

Foreword

Traditional synthetic organic chemistry is on the verge of a revolution. Despite prolific advances in the last three decades, there is an ever-increasing challenge to human ingenuity, skill, and innovation in this important branch of chemistry. This issue of the Proceedings (Chemical Sciences), incorporating a collection of seven overview articles and three invited research papers covers areas of current interest pursued by some of the distinguished leaders in organic chemistry.

The first article by G H Posner *et al* is an extension of their recent ingenious method of one-pot, multicomponent, sequential Michael-Michael-ring closure reaction illustrated by a total synthesis of juncunol. The paper by T Kametani *et al* projects the power of the Claisen rearrangement of glyceraldehyde derivatives towards the chiral synthesis of complex natural products. The article by K More *et al*, describes synthesis of 2,6-dimethyloctyl formate, a potent mimic of the aggregation pheromone of the flour beetles.

Chiral synthesis is currently among the most exciting areas of organic chemistry. H C Brown and B Singaram review some of their recent pioneering work on the synthesis of chiral compounds of high enantiomeric purity using the hydroboration reaction and substitution with retention in organoboranes. An authoritative account of the development of a series of useful new reagents and reactions using simple starting materials has been presented in the review by G K Surya Prakash and G A Olah. A R Katritzky and S Sengupta describe some interesting aspects of activation of σ - SP^3 centres toward electrophilic substitution in alcohols and amines. The remaining articles deal with some interesting aspects of synthetic organic chemistry: organo-lithiation and halogen metal exchange (by N S Narasimhan and R R Joshi), new aspects of benzyne and radical mediated cyclizations (by S V Kessar), synthetic studies in quest of the platonic hydrocarbon, dodecahydane (by G Mehta, K R Reddy and S Nair), and carbon-carbon bond formation and annulation reactions using trimethyl- and triethyl orthoformates (by S Ghosh and U R Ghatak).

In spite of our efforts we have not been able to cover many other exciting aspects of synthetic organic chemistry in this issue. We however, believe that the present issue contains a most interesting set of articles which not only bear testimony to the vitality of the subject but also make exciting reading.

We thank all the invited authors for their prompt response in forwarding their excellent contributions.

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Guest Editor

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