

## Preface

During the past 25 years, phenomenal developments have taken place in organic synthesis. Conventional synthetic methodologies initially evolved for natural product synthesis have been succeeded by synthesis of target molecules for molecular function and activity. New synthetic methods are encountered in the fields of biological and organometallic chemistry. Synthetic enzymes and catalytic antibodies have been the main targets in synthesis by designing appropriate analogues to transition states and intermediates, using mammalian immune system and genetic engineering. The discovery of new reactions and reagents, based on transition-metal organic chemistry had a major impact on designing new synthetic strategies. With the advent of advanced computing facilities and availability of new spectral techniques, the primary emphasis has shifted towards catalytic and enantioselective synthesis of complex molecules on both the molecular and supramolecular levels. In future, synthesis will become the cutting edge of organic chemistry, biology, biochemistry, medicine, physics and material science and will be the basis for chemical and pharmaceutical industry.

It was against this background the special issues of the *Journal* were contemplated. It was not initially clear to me how to organise this work because the topic is far and wide and spans through the interdisciplinary network from physics to biology. Our invitation to several scientists in India and abroad to contribute either a review or a research paper to the special issues evoked an overwhelming response. Three issues are now scheduled.

During the last three decades, contributions to the field of organic chemistry from India have steadily increased as reflected from the publications in the national and international journals and the impact index. This is largely due to the creation of infrastructural facilities at various universities and research institutions and generous research support from the Government of India, in particular, the UGC, CSIR, DBT and DST.

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