



From  
Prof. Abhijit Guha  
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To  
The Director,  
Joint Doctoral Program – IIT Kharagpur and University of Manchester.

Sub. **ADARSH K.P.**

12 March 2023

Adarsh K.P. is currently a second-year student of the MTech programme at the Mechanical Engineering Department of IIT Kharagpur. His area of specialization is Thermal Science and Engineering. His CGPA in the first year of his MTech study, comprising of taught subject modules, is 8.49 (out of 10). This shows that his academic preparation is good. In particular, he has scored the highest “Ex” grade in the module named *Refrigeration Systems* which is directly related to the proposed research area for the Joint PhD Programme.

Students in the second year of the MTech Programme carry out a year-long research project. I am the adviser for the MTech research project of Adarsh KP. The project involves the application of computational fluid dynamics (CFD) for studying the natural convection phenomenon around a heated horizontal plate. Other than developing an appreciation for the subtlety and the complexity of the fundamental thermo-fluid-dynamics involved, Adarsh has been learning various aspects of the general research methodology. He has become comfortable in the use of complex softwares such as Ansys Fluent, Solidworks and Tecplot. These are transferable skills that will be useful in his future research endeavours.

I have found that Adarsh KP is a conscientious student and is a good human being. He has expressed an interest in the field of proposed research. It is hoped that he would be able to do a reasonable PhD, provided he receives regular, detailed guidance from the PhD advisers. I wish him well in his future endeavours.

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