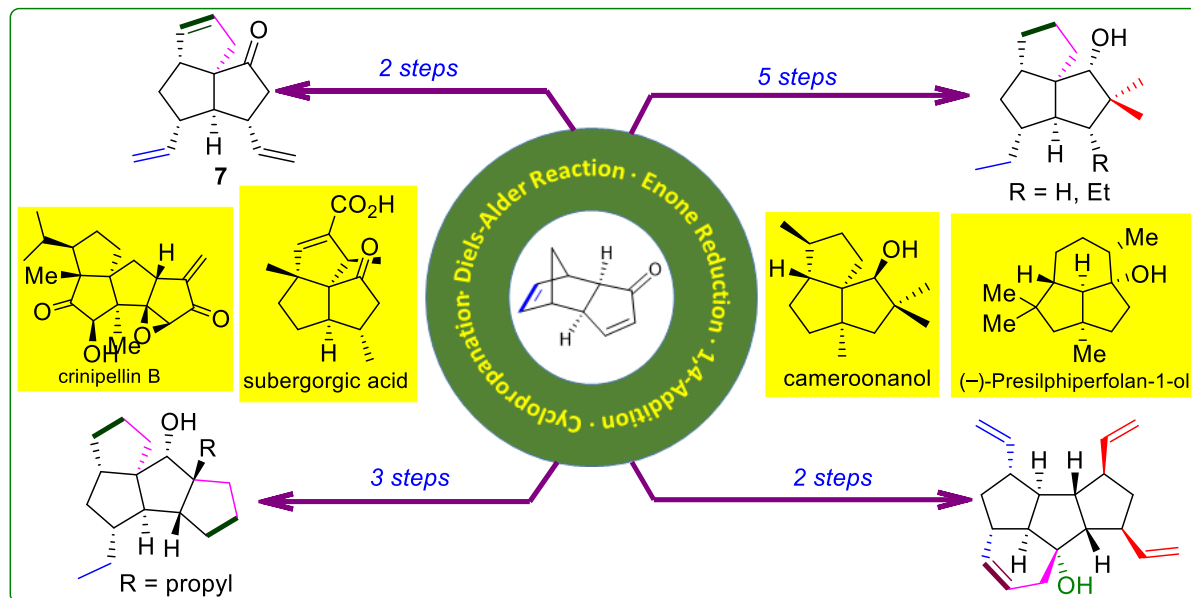


## Applications of Olefin-Metathesis in Polyquinanes Synthesis

Sambasivarao Kotha

Department of Chemistry, Indian Institute of Technology–Bombay, Powai, Mumbai 400 076,  
India. E-mail: [srk@chem.iitb.ac.in](mailto:srk@chem.iitb.ac.in)



Development of new strategies to polyquinanes gained wide interest among the synthetic chemists due to the presence of fascinating molecular architecture include (i) contiguous stereocenters, (ii) all-carbon quaternary centers, and (iii) dense functional groups. Owing to these unique features, they show a wide range of biological properties. In this context, the cascade olefin-metathesis is proved as the most prominent process to create the highly complex systems by minimizing the total number of linear steps. The ring-rearrangement metathesis (RRM) and ring-closing metathesis (RCM) processes are explored for the synthesis of several natural products skeletons such as cameroonanol, subergorgic acid, isocomene, silphinene, amicenone, crinipellin, and presilphiperfolanol from a less explored *exo*-dicyclopentadiene-1-one.<sup>1</sup>

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**Prof. Sambasivarao Kotha** FNASc, FASc, FRSC, FNA

Department of Chemistry  
Indian Institute of Technology Bombay

*Mumbai-400076 (MH), INDIA*

Email: [srk@chem.iitb.ac.in](mailto:srk@chem.iitb.ac.in)

<http://www.chem.iitb.ac.in/people/Faculty/prof/sk.html>



Sambasivarao Kotha graduated with M.Sc. degree in Organic Chemistry from University of Hyderabad and obtained Ph.D. in synthetic organic chemistry from University of Hyderabad in 1985. He continued his research at university of Hyderabad as a postdoctoral fellow for one and half year. Later, he moved to UMIST Manchester UK and University of Wisconsin as a research associate. Subsequently he was appointed as a visiting scientist at Cornell University and research chemist at Hoechst Celanese Texas prior to joining IIT Bombay in 1994 as an assistant professor. He was promoted to Professor in 2001.

His research interests include organic synthesis, development of new synthetic methods for unusual amino acids, peptide modification, cross-coupling reactions, Metathesis, Chemistry of benzocyclobutene, Green Chemistry and theoretically interesting molecules.

He is a recipient of B. M. Birla Science Prize (1996), N. S. Narasimhan endowment award (2000), Bronze Medal, CRSI (2004), IIT-B IRCC award (2004, 2005, 2010 and 2011) Bhagyatara National Award-Punjab University (2005), S. C. Bhattacharya research excellence award (2008), Prof. Y. T. Thathachari National award-Bhramara trust-Mysore (2010), J. C. Bose Fellowship (2010) and CCRS award (2012). Also, elected Fellow of the Indian Academy of Sciences and National Academy of Sciences India, Indian National Science Academy, Royal Society of Chemistry, Maharashtra Academy of Sciences and Andhra Pradesh Akademi of Sciences. He also served on the Editorial Advisory Board of Indian Journal of Chemistry, Journal of Amino Acids, Eur. J. Org. Chem. and Catalysis Journal.