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॥ अतरी पदवु शास्त्रालय ॥

उत्तर महाराष्ट्र विद्यापीठ, जळगाव- ४२५ ००४

NORTH MAHARASHTRA UNIVERSITY, JALGAON  
Umavinagar, Post Box 80, Jalgaon - 425 001, INDIA

Telephone : (O) : 0257-2257224 0257-2258409  
Email : bcudresearch@rediffmail.com

Ref. No. NMU/11/Ph.D./Elect.Engg./1574 /2016

Date: 24/05/2016

श्रीमती. अनिता केशव पाटील यांनी अभियांत्रिकी व तांत्रिकी विद्याशाखेतर्गत इलेक्ट्रॉनिक्स इंजिनिअरींग विषयाच्या पीएच. डी. पदवीसाठी संशोधनाद्वारे घेतल्या जाणा-या परीक्षेकरिता सादर केलेल्या "Multi-scale communication using cross layer wireless sensor network Architecture for Power optimization" या शीर्षकाच्या प्रबंधाचे मुल्यमापन करण्यासाठी नियुक्त केलेल्या परीक्षकांचा अभिप्राय विद्यापीठाने मान्य केला आहे. व त्यांना पीएच. डी. पदवी प्रदान करण्यात आली, असे जाहीर करण्यात येत आहे.

श्रीमती. अनिता केशव पाटील यांनी डॉ. ए. जे. पाटील, जळगाव (मार्गदर्शक) यांच्या मार्गदर्शनाखाली संशोधन केले होते.

कुलगुरुंच्या आदेशावरून,

(डॉ. धनंजय सा. गुजरस्थी)  
परीक्षा नियंत्रक

NORTH MAHARASHTRA UNIVERSITY, JALGAON.

It is hereby notified that the report of the referees appointed to adjudicate the thesis entitled "Multi - scale communication using cross layer wireless sensor network Architecture for power optimization" submitted by Ms. Anita Keshav Patil for Ph. D. Degree Examination by Research in Electronics Engineering in the Faculty of Engineering & Technology has been accepted by the University for the award of the said Degree and that Ms. Anita Keshav Patil is hereby awarded the Ph. D. Degree.

Ms. Anita Keshav Patil had worked under the guidance of Dr. A. J. Patil, Jalgaon (Guide)

By order of the Vice-Chancellor.

(Dr. Dhananjay N. Gujarathi)  
Controller of Examinations

Registration Code No. NMU/11/Ph.D./Elect.Engg./19/2011, date 23.02.2011

Address of the Candidate

Ms. Anita Keshav Patil,  
C/o. Milind P. Dhoke, Pipeline Road,  
Vidya Colony, Savedi Ahmednagar.

Address of the Guide

Dr. A. J. Patil,  
Shri. Gulabrao Deokar College of Engineering,  
Gate No.56, Shirsol Road, Jalgaon.

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PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar





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उत्तर महाराष्ट्र विद्यापीठ, जळगाव- ४२५ ००१  
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
### NOTIFICATION

It is hereby notified for the information of all concerned that the report of the referees appointed to examine and adjudicate the thesis "*Multi-scale communication using cross layer wireless sensor network Architecture for power optimization*" submitted by the below mentioned candidate, has been accepted by this University and that the said candidate has been declared eligible for the award of Degree of:

### **DOCTOR OF PHILOSOPHY (Ph. D.)**

of the North Maharashtra University with following criterias of the UGC  
notification July 11-17,2009.

Name of the Candidate	: Ms. Anita Keshav Patil		
Ph.D.Entrance Test (PET)	: Qualified		
Date of Registration	: 23.02.2011		
Pre-Ph.D.Course Work (Grade)	Paper I	Paper II	Paper III
	O	O	O
Topic of Research	: Multi-scale communication using cross layer wireless sensor network Architecture for power optimization		
Guide	: Dr. A. J. Patil, Shri. Gulabrao Deokar College of Engineering, Gate No.56, Shirsoli Road,Jalgaon.		
Subject	: Electronics Engineering		
Faculty	: Engineering & Technology		
Pre-submission presentation	: 06.07.2015		
Viva-voce held on			
Thesis submitted on	: 05.10.2015		
Viva-Voce held on	: 06.05.2016		

  
(Prof. D. G. Hundiwale)  
Director

Board of College and University Development


Ref. No. NMU/11/Ph. D. /Elect. Engg./ 1574 /2016 Date : 24/05/2016

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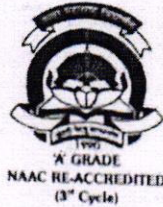
1. The University Librarian.
2. The Heads/In-charges of the University Departments/Sections.
3. Guide :- Dr. A. J. Patil, Shri. Gulabrao Deokar College of Engineering, Gate No.56, Shirsoli Road Jalgaon
4. Student:-Ms. Anita Keshav Patil, C/o. Milind P. Dhoke, Pipeline Road, Vidya Colony, Savadi Ahmednagar
5. Secretary General, AIU House, 16, Com. Indrajeet Gupta Marg, (Kotla Marg), New Delhi - 02
6. Dr. Yousuf Vir Singh, Library & Documentation Division, AIU House, New Delhi
7. The Director, INFLIBNET Centre, Infocity, Gandhinagar : 382 007 Gujarat  
(Please find enclosed herewith a CD of PDF soft copy of the thesis. for putting the soft copy of thesis on website.)

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PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar





# North Maharashtra University, Jalgaon

We, the Chancellor, the Vice-Chancellor, the Members of the Management Council  
and the Academic Council of the North Maharashtra University, Jalgaon,  
certify that



**Patil Anita Keshav**

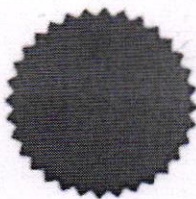
*having been examined in*

**Electronics Engineering**

*Being found duly qualified for the degree of*

## **Doctor Of Philosophy**

*the said degree has been conferred on him/her on April 08, 2017  
In Testimony whereof is set the seal of the University.*



*Dr. Vithalrao Vikhe Patil*  
PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar

*M. Pahl*  
Vice-Chancellor