



भारतीय प्रौद्योगिकी संस्थान खड़गपुर  
खड़गपुर - 721 302, भारत  
Indian Institute of Technology Kharagpur  
Kharagpur - 721302, India

महासागरों, नदियों, वातावरण और भूमि विज्ञान केंद्र  
CENTRE FOR OCEANS, RIVERS, ATMOSPHERE AND LAND SCIENCES

प्रो. अरुण चक्रवर्ती  
Prof. Arun Chakraborty FRMetS

21 November, 2021

### Letter of recommendation

It is with great pleasure that I am giving my highest recommendation to Mr. Sudhanshu Kumar for pursuing higher studies at your esteemed University. I have known him since he got enrolled in the Masters of Technology program in Earth System Science and Technology at the Indian Institute of Technology Kharagpur and would rate him in the top 1% of all students whom I have taught and guided in my academic career. Currently, he is doing his dissertation work under my supervision.

I am supervising his masters' thesis on 'Analysis of Marine Heat Waves in the Tropical North Indian Ocean in recent period'. During this detailed investigation, he diligently studied the causes and impact of heatwaves. Through this project, he got exposure to handling large datasets and coding effectively which further improved his analytical thinking abilities. His rigorous analysis revealed interesting insights about the heatwaves and their increasing trends in the Indian Ocean. I appreciate the record number of experiments he conducted independently, the in-depth analysis, and the multitude of promising results that were illustrated in his thesis. His graduate thesis committee was full of praise for the quality and quantity of research he had carried out within the tight deadlines of this project. His work is regarded as one of the finest theses in the department. I am really happy that Sudhanshu took the initiative to draft a paper and I am currently finalizing it for submission.

Sudhanshu opted for the following courses that I instruct – Advance Meteorology (CL-60003) as well as a laboratory course on Ocean and Storm Surge Modelling (CL-69004). He was indeed very inquisitive during lectures, and his participation and interactions during class were exceptionally good. Despite having the stringent absolute grading system in the Centre for Oceans, Rivers, Atmosphere, and Land-sciences (CORAL), which made it extremely difficult to score GPAs above 8.5 on a 10 pointer scale, he was able to secure GPAs above 9.0 in all individual semesters.

Sudhanshu's technical brilliance, his timely completion of challenging projects, and his highly focused and systematic approach to research are all commendable. These have truly shown that he is a student of great caliber and is ready to carry out a very ambitious research work in his field of interest. Moreover, he is humble and goes out of his way to help his peers, and mingles well with everyone. Conclusively, I give him my most outstanding recommendation for admission into your prestigious Ph.D. program.

  
प्रो. अरुण चक्रवर्ती  
Prof. Arun Chakraborty FRMetS  
प्रोफेसर / Professor  
महासागर, नदी वायुमंडल एवं भूमि विज्ञान केन्द्र  
Centre for Ocean, Rivers, Atmosphere and Land Sciences  
भारतीय प्रौद्योगिकी संस्थान खड़गपुर, खड़गपुर - 721302  
Indian Institute of Technology Kharagpur, Kharagpur - 721302