

**Construction of recombinant Bt toxin for efficient insecticidal activity and its formulation by encapsulating in nanoparticles**

*A thesis submitted to*

**The Maharaja Sayajirao University of Baroda**



*For the Degree of*

**Doctor of Philosophy**

**(Microbiology)**

**Guided by**  
**Prof. Sanjay S. Ingle**

**Submitted by**  
**Jigar V. Shah**

**Department of Microbiology and Biotechnology Centre**

**Faculty of Science**

**The Maharaja Sayajirao University of Baroda**

**Vadodara-390002, Gujarat, India.**

**FEBRUARY 2017**