This is to certify that this thesis incorporates the bonafied results of the investigation carried out by Mr. D.P. Bharambe in this department under my direct supervision and guidance. Any part of this work is neither reported nor used in earning a degree or diploma elsewhere.

Prof. J.M. Lohar Guide

Applied Chemistry Department Faculty of Technology and Engg.,

M.S. University of Baroda Baroda 390 001.