



भारतीय प्रौद्योगिकी संस्थान खड़गपुर
Indian Institute of Technology Kharagpur
West Bengal - 721 302, India

Department of Mechanical Engineering

Soumitra Paul
Professor

To Whom It May Concern

23 April 2021

Anirban Mandal completed his B.Tech in Mechanical Engineering from Visvesvaraya National Institute of Technology, Nagpur in May 2017. Then, he joined SHV Energy India Private Limited as a Plant Engineer.

He joined the Department of Mechanical Engineering, Indian Institute of Technology Kharagpur in July 2019 after clearing federally administered entrance examination called GATE to pursue his Masters in Manufacturing Science and Engineering.

After completion of 1st two semesters (consisting of 10 taught courses and several laboratories), his CGPA was 8.66 out of 10. I have taught him one of the elective courses named 'Theory of Abrasive Machining' and he was awarded the highest grade of Ex (Excellence). He has also taken 'Advanced Manufacturing Laboratory – I', jointly administered by me.

He started working with me and Dr Nilanjan Das Chakladar for a year-long Master's Project in May 2020. It involves 'investigating the role of process parameters and tool geometry on chip formation in orthogonal machining of Ti-6Al-4V alloy'. Due to the current pandemic, his project could not have an experimental component. He is executing his project using Commercial Finite Element Analysis Software Abaqus. Despite severe resource constraint, he has made significant progress in his project. His training in executing the project would be very helpful for any future work involving Finite Element Analysis in the broad area of Manufacturing.

I understand that he is applying for the Joint Doctoral Programme – the University of Manchester and IIT Kharagpur. I strongly recommend him for the above programme with full financial assistance.

Dr. Soumitra Paul
Professor
Department of Mechanical Engineering
Indian Institute of Technology Kharagpur
West Bengal 721302, India