

PREFACE

This thesis is one of the outcomes of my effort under the supervision of Dr. Pranab Ghosh, Professor, Department of Chemistry, University of North Bengal, during the period of December 2015 to June 2021. The basis for this research originally stemmed from my passion for developing multifunctional lube oil additives and vegetable oil-based base stock. As the world moves into the age of engines, there will be a greater need to develop additives and environmentally benign stock lube that can support such operations. Therefore, it was my passion to develop additives as well as base lube that can work under severe conditions in an environment-friendly way.

Although nobody can become an expert in such a short period, it is no exaggeration to state that my learning curve, which grew like a logarithmic function, has reached a considerable level after the research. I am grateful to all those people who have contributed to this study.

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