



सी.एस.आई.आर.-केन्द्रीय औषधि अनुसंधान संस्थान, लखनऊ
(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)
सेक्टर 10, जानकीपुरम विस्तार, सीतापुर रोड, लखनऊ – 226 031 (भारत)
CSIR - Central Drug Research Institute
(Council of Scientific & Industrial Research)
Sector 10, Janakipuram Extension, Sitapur Road, Lucknow - 226 031 (India)



To

The Office of Sun Pharma Science Foundation
8C, 8th Floor, Hansalaya Building, 15-Barakhamba Road,
Connaught Place, New Delhi : 110001, (India)
Tel. (91-11) 23721414 / 23721415
e-mail : sunpharma.sciencefoundation@sunpharma.com
Website : www.sunpharmasciencefoundation.net

Subject: Statement that the research work under reference has not been given any award in the past

Dear Sir,

The work of Dr. Gautam Panda, Chief Scientist, Medicinal and Process Chemistry Division of CSIR-Central Drug Research Institute is original and it is certified that the research work done by him has not been given any award in the past.

(Dr. Radha Rangarajan)
Director, CDRI, Lucknow



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To,
The Selection Committee
Sun Pharma Science Foundation Awards

RE: Nomination of Dr Gautam Panda for the Sun Pharma Science Foundation Research Award

Dr. Panda, Chief Scientist, CSIR-CDRI has amply demonstrated his prowess in medicinal and process chemistry during the last two decades as an independent researcher. The major highlights are as follows:

He has harnessed chiral amino acids in the synthesis of potent inhibitor of protein kinase C (-)-Balanol, antifungal agent Ophiocordin, nicotinic agonists (+)-epiquinamide, (+)- α -conhydrine, antimitotic C₃-*epi*-(+)-lycoridine, Jaspine B, potent inhibitor of glucosidase enzymes 8,8a-diepicastanospermine, (-)-Swainsonine, antibacterial levofloxacin, antimalarial (-)-Raphidecursinol B and spisulosine. Further, he has synthesized hetero [6-5-6] tricyclics resembling Taiwaniquinoids and C-nor-D-homo steroids through heteroaromatic Nazarov type cyclization with excellent regioselectivity. His chiral serine azide through Weinreb amide to reduce acidity of α -proton is widely utilized. In a quest for steroidomimetics, he has employed amino acids to incorporate chiral space towards difficult asymmetric steroids. A tyrosine-derived benzoxazine lead compound regressed tumor growth at 5mg/Kg and 20mg/Kg in the rat syngenic mammary tumor model. His work on spisulosine that markedly induces autophagic cell death to cancer cells is very interesting. His consistent effort has resulted in the synthesis of anti-tuberculosis agent, S006-830 with comparable efficacies to ethambutol and PZA in animal models. He has published new synthetic routes for Cetirizine and Bedaquiline like molecules and filed patents on new process routes of anticancer drugs Nintedanib and Olaparib. In addition, he has developed process routes for two off-patented drugs (having no suppliers in India) like Almitrine and Ifenprodil and the technology has been transferred to industry.

(Dr. Radha Rangarajan)
Director, CDRI, Lucknow



Citation for Dr Panda

Dr Gautam Panda has the following achievements to his credit:

- Has filed patents (0209NF2020- Application number 202111003021 dated 21.01.2021, 0210NF2020- Application number 202111015502 dated 31.03.2021) on process routes for two off-patented drugs (having no suppliers in India) like Almitrine and Ifenprodil. MoU has been signed with Reliance Rasayan Private Limited (RRPL), Ahmedabad, Gujarat and technology has been transferred to them to commercialize these new process routes.
- Has optimized new process routes for block buster anti-cancer drugs Nintedanib and Olaparib, Patent has been filed (IN 202211006560 Date of filing 07/02/2022, IN 202211013919, 14/03/2022, Chemistry Select accepted). These process technologies have the potential to reduce the cost of manufacture.
- A tyrosine-derived novel benzoxazine series with anti-cancer activity in the rat syngenic mammary tumor model of breast cancer, (J. Med. Chem. 2021, 64, 16293-16316 10.1021/acs.jmedchem.1c01624). Tyrosine-derived novel benzoxazine regressed tumor growth at concentration of 5 mg/Kg and 20 mg/Kg better than tamoxifen in the rat syngenic mammary tumor model.
- Has published 128 papers, which received around 3286 citations with h-index of 31 (<https://scholar.google.co.in/citations?user=YwJvoilAAAAJ&hl=en>) and is an inventor on 7 patents.
- Has guided 20 doctoral students.

(Dr. Radha Rangarajan)
Director, CDRI, Lucknow