

Declaration by Research Scholar

Originality of Research Work

I declare that thesis entitled "*A Novel Fault-Tolerant Structure for a Single-Phase Seven-Level Cascaded H-Bridge Multilevel Inverter*" is my own work conducted under the supervision of **Dr. Dharmesh J. Pandya** at the Department of **Electrical Engineering**, Faculty of **Engineering & Technology**, Atmiya University, Rajkot, Gujarat, India and approved by the Director of Research.

I further declare that to the best of my knowledge the thesis does not contain any part of any work which has been submitted for award of any degree either in this University or any other University without proper citation.

Date: 20/12/2023

Place: Rajkot



Signature of the Research Scholar

[Patel Monika Devrajbhai]

Certificate of Supervisor

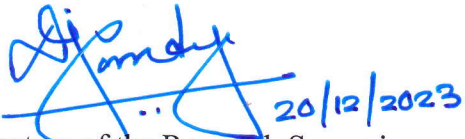
This is to certify that work entitled “*A Novel Fault-Tolerant Structure for a Single-Phase Seven-Level Cascaded H-Bridge Multilevel Inverter*” is a piece of research work done by **Patel Monika Devrajbhai** under my supervision for the degree of Doctor of Philosophy in the Department of **Electrical Engineering**, Faculty of **Engineering & Technology**, Atmiya University, Rajkot, Gujarat, India

To the best of my knowledge and belief the research work and thesis

- I. Embodies the work of candidate herself,
- II. Has duly been completed,
- III. Fulfils the requirement of ordinance related to Ph.D. degree of the University &
- IV. is up to the standard both in respect of content and language for being referred to the examiner.

Date: 20/12/2023

Place: Rajkot



Signature of the Research Supervisor

[Dr. Dharmesh J. Pandya]



Certificate

Pre Thesis Submission Presentation

This is to certify that **Patel Monika Devrajbhai** has made Pre Ph.D. presentation on the research work entitled **A Novel Fault - Tolerant Structure for A Single-Phase Seven - Level Cascaded H - Bridge Multilevel Inverter** in the Faculty of Engineering & Technology, Atmiya University, Rajkot on 17/11/2023 before Departmental Research Committee for getting feedback and comments.

This is also to certify that all the suggestions and comments given by the Doctoral Progress Review Committee are incorporated. Moreover the presented research work was appreciated and recommended by all attendees.

Date: 17/11/2023

Place: Rajkot



Adhis
Director

Centre for Research, Innovation & Translation

Thesis Approval Form

The Viva-Voce of the Ph.D. thesis entitled “*A Novel Fault - Tolerant Structure for A Single-Phase Seven - Level Cascaded H - Bridge Multilevel Inverter*” submitted by **Patel Monika Devrajbhai (Enrolment No. 191153002)** was conducted on **20/12/2023 (Wednesday)** at Atmiya University, Rajkot, Gujarat

Based on the Performance of the Candidate, We, the panel of examiners, recommend that
(Please tick any of the following)

1. He / She be awarded Ph.D. Degree
 2. He / She be awarded Ph.D. Degree with minor modification

Please Suggest Modification

3. The following modifications are to be incorporated in the thesis within one month and viva-voce be re-conducted by the same panel of examiners

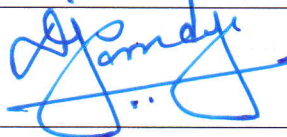


Please Suggest Modification

4. He / She should not be awarded Ph.D. Degree

Please mention Reason for Rejection

Date: 20/12/2023

Place: Rajkot

Signature			
	Research Supervisor	University Nominee	External Examiner

Declaration by Research Scholar

Submission of Thesis

I declare that the submitted thesis entitled “*A Novel Fault-Tolerant Structure for a Single-Phase Seven-Level Cascaded H-Bridge Multilevel Inverter*” incorporates

1. All the suggestions / directions / modifications / additions / deletions received from the supervisor and the external examiners through their thesis evaluation reports.
2. All the suggestions / directions / modifications / additions / deletions received from the panel of examiners during the public viva-voce (Open Defence) conducted on **20/12/2023**.

Date: 20/12/2023

Place: Rajkot



Signature of the Research Scholar

[Patel Monika Devrajbhai]

Acknowledgement

With great pleasure, I take this opportunity to express my gratitude towards all the individuals who helped and inspired me in my dissertation work.

I would like to express my gratitude to my guide **Dr.Dharmesh J. Pandya**, *Associate Professor & Head (Electrical)*, Department of Electrical Engineering, Atmiya University for his constructive suggestions for genuine and quality research work. He has devoted significant amount of his valuable time to plan and discuss the dissertation work in the stipulated time.

I am very much thankful to **Mr. Niral Y. Yagnik**, *Assistant Professor*, Department of Electrical Engineering, Ganpat University and **Mr. Dhaval Y. Raval**, *Assistant Professor*, Department of Electrical Engineering, Atmiya University for their continuous help and guidance in this research work. Their experience and insights lead the research work towards the desired level of quality set by my guide.

I would like to express my special thanks to my husband **Mr. Ravi Kalariya**, my son **Soumya Kalariya** and **my parents** for their endless love and support throughout my life.



Signature of the Research Scholar
[Patel Monika Devrajbhai]

*This work is dedicated to
my loving Brother late Dr. Bhavin and
my caring Father late Shri Devrajbhai!*