



INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

Department of Biosciences and Bioengineering

North Guwahati, Guwahati – 781 039

Tel: +91-361-2582225 Fax: 2582249

Email: biman.mandal@iitg.ac.in

Biman Behari Mandal

Professor

SwarnaJayanti Fellow & National Bioscience Awardee

29th August, 2024

Sub: Letter of support for Sun Pharma Science Scholar Fellowship

To Whom It May Concern:

It is indeed a pleasure to recommend **Mr. Souradeep Dey** for Sun Pharma Science Scholar Fellowship 2024. I strongly believe that he is a suitable candidate for this fellowship. Souradeep has been a part of the "Biomaterials and Tissue Engineering Laboratory" since May, 2017. He is at present a Ph.D. Scholar working under my supervision on his thesis entitled "**Development of Clinically Relevant Silk Based Multi-Faceted 3D Printed Implants and Diagnostics as Affordable Healthcare Products**". He is also conferred with the prestigious *Prime Minister's Research Fellowship (PMRF)* in 2020 from Ministry of Education, Government of India for carrying out his doctoral research in healthcare domain, with focus on national priorities. I have found Souradeep to be a committed and eager student, willing to go the extra mile for his work, the laboratory and the team. He is highly motivated, hardworking, co-operative and always curious about latest happenings in science.

Souradeep completed his master's program from Vellore Institute of technology, Vellore with a commendable performance, securing 9.68/10 CPI and stood 2nd (Departmental rank; silver medalist) out of 92 students. He carried out his master's dissertation under my supervision, which dealt with the fabrication of 3D printed angle-ply annulus fibrosus anatomical equivalents for intervertebral disc replacement. During his master's, he was able to secure 01 conference publication and 01 research article in a reputed international journal (*Applied Materials Today*). Further, he joined my lab as a junior research fellow for 01 year and since then he is actively involved in 3D bioprinting, in vitro model development and in gathering experiences on several experimental and technical skills. In May 2019, he joined my lab as a Ph.D. student after qualifying highly competitive national level *Graduate Aptitude Test in Engineering (GATE)* (Life

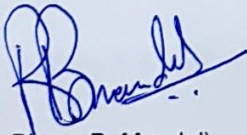
Science) exam. At this point of time he has sufficient experience with 3D bioprinting, stem cell maintenance and differentiation, fabrication of microfluidic organ-on-a-chip models and on several other experimental and technical skills. One of his doctoral research works was recently published in a flagship international journal (*Biomaterials*) which dealt with the development of a microfluidic based in vitro liver model for drug induced liver injury prediction. Moreover, his presentation of scientific material is also of a good order, which secured him the "*Best Poster Presentation Award*" at 12th World Biomaterials Congress (WBC 2024) held at Daegu, Republic of Korea, the prestigious *Dr. Himangshu Roy Memorial Young Scientist Award (2023)* from The Zoological Society, Kolkata, "*Springer In vitro models Best Poster Award*" at International Conference on Biomaterials, Regenerative Medicine and Devices (BIO-Remedi 2022) held at IIT Guwahati and *Best IIT Guwahati Project* along with his team mates in TechExpo organized during Techniche 2018 at IIT Guwahati. Further, along with his fellow lab mates, he also secured *third prize for model presentation* in Research Conclave'19 at IIT Guwahati. At present Souradeep has **18 published research papers** in high-impact international peer reviewed journals, **01 book chapter**, **01 patent (applied)** and **03 conference proceedings**.

Souradeep is responsible and responds to mentoring with positivity and an open mind. He is therefore able to take forward the experience gained in his pre-PhD programmes and take on challenges in his doctoral studies in creating new strategies for development of advanced microphysiological in vitro models for disease modelling, high-throughput drug screening and drug discovery applications.

I strongly recommend Souradeep's candidature for the Sun Pharma Science Scholar Fellowship and believe that he is highly deserving of this recognition. I also wish him success in his endeavour. If secured, I expect him to make the best use of this fellowship, that is vital for his early academic career.

Should any additional inputs be needed please do not hesitate to contact me.

Thanking you,
Yours sincerely,


(Prof. Biman B. Mandal)

Dr. Biman B. Mandal
Professor
Department of Biosciences and Bioengineering
Indian Institute of Technology Guwahati
Guwahati-781039, Assam, INDIA