

**ROLE OF DUST GRAINS IN PARAMETRIC COUPLING OF A
LOWER HYBRID PUMP WAVE WITH NEUTRAL BEAM
DRIVEN ION CYCLOTRON INSTABILITY IN A TOKOMAK**

Dissertation

*Submitted in partial fulfilment of the requirements
for the degree of*

MASTER OF TECHNOLOGY

in

NUCLEAR SCIENCE AND ENGINEERING (NSE)

By

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(2K13/NSE/09)

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CERTIFICATE

This is to certify that this dissertation, entitled **ROLE OF DUST GRAINS IN PARAMETRIC COUPLING OF A LOWER HYBRID PUMP WAVE WITH NEUTRAL BEAM DRIVEN ION CYCLOTRON INSTABILITY IN A TOKOMAK**, is the authentic work carried out by **Mr. RAHUL (2K13/NSE/09)** under my guidance and supervision in partial fulfillment for award Of degree of **Master of Technology (M. Tech)** in **Nuclear Science and Engineering** by Department of Applied Physics in Delhi Technological University (Formerly Delhi College of Engineering), Delhi during the year 2013-2015. As per the candidate declaration, this work has not been submitted elsewhere for the award of any other degree/diploma

DATE: July 31, 2015

PLACE: New Delhi

(Signature of Internal Assessment Guide)

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DECLARATION

I, hereby, declare that the work being presented in this dissertation, entitled **ROLE OF DUST GRAINS IN PARAMETRIC COUPLING OF A LOWER HYBRID PUMP WAVE WITH NEUTRAL BEAM DRIVEN ION CYCLOTRON INSTABILITY IN A TOKOMAK**, is an authentic record of my own work carried out under the guidance of **Prof. Suresh C. Sharma**, Head, Department, Applied Physics, Delhi Technological University (Formerly Delhi College of Engineering), Delhi. The work contained in this dissertation has not been submitted in part or full, to any other university or institution for award of any degree or diploma. This dissertation is submitted to **Delhi Technological University** (Formerly Delhi College of Engineering) in partial fulfillment for the **Master of Technology (M. Tech)** in **Nuclear Science and Engineering** during the academic year 2014-2015.

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