सीएसआईआर-केन्द्रीय औषधि अनुसंधान संस्थान
CSIR-CENTRAL DRUG RESEARCH INSTITUTE

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

प्रोफ़ेसर तपस कुमार कुंडू
पीएचडी, डीएससी, एफएमएएससी, एफएससी, एफएमए, सर जेसी बोस नेशनल फेलो
निदेशक

Professor Tapas K. Kundu
PhD, DSc, FNASc, FASc, FNA, Sir J C Bose National Fellow
Director

September 24, 2021

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
Dear Sir,

Signed Justification for sponsoring the nomination

Dr. Gautam Panda extensively, ingeniously harnessed chiral amino acids (AAs) and syn-2,3-dihydroxy esters in synthesis of potent inhibitor of protein kinase C (-)-Balanol, antifungal antibiotic Ophiocordin, nicotinic agonists (+)-epiquinamide, (+)-α- conhydrine, antimitotic C3-epi-(+)-lycoricidine, Jaspine B, potent inhibitor of glucosidase enzymes 8,8a-diepicastanospermine, (-)-Swainsonine, antibacterial levofloxacin, antimalarial (—)-Raphidecursinol B, novel antitumoral of marine origin spisulosine etc. Hetero [6-5-6] tricyclics resembling Taiwaniaquinoids and C-nor-D-homo steroids were synthesized through first heteroaromatic Nazarov type cyclization with excellent regioselectivity. His chiral serine azide through Weinreb amide to reduce acidity of α-proton is widely utilized. In quest for steroidomimetics, he envisages to employ Amino Acids to incorporate chiral chemical space which otherwise very difficult to introduce and comprised of several synthetic steps for asymmetric steroids. His consistent effort has resulted in bringing tri and tetrasubstituted methanes (TRSMs) and Amino Acids derived steroidals and nonsteroidals towards developing potent antitubercular and anticancer agents respectively. His recent work on spisulosine that markedly induces autophagic cell death to various cancer cells is very interesting. Mild toxicity issues are being addressed by his group along with detailed biological evaluation. He has recently published new effective routes for Meclizine, Hydroxyzine and Cetirizine like drug molecules from base mediated 1,6- Aza-Michael addition of heterocyclic amines and amides to para-Quinone Methides chemistry. Collaborative MoU has been signed with Reliance Rasayan Private Limited (RRPL), Ahmedabad, Gujrat and technology has been transferred to them to commercialize new process routes of off-patented drugs (having no suppliers in India) like Almitrine and Ifenprodil which have been recently discovered by his group. Preparation of IND Dossiers and initiation of Clinical trials as Covid-19 therapeutics are currently underway.

(Tapas Kumar Kundu)

सेक्टर 10, जानकीपुरम विस्तार, सीतापुर रोड, लखनऊ–226 031 (भारत)
Sector 10, Jankipuram Extension, Sitapur Road, Lucknow-226 031 (India)

दूरभाष Phone: कार्यालय (Office) +91-522-2771940; +91-7081117999 फैक्स Fax: +91-522-2771941
EPABX-0522-2772450, 2772550
ई मेल E-mail: director@cdri.res.in वेब Web: www.cdri.res.in