

CERTIFICATE

It is certified that the work contained in the thesis titled “*SYNTHESIS AND CHARACTERIZATION OF Al_3Zr AND $(Al_3Zr+ZrB_2)$ REINFORCED Al-Mg ALLOY INSITU COMPOSITES*” by *GAURAV GAUTAM* has been carried out under my 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, Candidacy and SOTA.

Dr. Anita Mohan
Supervisor
Department of Physics
Indian Institute of Technology
(Banaras Hindu University)
Varanasi - 221005

COPYRIGHT TRANSFER CERTIFICATE

Title of the Thesis: Synthesis and characterization of Al_3Zr and $(\text{Al}_3\text{Zr}+\text{ZrB}_2)$ reinforced Al-Mg alloy *insitu* composites

Name of the Student: Gaurav Gautam

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:

Place: Varanasi

(GAURAV GAUTAM)

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.