NAAC 2022/ Metrics Level Deviations/Cr3-6 Date:-02/07/2022

Criteria 3.2.2:	Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years
Findings of DVV	Provide Cover page, content page and first page of Smart home — Automation and security system based on sensing mechanism Low Voltage Ride Through (LVRT) Solution for Wind Farm Using STATCOM Efficient lightning scheme by using Dislux Structural Design and Drawing-III with ISBN numbers, title, author, Department/ School/ Division/ Centre/ Unit/ Cell, name and year of publication.
Response/ Clarification	1) Cover page, content page, first page and last page of the book/publication showing title, author name along with the content page, ISBN number and year of publication of all the books as per above list for the 5 years, attested by the Principal are attached.**(Appendix-I)**

GAE
IQAC Coordinator

IQAC Coordinator
S.B.Patil College of Engineering
Vangali,Tal.Indapur, Dist.Pune

S. B. Patil College of Engineering
OFFICE
Vangali, Tal. Indapur, Dist. Pune

Principal

PRINCIPAL
S.B.Patil College of Engineering
Vangali,Tal.Indapur,Dist.Pune

Appendix-I

IEEE Xplore Browse My Settings Help Institutional Sign In IEEE
All
ADVANCED SEARCH
Conferences > 2017 Second International Con...

Smart home — Automation and security system based on sensing mechanism

Publisher: IEEE Cite This PDF

Mile Mrinal ; Lakade Priyanka ; Mashayak Sanya ; Katkar Poonam A B Gavali All Authors

7 Paper Citations
1222 Full Text Views

Need Full-Text access to IEEE Xplore for your organization?
CONTACT IEEE TO SUBSCRIBE

More Like This

Cover Page

7 Paper Citations
1222 Full Text Views

Abstract
Document Sections
I. Introduction
II. Previous Work
III. Proposed System
IV. Proposed System Architecture
V. Mathematical Model
VI. Comparative Study
VII. Conclusion
Hide Full Outline

Abstract:
Today's life rolls around the concept of automation and the things that are automated are said to be of next generation because they reduce the interference of human beings. The home automation system technology is unique from other systems which give ability to the user to control the system from any location around the world through an internet connection. The existing system describes implementation of a security system that uses Android mobile devices with the use of Blue tooth as a wireless connection protocol. These systems allow users to lock and unlock a door, sense the temperature and humidity, controlling light switches from a remote location. The new generation is based on smart humans using smart technology. A smart technology makes human life easy and updated. The proposed system is designed for home automation with some increased functionalities and using Wi-Fi as an Internet connection protocol. The increased functionalities include Alarm based smart lock, controlling household appliances from remote Location, Mosquito sensing, Smart water tank. By making use of the proposed system diseases caused due to mosquitoes can be prevented. Also this system helps in reducing the human efforts as it is automated.

Published in: 2017 Second International Conference on Electrical, Computer and Communication Technologies (ICECCT)

Content & First Page

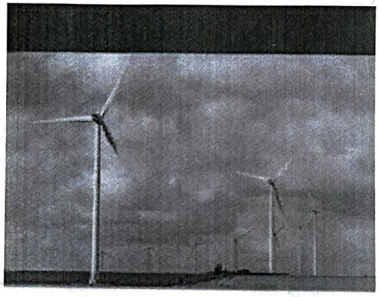
S B Patil College of Engineering OFFICE Vangali, Tal. Indapur, Dist. Pune

Pravin Phutane

Low Voltage Ride Through (LVRT) Solution For Wind Farm Using STATCOM

LAMBERT Academic Publishing

S.B. Patil College of Engineering
OFFICE
Vangali, Tal. Indapur, Dist. Pune



Pravin Phutane

Low Voltage Ride Through (LVRT) Solution For Wind Farm Using STATCOM

LAMBERT Academic Publishing

S. B. Patil College of Engineering
OFFICE
Vangali, Tal. Indapur, Dist. Pune

LAP LAMBERT Academic Publishing
is an imprint of OmniScriptum GmbH & Co. KG
Bahnhofstraße 28, 66111 Saarbrücken, Germany
Telefax: +49 681 37 20 174-9
Email: info @ lap-publishing.com
www.lap-publishing.com

