



**ATMIYA
UNIVERSITY**

**VIRTUAL INERTIA ISSUE AND ITS MITIGATION TECHNIQUE IN
INTEGRATION OF RENEWABLE ENERGY WITH GRIDS**

A Thesis

Submitted to the

Atmiya University,

For the Degree of

DOCTOR OF PHILOSOPHY

in

Electrical Engineering

by

KATHAD SHILPA KESHUBHAI

Enrolment No. 191153001

Under the Guidance of

Dr. DHARMESH J PANDYA

Electrical Engineering Department

ATMIYA UNIVERSITY,

Yogidham Gurukul, Kalawad Road,

Rajkot-360005, Gujarat (India)

July, 2024