



# **B.V.RAJU COLLEGE**



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| 1     | DR N PRUDHVI RAJU   | MSC CHEMISTRY | BOOK         | LAMBERT ACADEMIC PUBLISHING | SYNTHESIS OF TETRAHEDROPYRAN / TETRAHYDROFURAN DERIVATIVES | 2017 | 78-620-2-09591-4 |

In this book, a metal-free protocol for the synthesis of 2, 3, 6-trisubstituted tetrahydropyrans using molecular iodine under mild conditions; Prins/Ene cyclisation and Prins/Ene bicyclization process for the stereoselective synthesis of a novel series of spiropyrrolidine derivatives; a novel bicyclization strategy for the synthesis of indeno [2,1-c]pyran and cyclopenta[c]pyran scaffolds from aldehydes and exo-olefinic diols and a novel one-pot strategy has been developed for the synthesis of 3,4,4',5-tetrahydro-2H,2'H-spiro[furan-3,1'-naphthalen]-2'-one scaffolds through a pinacol 1,2-shift terminated Prins cyclization explained very efficiently. In contrast with the rapidly growing interest in such reactions, little effort has been focused on construction of O-containing heterocyclic scaffolds. These processes would be extremely useful for obtaining O- Heterocycles which comprises around 60% of all drug substances. Though few reports are there, still exploration in this field is highly desirable. These observations led us to choose Prins type cascade cyclizations as a key topic for our research.



Boggu Jagan Mohan Reddy  
N. Prudhvi Raju

## Synthesis of Tetrahydropyran/ tetrahydrofuran derivatives

Dr. Boggu Jagan Mohan Reddy completed his M.Sc., M.Phil and Ph.D from S.V University, Tirupati, Andhra Pradesh, India. Now, he working as Asst. Professor, Adikavi Nannaya University, Rajamahendravaram. His research interest includes Organic Synthesis and Medicinal Chemistry. He published 40 research articles in international and national journals.

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N. Prudhvi Raju**

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