Key: aeb3a720736b5d3870a8addb088ef8c2
Project: 133433
Isbn: 978-3-659-83601-5
Central Account ID: 200345037
Central Account ID History:

Author's Datasheet

Subject Matter:

Low Voltage Ride Through (LVRT) Solution For Wind Farm Using STATCOM

Last name, First name:	Phutane, Pravin	**Date of Birth:**	1987-08-09
No., Street:	PLOT NO. 45 SADASHIVNAGAR CIDCO N2A, JALNAROAD, BEHIND HDFC ATM, RAMNAGAR		
Postal Code/City:	431001,AURANGABAD	**Country:**	India
Phone home:		**Phone work:**	
Mobile:		**Fax:**	
E-Mail:	phutanepravin@gmail.com		
Bank:		**Account holder:**	
Account no.:		**Bank code/Routing no.:**	
IBAN:		**BIC:**	
Type of payment:	Decide later		

Declaration of VAT Author calculates VAT:

I have been informed that my royalty has to be declared via the Finance Office and has to payed tax on.

The Tax Number / SSN (for US) that the Financial Office issued is:

Important Notice: Without your tax number we can not disburse your royalty (is only valid for authors and editors from the US and Germany). If you haven't received your tax number yet, please type in "will be handed in later" in the respective line.

I have received and agreed the Publishing Agreement from the OmniScriptum GmbH & Co. KG of the 3-20160125-527. Online confirmation has been carried out through the author. On 2016-02-01 05:02:59 +0100 under the IP-address 117.239.40.146.

Document:4-20160125-555
General terms and conditions: 3-20160125-527

Register court/number: Handelsregister Amtsgericht Saarbrücken HRA 10356 Identification Number (Verkehrsnummer): 13955 - VAT Reg. No.: DE 258118575 - Partner with unlimited liability/Persönlich haftende Gesellschafterin: OmniScriptum Holding GmbH Register court/number: Handelsregister Amtsgericht Saarbrücken HRB 19539 - Managing director/Geschäftsführung: Dr. Wolfgang Philipp Müller (CEO)

Contents

1.	**INTRODUCTION**	**1**
	1.1 Background	1
	1.2 Problem Statement	5
	1.3 Wind Power Scenario in India	6
	1.4 State wise Wind Energy Scenario	10
	1.5 Motivation and Objectives	13
	1.6 Organization of Report	15
2.	**LITERATURE REVIEW**	**17**
3.	**WIND ENERGY CONVERSION SYSTEM**	**27**
	3.1 Configurations	27
	3.2 Wind Generator Types	29
	3.3 Wind turbine modeling	31
	3.4 PMSG Converter Topologies	31
4.	**Problem Formulation and Methodology**	**36**
	4.1 Introduction to Grid Code	36
	4.2 LVRT Technology	40
	4.3 Low Voltage Ride Through Strategies	43
	4.4 STATCOM	54
	4.5 STATCOM Operating Principle	57
	4.6 LOCATION OF STATCOM	59
	4.7 Typical STATCOM Applications	61
	4.8 STATCOM Features	61
	4.9 Applications of STATCOMs in Wind Power	62
5.	**DESIGN AND MODELLING OF PROBLEM**	**65**
	5.1 Studied System Description	65
	5.2 SIMULATION Details	67
	5.3 PROTO TYPE TEST BENCH	72

