MAJOR PROJECT

SYNTHESIS OF GLYCEROL BASED NOVEL MONOMER FOR NONISOCYANATE POLYURETHANE (NIPU): bis((2-oxo-1,3-dioxolan-4-yl)methyl) (methylene bis(4,1-phenylene)) dicarbamate

A Major – II Project Report submitted for the partial fulfillment of the requirement of the award of the degree of

MASTER OF TECHNOLOGY

IN

POLYMER TECHNOLOGY

Under Guidance of:

Dr. Raminder Kaur

Submitted by

Kamlesh Kumar

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DECLARATION

I**,** Kamlesh Kumar**,** hereby declare that the thesis entitled **"SYNTHESIS OF GLYCEROL BASED NOVEL MONOMER FOR NONISOCYANATE POLYURETHANE (NIPU):bis ((2-oxo-1,3-dioxolan-4-yl)methyl) (methylene bis (4,1phenylene)) dicarbamate"** is an authentic record of research work done by me under the supervision of **Dr. Raminder Kaur**, **Assistant professor**, Department of Polymer Science and Chemical Technology, Delhi Technological University**.** It has not been copied from any source without giving its proper reference, except where due acknowledgement has been made in the text. This work has not been previously submitted for the award of any degree or diploma of this or any other University/ Institute.

Kamlesh Kumar
(2K13/PTE/09)

CERTIFICATE

This is to certify that the project report entitled **"Synthesis of glycerol based novel monomer for non isocyanate polyurethane: bis((2-oxo-1,3-dioxolan-4-yl)methyl) (methylene bis(4,1-phenylene)) dicarbamate"** submitted by **Kamlesh Kumar (Roll No.2K13/PTE/09**) in partial fulfillment for the award of degree of **Masters of Technology in Polymer Technology** to Delhi Technological University, Delhi – 110042, is the students own work carried out by him under my supervision. The project embodies the original work done by him to the best of our knowledge and has not been submitted to any other degree of this or any other university. The matter embodied in this project report is original and not copied from any source without proper citation.

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