Dr. Avula Satya Kumar

34 Years

Chemistry

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INDIA

I worked on the total synthesis of bioactive Natural Products, development of new synthetic methodologies and chemical investigation on *Jatropha multifida. During the course of this work, 'asymmetric synthesis' technique was extensively used.* I completed my PhD from IICT (INDIA), after which I chose to explore new horizons. My postdoctoral research in UKZN is based on an effort towards the cyclization of 1,6-Enynes and Synthesis of Chiral N, P ligands and their application in asymmetric catalysis. I am particularly motivated by challenges requiring a high sense of initiative and adaptability.

CURRENT RESEARCH

Topic

- ❖The total synthesis of bioactive compounds
- ❖ Isolation of Natural products
- ❖ Development of new synthetic methodologies
- ❖ Asymmetric catalysis

Methodology

- ❖ Development of new synthetic methodologies and their applications.

Application

- ❖ Anti viral activity
- ❖ Anti fungal activity
- ❖ anti cancer activity
- ❖ Enanstiomeric excess

UKZN main Publications

1. Simple Proline-Derived Phosphine-Thiazole Iridium Complexes for Asymmetric Hydrogentation of Trisubstituted Olefins", Nattawut Yotapan, Alexander Paptchikhine, Milan Bera, **A. Satya Kumar, Tirayut Vilaivan, Pher G. Andersson,** ***Asian. J. Org. Chem. 2013, 2, 674-680***

Past Researches

1. Simple Stereoselective Synthesis of Unsaturated Lactone Intermediates and Their Conversion into Natural dihydropyranones and Their Enantiomers#, Digambar Balaji Shinde, Boddu Shashi Kanth, **A. Satya Kumar, V.T. Kamble and Biswanath Das,** ***Lett. In Org. Chem. 2013, 10, 317-323***

Future Interests

- ❖ Total Synthesis
- ❖ Asymmetric catalysis
- ❖ Development of new synthetic methodologies

Extra Interests

Sports (Cricket), Chess, carroms and listening music