Excellence of Research work

Dr. B. V. Subba Reddy has been working as a Head & Chief Scientist in Fluoro & Agrochemicals Department in IICT, Hyderabad. He is working mainly in the area of asymmetric synthesis, natural products synthesis and process development of APIs reflecting a high order of conceptual originality and experimental excellence.

The first to develop novel synthetic route for the construction of fused- and bridged tetrahydropyran scaffolds through a domino Prins cyclization.

Expert in the design and synthesis of novel chiral ligands, *gluco*-BOX and sugar based

thiourea catalysts for asymmetric synthesis.

In collaboration with Colgate-Palmolive Company, he has successfully developed novel process technologies for the commercially valuable products magnolol and honokiol, which are being used in tooth paste and hand wash and also developed ester quats for dish wash application.

Developed a technology for large scale synthesis of poly(allyl)guanidine, which possesses unique adhesive properties and is specific to bind with soft and hard oral tissues therefore, it is used for Gum Tissue Graft Surgery.

Received **60 Citations** in **Jerry March**, 7th Edition, Text Book

Technologies developed:

(i) Synthesis of magnolol and its analogue compounds (US patent8,519,197B2)

(ii) Processes for making magnolol derivatives (US9676690B2)

(iii) An antioxidant compound having anti-atherosclerotic effect and preparation (US9580452B2). The patent rights (tech transfer) have been transferred to Sun Pharma Industries for further developmental studies.

As a head of the department, we have supplied PBW pheromone lures (4 Lakhs) to

minimize pink bollworm in cotton in 2018, and 7 Lakhs FAW lures to minimize fall armyworm in maize and corn in 2019 to TS govt and also supplied 624000 PBW lures to monitor pink bollworm in cotton fields in AP. Very recently, we have supplied pheromone lures for rice and maize to Department of Agriculture, Andhra Pradesh Government under YSR Polambadi program- 2020.

Currently, actively involved as a project co-coordinator in CSIR Agro-mission for the

process development of four insecticides, four fungicides and four herbicides.

# [http://thumbp1.mail.re2.yahoo.com/tn?sid=706032261&mid=APAlvs4AAErbSPdWtwCPBh%2BrxRo&partid=3&f=541&fid=Inbox](http://us.mg2.mail.yahoo.com/ya/download?fid=Inbox&mid=1_1804118_APAlvs4AAErbSPdWtwCPBh+rxRo&pid=3&tnef=&YY=1224206016312&newid=1&clean=0&inline=1)I am herewith submitting the duly filled nomination form for the Sun Pharma Research Awards 2021 in pharmaceutical sciences for sponsoring my nomination. The research work presented in the nomination form is original and has been carried out by me and our students. I do hereby give my consent for sponsoring my nomination.

(B. V. Subba Reddy)

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