CERTIFICATE

It is certified that the work contained in the thesis titled "Applications of Boronic Acids as a Reagent and Starting Material in Organic Synthesis" by "Ms. Surabhi Gupta" 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.

Supervisor

Co-Supervisor

(Dr. Jeyakumar Kandasamy) (Department of Chemistry)

(Prof. Vandana Srivastava)

(Department of Chemistry)

COPYRIGHT TRANSFER CERTIFICATE

Title of Thesis: Applications of Boronic Acids as a Reagent and Starting Material

in Organic Synthesis

Name of the Student:

Ms. Surabhi Gupta

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: Varanasi

(Ms. Surabhi Gupta)

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.

iv