

Declaration by the Applicant

This research work under reference has not been given any award in the past. Mr. Sandip Porey and Xinglong Zhang contributed equally in this paper. While the idea was conceived by Mr. Porey, Prof. Maiti and Dr. Guin, experimental work was executed by Mr. Porey, Mr. Suman Bhowmick and Mr. Vikas Kumar Singh. Computational analysis was carried out by Xinglong Zhang and supervised by Prof. Robert S. Paton. The entire work was supervised by Prof. Debabrata Maiti and Dr. Srimanta Guin.

This work reports a C–H functionalization LSF strategy that hinges on the use of an alkyne linchpin to assemble conjugates of sp²-rich marketed pharmaceuticals and agrochemicals with sp³-rich 3D fragments and natural products. This is accomplished through a template-assisted inverse Sonogashira reaction that displays high levels of selectivity for the meta position. This protocol is also amenable to distal structural modifications of α -amino acids. The transformation of alkyne functionality to other functional groups further highlights the applicative potential.



Dr. Debabrata Maiti