



**NAVRACHANA
UNIVERSITY**

a UGC recognized University

nuv.ac.in

Certificate

This is to certify that the thesis titled "EXPERIMENTAL STUDY ON MANUFACTURING AND FRICTION STIR WELDING OF AA 2014 BASED METAL MATRIX COMPOSITES" has been prepared by Mr. Viren K. Parikh, under my supervision and guidance.

The thesis is his original work completed after careful research and investigation.

The work of the thesis is of the standard expected of a candidate for PhD program in Mechanical and I recommend that it be sent for evaluation.

Dr. Amarish Badgujar

Forwarded through

Dr. Amarish Badgujar
Head-School of Engineering and
Technology

Dr. Mandira Sikdar
PhD Program Chairperson

To,
Registrar
Navrachana University, Vadodara

Vasna - Bhayli Road, Vadodara - 391410, Gujarat, India
Telephone: +91 265 2617000 / 100 e-mail: nuv@nuv.ac.in