

Kritideepan Parida is a Ph.D. student in the Department of Chemical and Biomolecular Engineering who joined the Gorodetsky Group in January 2021. He graduated in Biomedical Engineering from the National Institute of Technology Rourkela, India (NIT Rourkela, India). Prior to joining the Gorodetsky group, Kritideepan undertook biomaterials training in the Biomolecular Nanotechnology Laboratory, and the Gene Manipulation Laboratory at NIT Rourkela, India. The trainings helped him to work on projects such as the usage of decellularized mammalian sclera as graft material for tissue engineering, Phytochemical functionalized carbon nanotube for tissue regeneration, Devising methods for scaled-up production of graphene quantum dots, Chitosan based hydrogels for drug delivery, etc. Through his work, he has acquired the skills in *In Vitro* studies (cell culture, primary culture of malarial parasites, etc.), Material synthesis (Sol-gel, Electrospinning, Synthesis of polymers, etc.), Material characterization (FTIR, UV-Vis, FE-SEM, Rheological characterization of biomaterials), and computational (Python, SQL). His current research work focuses on cellular aspects of the bio-inspired materials.

During his undergraduate research career, Kritideepan has been instrumental in writing grant proposals for INR 150K, 3 research patents, and has also presented his work at over 5 different conferences and events across India. He has also been the founding member of a nanomaterial-based startup in India wherein he contributed to the R&D sector of production along with leading the funding team, and the operational functions of the business. The startup focused on the production of Graphene Quantum Dots.

EDUCATION

- National Institute of Technology, Rourkela (B.Tech)
 - Biomedical Engineering

ACCOLADES

- *Best startup award to founded startup 'FluoroQ', Innovation Carnival 2018, NIT Rourkela*
- *Received grants from BIRAC-SRISTI, Dept. of Biotechnology and TEQIP-COE, Govt. of India, 2017*

SPEECHES/EVENTS, ARTICLES, PUBLICATIONS

Selected Conference Presentations

K. Parida, et al. Electrospun Silk Nanofibres Exhibit Amyloid like Features, 2nd International Conference on Recent Advances in Nanoscience and Nanotechnology, ICRANN 2016, Jawaharlal Nehru University, New Delhi, December 2016. (Best Poster Award)

K. Parida, et al. Water Hyacinth: The Most Invasive Weed, Engineering Students Innovation Challenge, ESIC 2017, International Society for Scientific Research and Development, January 2017. (Best Project Award)

K. Parida, et al. Purification of Graphene Quantum dots by Vapor Phase Transmission Process, CTMSE 2018, Institute of Engineering & Management, Kolkata and S.N. Bose National Center for Basic Sciences, Kolkata, January 2018.

Patents

K. Parida, et al. Decellularized sclera as graft material. India Patent Application Number IPO/ 201731026590, July 26, 2017.

K. Parida, et al. Scaled up production of Graphene Quantum dots from coal and method of production thereof. India Patent Application Number IPO/ 201831002066, January 18, 2018.

K. Parida, et al. Egg to Glass. India Patent Application Number IPO/ 201831020749, June 3, 2018.