S. B. Patil College of Engineering
OFFICE
Vangali, Tal. Indapur, Dist. Pune

6. **RESULT ANALYSIS** 73

6.1 Case 1- Without STATCOM without Fault 75

6.2 Case 2- with STATCOM without fault 77

6.3 Case 3- without STATCOM with fault 79

6.4 Case 4- with STATCOM with fault 81

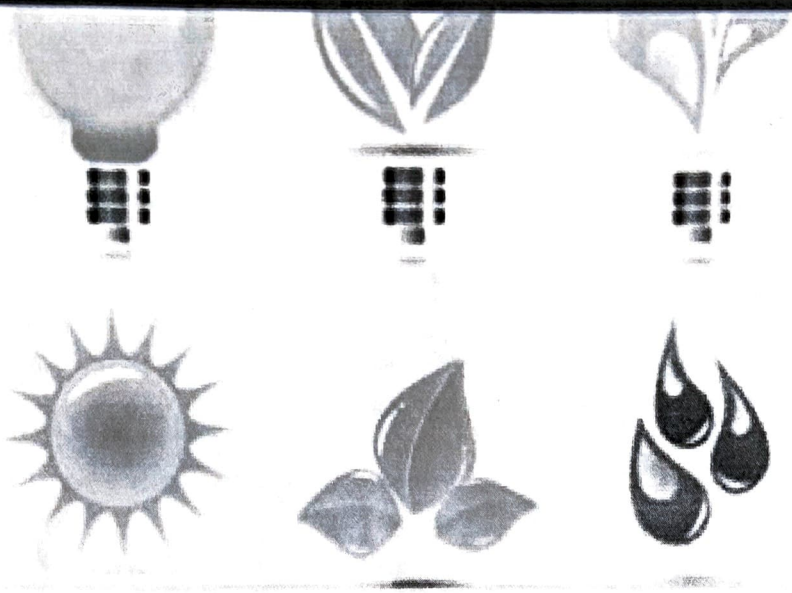
6.5 Proto Type Hardware Results 83

7 **CONCLUSION AND FUTURE SCOPE** 85

7.1 Conclusions 85

7.2 Future Work 86

Reference 87



Nilesh Deokar
Pravin Phutane

Efficient lighting scheme by using Dialux

S. B. Patil College of Engineering
OFFICE
Vangali, Tal. Indapur, Dist. Pune

LAMBERT Academic Publishing

LAP LAMBERT Academic Publishing

is an imprint of OmniScriptum GmbH & Co. KG
Bahnhofstraße 28, 66111 Saarbrücken, Germany
Telefax: +49 681 37 20 174-9
Email: info@omniscriptum.com
www.lap-publishing.com

Key: 03aba134cda4bb2662c92fa403c23267
Project: 146670
Isbn: 978-3-659-97102-0
Central Account ID: 200395657
Central Account ID History:

Author's Datasheet

Subject Matter:

Efficient lighting scheme by using Dialux

Last name, First name:	DEOKAR, NILESH	**Date of Birth:**	1987-01-01
No., Street:	PLOT NO 93, TRIMURTI NAGAR BEHIND SURYA LAWNS DEOLAI AURANGABAD MAHARASHTRA		
Postal Code/City:	431010 AURANGABAD	**Country:**	India
Phone home:		**Phone work:**	
Mobile:		**Fax:**	
E-Mail:	nileshdeokar86@gmail.com		
Bank:		**Account holder:**	
Account no.:		**Bank code/Routing no.:**	
IBAN:		**BIC:**	
Type of payment:	Decide later		

Declaration of VAT Author calculates VAT:

I have been informed that my royalty has to be declared via the Finance Office and has to payed tax on.

The Tax Number / SSN (for US) that the Financial Office issued is:

Important Notice: Without your tax number we can not disburse your royalty (is only valid for authors and editors from the US and Germany). If you haven't received your tax number yet, please type in "will be handed in later" in the respective line.

I have received and agreed the Publishing Agreement from the OmniScriptum GmbH & Co. KG of the 3-20160729-546. Online confirmation has been carried out through the author. On 2016-10-13 07:46:37 +0200 under the IP-address 117.202.20.122.

