

CERTIFICATE

It is certified that the work contained in the thesis titled " **SYNTHESIS AND STUDY OF MAGNETIC AND MAGNETO-TRANSPORT PROPERTIES OF SOME TOPOLOGICAL INSULATORS** "by " **ABHISHEK SINGH** " has been carried out under my/our supervision and that this work has not been submitted elsewhere for a degree. It is further certified that the student has fulfilled all the requirements of Comprehensive Examination, Candidacy and SOTA for the award of Ph.D. Degree.

Supervisor
(Prof. Sandip Chatterjee)

DECLARATION BY THE CANDIDATE

I, **ABHISHEK SINGH**, certify that the work embodied in this thesis is my own bonafide work and carried out by me under the supervision of **PROF. SANDIP CHATTERJEE** from **SEPTEMBER, 2012** to **MARCH, 2018**, at the **DEPARTMENT OF PHYSICS**, Indian Institute of Technology (BHU), Varanasi. The matter embodied in this thesis has not been submitted for the award of any other degree/diploma. I declare that I have faithfully acknowledged and given credits to the research workers wherever their works have been cited in my work in this thesis. I further declare that I have not willfully copied any other's work, paragraphs, text, data, results, etc., reported in journals, books, magazines, reports, dissertations, theses, etc., or available at websites and have not included them in this thesis and have not cited as my own work.

Date:

Signature of the Student

Place:

(ABHISHEK SINGH)

CERTIFICATE BY THE SUPERVISOR(S)

It is certified that the above statement made by the student is correct to the best of my/our knowledge.

Supervisor

(Prof. Sandip Chatterjee)

Signature of Head of Department

COPYRIGHT TRANSFER CERTIFICATE

Title of the Thesis: Synthesis and Study of Magnetic and Magneto- Transport Properties of Some Topological Insulators

Name of the Student: Abhishek Singh

Copyright Transfer

The undersigned hereby assigns to the Indian Institute of Technology (Banaras Hindu University) Varanasi all rights under copyright that may exist in and for the above thesis submitted for the award of the DOCTOR OF PHILOSOPHY.

Date:

Signature of the Student

Place:

(ABHISHEK SINGH)

Note: However, the author may reproduce or authorize others to reproduce material extracted verbatim from the thesis or derivative of the thesis for author's personal use provided that the source and the Institute's copyright notice are indicated.