

## ACKNOWLEDGEMENT

---

First of all I would like to express thanks to the almighty GOD. I convey my gratitude to my supervisors, Dr. Makhanlal Nanda Goswami and Dr. Prasanta Kumar Mahapatra, for their valuable guidance, advice, support and encouragement throughout the entire research work. Their precious discussions always have produced a growing interest towards the research area deliberated in this thesis. The goal of present research work would not have been achievable without their continuous inspiration and assistance.

I express my deep gratitude to my parents for their support, inspiration and blessing for this research work. I am heartily thankful to my brother Dr. Aniruddha Samanta and my husband Dr. Saikat Maiti who supported me with love and encouragement for carrying out this work.

I am thankful to CRF, IIT Kharagpur for providing the HRTEM and SQUID facilities and UGC-DAE CSR, Kolkata for SQUID study. This research work is partly funded by research project (Grant No. PSW 129/13-14) from UGC of India. This exertion is also partly funded by DST, Govt. of West Bengal research project (Memo No.: 296 (Sanc)/ST/P/S&T/16G-17/2017) of India.

I show my heartily thank to Neha Pradhani of Siksha 'O' Anusandhan University for the support rendered in Reitveld analyses. I also thankful to Dr. Tanusri Pal Ghosh, Dr. Alfazuddin Thander of Midnapore College for allowing me to utilize the instrumental facilities during the research work. I acquire this opportunity to thank all the research scholars, faculties, technical staffs of Dept. of Physics, Midnapore College and Dept. of Physics, Vidyasagar University for their support and help during my research work.

*Anindita Samanta .*

(Anindita Samanta)

Research Scholar

Dept. of Physics, Vidyasagar University, WB, India