



Indian Association for the Cultivation of Science

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Sub: Justification of Nomination of Mr. Sanu Saha for The Sun Pharma Science Foundation Science Scholar Awards 2023.

It is my great pleasure to write this letter in strong support of the candidature of Mr. Sanu Saha, Senior Research Fellow of the School of Chemical Sciences, IACS, Kolkata for Sun Pharma Science Foundation Science Scholar Awards 2023 in Pharmaceutical Sciences.

We all are quite aware about the tremendous impact of natural products in pharmaceutical domain and practicing their chemistry as a whole is essential for our sustainability. Every year many natural products are isolated and development of their laboratory preparation is quite important to understand their role in details. This eventually validate the structure of the natural products and importantly supply enough material towards biological evaluation.

Mr. Saha has contributed very significantly towards this direction and developed the synthetic routes for total synthesis of structurally intriguing natural products alveolaride C (antifungal), beauveamide A (anticancer), pestalotioprolides E and F (anticancer) and bipolaramide A (antimicrobial). During this journey, his developed synthetic routes provided some of useful natural product like analogues apart from the parent molecules. Interestingly, initial evaluation of anticancer activity of beauveamide A analogue showed much more potency compare to the actual natural product. Furthermore, his research opened up the avenue related to the structural validation of isolated natural products. The proposed structure of cyclodepsipeptide alveolaride C, macrolide pestalotioprolide F and hybrid natural product bipolaramide A have been corrected/reassigned which are quite important in respect to medicinal chemistry as the structure of natural product play a major role in drug discovery program. The chemistry he invented is really praiseworthy which resulted quality publications (**Chem. Sci.**, **2020**, *11*, 11259-11265, **Org. Lett.**, **2022**, *24*, 7113-7117, **Org. Lett.**, **2018**, *20*, 4606-4609, **Org. Biomol. Chem.**, **2022**, *20*, 3348-3358). His part of works helped his laboratory to have very interesting articles “*Total synthesis: the structural confirmation of natural products*” (**Chem. Commun.**, **2021**, *57*, 3307-3322) and “*Intramolecular Heck Reaction in Total Synthesis of Natural Products: An Update*” (**Euro. J. Org. Chem.**, **2021**, 2057-2076).

In overall, Mr. Saha's research endeavor has very significant impact in the chemical synthesis of bioactive natural products and their analogues and I sincerely believe that he should be awarded The Sun Pharma Science Foundation Science Scholar Awards 2023 in Pharmaceutical Sciences.

(Dr. Asit K. Chakraborti)

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