

**EXPLORATIVE STUDIES ON CARBON-NITROGEN (C-N) BOND  
FORMATION AND SYNTHESIS OF NITROGEN CONTAINING  
HETEROCYCLIC COMPOUNDS**

**A Thesis Submitted to the University of North Bengal**

**For the award of**

**Doctor of Philosophy (Ph.D)**

**In**

**Chemistry**

**By**

**Sri Rakesh Ranjan Chakraborty (M.Sc)**

**Research Guide**

**Pranab Ghosh**

**Professor, Department of Chemistry**

**University of North Bengal**

**August, 2018**