Document:4-20160729-574
General terms and conditions: 3-20160729-546

Register court/number: Handelsregister Amtsgericht Saarbrücken HRA 10356 Identification Number (Verkehrsnummer): 13955 - VAT Reg. No.: DE 258118575 - Partner with unlimited liability/Persönlich haftende Gesellschafterin: OmniScriptum Holding GmbH Register court/number: Handelsregister Amtsgericht Saarbrücken HRB 19539 - Managing director/Geschäftsführung: Dr. Wolfgang Philipp Müller (CEO)

CONTENTS

Description	Page No.
Contents	1
List of Figures	3
List of Tables	4
CHAPTER 1: INTRODUCTION	**5-8**
1.1 Background	5
1.2 Need for study	6
1.3 Objectives	7
1.4 Theme	7
1.5 Outline of thesis	8
CHAPTER 2: LITERATURE SURVEY	**9-17**
2.1 Introduction	9
2.2 Research in the field	10
2.3 The comment	16
CHAPTER 3: ILLUMINATION	**18-52**
3.1 Definitions & vocabulary	18
3.2 Definitions & vocabulary used in software	22
3.3 Luminaires	25
3.4 Lamps	28
3.5 Choice of Lamps	36
3.6 Classification of industrial illumination	38
3.7 Indoor illumination system	39
3.8 Outdoor illumination scheme	42
3.9 Classification of outdoor illumination	46
3.10 Emergency & escape route lighting	52
CHAPTERS 4: SYSTEM DEVELOPMENT	**53-67**
4.1 Introduction	56
4.2 About Project	56

S. B. Patil College of Engineering OFFICE Indapur, Dist. Pune

4.3 Lighting design criteria 57
4.4 Dialux 58
4.5 Indoor illumination scheme 61
4.6 Outdoor illumination scheme 66

CHAPTERS 5: PERFORMANCE ANALYSIS 68-169
5.1 Introduction 71
5.2 Mathematical Analysis 71
5.3 Sample calculations 75
5.4 Computational calculations 80
5.5 Comparison of results 162
5.6 Justification for difference in results 169

CHAPTER 6: CONCLUSION AND FUTURE SCOPE 170-171
6.1 Conclusion 170
6.2 Future Scope 170

REFERENCES 172-174

APPENDIX I 175

APPENDIX II 176

S. B. Patil College of Engineering
OFFICE
Vangali, Tal. Indapur, Dist. Pune

2019

SPPU

Strictly as per the new Credit System
Syllabus (2015 Course)
Savitribai Phule Pune University
w.e.f. academic year 2018-2019

STRUCTURAL DESIGN AND DRAWING - III

Chapterwise Solved SPPU
Question Papers upto Aug. 2017.

Questions & Answers
for In Semester Examination.

(Code : 401003)

Semester 7 - Civil Engineering

Sajjan V. Wagh Ramesh R. Rathod V. A. Choudhari

TECH-NEO PUBLICATIONS
Where Authors Inspire Innovation
A Sachin Shah Venture

(A94)

₹ 300/-

Structural Design and Drawing - III

Semester VII - Civil Engineering (Course code 401003)
(Savitribai Phule Pune University) (SPPU)

Strictly as per the New Credit System Syllabus (2015 Course)
Savitribai Phule Pune University w.e.f. academic year 2018-2019

Sajjan V. Wagh
M.E. Civil (Structures), AIE, LMISTE
Assistant Professor,
Department of Civil Engineering
TSSM'S PVPIT Bavdhan,
Pune, Maharashtra, India

Ramesh R. Rathod
Assistant Engineer Grade-1 (Class 1),
Water Resource Department,
Government of Maharashtra.

Prof. V.A. Choudhari
Assistant Professor,
Department of Civil Engineering,
SB Patil College of Engineering
Indapur.

