theme of Recent Advances in Chemical Engineering are included in this book.

The book introduces the outcomes of latest research in the field of chemical engineering. Also it illustrates the application of chemical engineering principles to provide innovative and state-of-the-art solutions to problems associated with chemical industries. It covers a wide spectrum of topics in chemical engineering such as transfer operations, novel separation processes, adsorption, photooxidation, process control, modelling and simulation. This book provides timely contribution towards implementation of recent approaches and methods in chemical engineering research. It presents chapters focussed on several chemical engineering principles and methodologies of wide multidisciplinary applicability.

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