

UNDERTAKING FROM THE CANDIDATE

I, **Vinay Pratap Singh**, research scholar under the supervision of **Dr. Chandana Rath**, Assistant Professor, School of Materials Science and Technology, Indian Institute of Technology (Banaras Hindu University), Varanasi give undertaking that the thesis entitled "**Studies on Intrinsic Defects in ZnO, Doped/Codoped ZnO and ZnO-SrAl₂O₄ Composites**" submitted by me for the degree of *Doctor of Philosophy* is a record of first-hand research work done by me during the period of study.

I avail myself to responsibility such as an act will be taken on behalf of me, mistakes, errors of facts, and misinterpretations are of course entirely my own.

Date

(Vinay Pratap Singh)

Place: Varanasi



पदार्थ विज्ञान एवं प्रौद्योगिकी स्कूल
SCHOOL OF MATERIALS SCIENCE AND TECHNOLOGY
भारतीय प्रौद्योगिकी संस्थान
INDIAN INSTITUTE OF TECHNOLOGY
काशी हिन्दू विश्वविद्यालय
Serving the nation since 1919
BANARAS HINDU UNIVERSITY
वाराणसी-221005, भारत
VARANASI-221005,

Tel.: +91-542-6702741; दूरभाषसंख्या: +९१-५४२-६७०२७४१ Fax: +91-542-2368428, फैक्ससंख्या: ९१-५४२-२३६८४२८ E-mail: coordinator.mst@iitbhu.ac.in

COURSE WORK/ COMPREHENSIVE EXAMINATION COMPLETION CERTIFICATE

This is to certify that **Mr. Vinay Pratap Singh**, a bonafide research scholar of this school, has successfully completed the **Ph.D.** course work examination which is a part of his Ph.D. programme.

Date

Place: Varanasi

(Coordinator of School)



पदार्थ विज्ञान एवं प्रौद्योगिकी स्कूल
SCHOOL OF MATERIALS SCIENCE AND TECHNOLOGY
भारतीय प्रौद्योगिकी संस्थान
INDIAN INSTITUTE OF TECHNOLOGY
काशी हिन्दू विश्वविद्यालय
Serving the nation since 1919
BANARAS HINDU UNIVERSITY
वाराणसी-221005, भारत
VARANASI-221005,

Tel.:+91-542-6702741;दूरभाषसंख्या:+९१-५४२-६७०२७४१Fax:+91-542-2368428, फैक्ससंख्या..९१-५४२ -२३६८४२८E-mail: coordinator.mst@iitbhu.ac.in

PRE-SUBMISSION SEMINAR COMPLETION CERTIFICATE

This is to certify that **Mr. Vinay Pratap Singh**, a bonafide research scholar of this school, has successfully completed the pre-submission seminar held on 16-August-2014 which is a part of his **Ph.D.** programme.

Date

Place: Varanasi

(Coordinator of School)

COPYRIGHT TRANSFER CERTIFICATE

Title of the Thesis: **Studies on Intrinsic Defects in ZnO,
Doped/Codoped ZnO and ZnO-SrAl₂O₄
Composites**

Candidate's Name: **Vinay Pratap 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 Ph.D. degree.

(Vinay Pratap 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 University's copyright notice are indicated.