

UNDERTAKING FROM THE CANDIDATE

I, **Ms. Nandini Jaiswal**, certify that the present work embodied in this Ph.D. thesis is my own bonafide work carried out by me under the supervision of Prof. Om Parkash and co-supervision of Prof. Devendra Kumar (Department of Ceramic Engineering, IIT(BHU), Varanasi, India) & Dr. Shail Upadhyay (Department of Physics, IIT(BHU), Varanasi, India) for a period of 3 years and 11 months from July 2011 to May 2015 in the Department of Ceramic Engineering, Indian Institute of Technology (Banaras Hindu University). The contents included in this Ph.D. thesis have not been submitted for the award of any other degree.

Date:
Place: Varanasi

(Nandini Jaiswal)

ANNEXURE F

**COURSE WORK/ COMPREHENSIVE EXAMINATION COMPLETION
CERTIFICATE**

This is to certify that **Ms. Nandini Jaiswal**, a bonafide research scholar of this department, has successfully completed the course work/comprehensive examination requirement which is a part of her Ph.D. programme.

Date:

Place: Varanasi

(Head of the Department)

ANNEXURE F

Pre Ph.D. SEMINAR COMPLETION CERTIFICATE

This is to certify that **Ms. Nandini Jaiswal**, Ph.D. scholar of the Department (Enrollment No. 311519) has delivered her Pre Ph.D. seminar on **12th December, 2014** on the topic **“Study of some doped and co-doped ceria and ceria/carbonate nanocomposite solid electrolytes for solid oxide fuel cells (SOFCs)”** in the Computer Room of the Department to the satisfaction of DPGC, DRC and RPC members.

Date:

Place: Varanasi

(Head of the Department)

ANNEXURE G

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Title of the Thesis: “Study of some doped and co-doped ceria and ceria/carbonate nanocomposite solid electrolytes for solid oxide fuel cells (SOFCs)”

Candidate’s Name: Nandini Jaiswal

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