



### Letter of Recommendation for Mr. Atul Kumar Verma

The applicant, Mr. Atul Kumar Verma has applied for graduate studies for a joint program between IIT Kharagpur, India and Univ. of Manchester, UK starting from 2022. I know Atul for the last one year, since I joined Indian Institute of Technology (ISM) Dhanbad as a visiting professor in the Department of Mechanical Engineering. Having spent three decades as a faculty member at IIT Kanpur, I retired last year after superannuating as Professor in the Higher Administrative Grade (HAG) from the Department of Aerospace Engineering. During my stay at IIT Kanpur, my main focus was in research and teaching. As one of the administrative jobs, I set up the HPCL Lab, which is known for its research outputs in the areas of aerodynamics/ fluid mechanics, scientific computing/ HPC. Our students have distinguished also in the areas of fluid flow transition and turbulence. With this background, I was specifically invited to IIT (ISM) to help setting up the HPC activities catering to multiple disciplines. Apart from teaching couple of courses on scientific computing, I am involved in guiding and mentoring graduate students and younger colleagues since October 2020.

Atul is doing his M. Tech. program in Mechanical Engineering and took the course: Advanced Scientific Computing (MEO 590) which I taught during January, 2021 to April 2021. He received a B+ grade in this course taken by twenty students. In his batch of students, currently his rank in top five students, speaks about his academic standing. He is also doing his M. Tech. thesis that involves high performance computing of a transitional flow. He is very sincere and hard-working student and very motivated to pursue higher studies.

I am particularly impressed by his continuous efforts, despite himself suffering from COVID-19 and still he was keeping up with academic loads and thesis work. I am hopeful that he will show excellence on his chosen research field. He comes across as a keen young man genuinely interested in carving out a research career. He is a quite soft-spoken, caring person and is always able to adjust working in a group. Based on my collective experience as teacher over more than three decades at various educational institutes in India and abroad, I will place him in the top 15% of all the successful graduate applicants for higher studies. Thus, I have no hesitation in recommending him for the graduate program at IIT Kharagpur/ Univ. of Manchester. Please feel free to ask any other queries you may have for the applicant.

(Tapan K. Sengupta)

Visiting Professor,  
 IIT (ISM) Dhanbad  
 Jharkhand 826004, INDIA

Formerly:

Dr. Tapan K. Sengupta  
Professor (HAG)  
High performance Computing Laboratory  
Department of Aerospace Engineering  
Indian Institute of Technology Kanpur  
Kanpur – 208016, INDIA