

**SYNTHESIS OF HETEROCYCLES USING COPPER-BASED
CATALYST AND DEVELOPMENT OF NEW
METHODOLOGIES USING GROUP 16 ELEMENTS AND
THEIR COMPOUNDS IN ORGANIC SYNTHESIS**

BY

**ICYDORA KHARKONGOR, M.Sc.
CENTRE FOR ADVANCED STUDIES IN CHEMISTRY
SCHOOL OF PHYSICAL SCIENCES**

**THESIS SUBMITTED
IN FULFILMENT OF THE REQUIREMENT
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY IN CHEMISTRY
TO
NORTH-EASTERN HILL UNIVERSITY
SHILLONG-793022
INDIA
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