

*Dr. Siva Sankar Nemala  
Research Fellow  
2D Materials and Devices Group  
Cluster for Advanced Materials and Computing*

12 March 2023,

Braga.

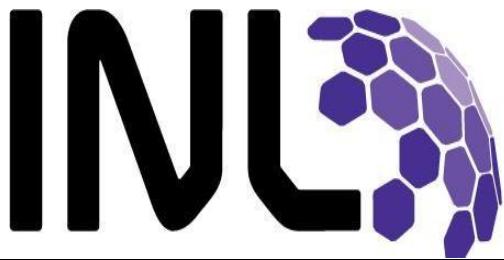
**Letter of recommendation**

**Dear Selection Committee,**

As a Research Mentor of **Mr. Gagan Kumar Bhatt** in the Physics discipline at IIT Gandhinagar, India, I am pleased to write this recommendation letter in favor of him for the **Joint Ph.D. Program between the University of Manchester and IIT Kharagpur**. I have known Gagan since he joined the group for his Master's dissertation in Physics. It has become apparent that he is energetic and enthusiastic in all tasks assigned to him both academic and research. I have come to know his curiosity and passion for research during this period. His love is to become an energetic scientist in 2D materials and their applications in membrane technologies.

He collected and studied many articles related to "**Hydrogen intercalated vermiculate membranes**" independently. Mr. Gagan gave presentations about the different aspects of synthesizing 2D Materials for membrane applications and progress toward the project. Gagan's presentation in the group meetings was always well prepared and perfectly presented. His independence and curiosity about the research project made me find him a successful researcher. He has a greater interest in becoming a researcher, which needs to be molded and I appreciate his inquiry and visualization skills. He is the go-to man when it comes to interactive teaching.

Gagan is always keen and interested in learning and comes up with many questions about 2D nanomaterials. I am sure he will be friendly to co-researchers and best in his motivation towards the research work in the area of **angstrofluidics**. I believe that his strong academic performance in the transcripts is self-explanatory.



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I am confident that **Mr. Gagan Kumar Bhatt** will continue to be very curious and interested in science. I wish him good luck and success in all of his research endeavors. I strongly recommend him for the **Ph.D. program**; he will be a suitable candidate. I am confident that he will be an excellent addition to your research community. Please contact me if you have any questions regarding his character or past academic work.

(SIVA SANKAR NEMALA)