



JACOBS  
UNIVERSITY

It is hereby certified that

*Abhijit Kumar Ghosh*

born on December 15, 1975

has been conferred the degree of

DOCTOR OF PHILOSOPHY

in  
Chemistry

Title of the Dissertation: Asymmetric Reductive Amination of Prochiral  
Ketones and  $\alpha$ -,  $\beta$ -,  $\gamma$ -Keto esters

Bremen, January 10, 2008



Dr. Bernhard Kramer  
Dean of the School of Engineering  
and Science

Dr. Joachim Treusch  
President