



**Vinod K. Singh**, FNA, FTWAS  
*Rahul & Namita Gautam Chair Professor*

September 14, 2021

Dear Sir/Madam,

I wish to nominate **Dr. D. H. Dethe** of IIT Kanpur for the Sun Pharma Science Foundation Research Award-Pharmaceutical Sciences for the year 2021. Dr. Dethe has made outstanding contributions in the field of Organic Synthesis. A major thrust of his research is the design and invention of new annulation strategies for the synthesis of Natural products. He has reported the total syntheses of a variety of structurally diverse complex natural products, which in addition to confirming the structure also established the absolute configuration of the natural products. The notable points in the synthetic route were synthesis of a highly functionalized tricyclic diterpenoid moiety starting from an enantiopure Wieland–Miescher ketone derivative in concise manner via Robinson-type annulation, an elegant hydrogen atom transfer olefin reduction, Lewis acid-catalyzed Friedel–Crafts reaction for one-pot C–C and C–O bond formations, [3+2] cycloaddition, Diels–Alder reaction, highly efficient biomimetic C-4 cyclization of indole derivative, a highly fascinating sp<sup>3</sup> C–H activation on axial methyl to install the lactone moiety.

During the last decade, his research output is excellent, as he has published more than 55 research papers (1-*JACS*, 1-*Chem. Sci.*, 12-*Org. Lett.*, 6-*Chem. Commun.*, 3-*Chem. Eur. J.*, 7- *JOC*, 3-*Org. Chem. Front.*, etc) in the area of total synthesis. Natural product synthesis in terms of molecular architecture, biological activity, and medical value will continue to be the magnet and prime guiding force. Based on immense contribution of Dr. Dethe to the field of total synthesis of biologically active natural products, I firmly believe that he deserves to get prestigious “Sun Pharma Award and I strongly recommend him for this award.

Sincerely,

Vinod Singh  
Former Director, IISER Bhopal