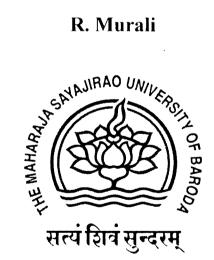


THE MAHARAJA SAYAJIRAO UNIVERSITY OF **BARODA**

For the degree of

Doctor of Philosophy In **Applied Chemistry**

Submitted by



Applied Chemistry Department Faculty of Technology & Engineering The M. S. University of Baroda Vadodara-390001 May 2011