512

512 Civil Dept Library-2
10-7-19
300.

TECH-NEO PUBLICATIONS
Where Authors Inspire Innovation
A Sachin Shah Venture

S. B. Patil College of Engineering
OFFICE
Vangali, Tal. Indapur, Dist. Pune

A94

Structural Design and Drawing - III

Sajjan V. Wagh, Ramesh R. Rathod, Prof. V.A. Choudhari

Semester VII, Civil Engineering, Savitribai Phule Pune University (SPPU))

[PCIV25] (FP39) (Book Code : PO20A) (RBD)

Copyright © by Authors. All rights reserved. No part of this publication may be reproduced, copied, or stored in a retrieval system, distributed or transmitted in any form or by any means, including photocopy, recording, or other electronic or mechanical methods, without the prior written permission of the publisher.

This book is sold subject to the condition that it shall not, by the way of trade or otherwise, be lent, resold, hired out, or otherwise circulated without the publisher's prior written consent in any form of binding or cover other than which it is published and without a similar condition including this condition being imposed on the subsequent purchaser and without limiting the rights under copyright reserved above.

▶ **Note from Author**

First Printed in India : July 2015

Edition : 2019

ISBN 978-93-89302-54-7

This edition is for sale in India, Bangladesh, Bhutan, Maldives, Nepal, Pakistan, Sri Lanka and designated countries in South-East Asia. Sale and purchase of this book outside of these countries is unauthorized by the publisher

Published by	**Branch office**	**Printed at**
Mr. Sachin S. Shah & Mr. Rahul S. Shah Tech-Neo Publications LLP 407-412, 4th floor, Decision Tower, Above Hotel Tiranga, Nr. City Pride Theatre, Pune-Satara Road, Pune-411009. Maharashtra State, India. Email : info@techneobooks.com Website : www.techneobooks.com Mobile : 9145531105 / 8668233261	B/5, Ground floor, Maniratna Complex, Taware Colony, Aranyeshwar Corner, Pune - 411 009. Maharashtra State, India	**Image Offset (Mr. Rahul Shah)** Dugane Ind. Area Survey No. 28/25, Dhayari Near Pari Company, Pune - 41, Maharashtra State, India. E-mail : rahulshahimage@gmail.com

Books Delivery Address

Sr. No. 38/1, Behind Pari Compound, Khodokar Industrial Estate,
Narhe, Maharashtra,
Pune 411041.

Bharati Vidyapeeth's B. P. Patil College of Engineering OFFICE Pangari, Tal. Indapur, Dist. Pune

Syllabus

Savitribai Phule Pune University

Fourth Year of Civil Engineering (2015 Course)

Course Code : 401003 Course Name : Structural Design and Drawing III

Teaching Scheme :	Credits	Examination Scheme :
Lecture : 4 Hrs/Week	TH : 04	In Sem : 30 and End Sem : 70 Marks
Practical : 2 Hrs/Week	Lab : 01	Oral : 50 Marks
		Duration : In-Sem : 1.5 Hrs.
		End-Sem : 3 Hrs.

Unit 1

Prestressed concrete – Analysis :

Introduction, Basic concepts, materials, various Pre-tensioning and Post-tensioning systems, concept of losses, Stress calculations, and concept of cable profile.. **(Refer chapter 1)**

Unit 2

Prestressed concrete – Design :

Design of post tensioned prestressed concrete simply supported rectangular and flanged sections for flexure and shear including end block. Design of one way and two way post tensioned slabs (Single panel only). **(Refer chapter 2 and 3)**

Unit 3

Design of Flat slab :

Introduction to flat slab. Design of prestressed two way flat slab by direct design method. **(Refer chapters 4)**

Unit 4

Earth retaining structures :

Introduction, Functions and types of retaining walls, Analysis and design of RCC cantilever type of retaining wall for various types of backfill conditions. **(Refer chapter 5)**

Unit 5

Liquid retaining structures :

Introduction, types, function, codal provisions, methods of analysis, Design of circular, square, and rectangular water tanks resting on ground by working stress method, Introduction to limit state design of water tanks. **(Refer chapter 6)**

Unit 6

Introduction to vibration and earthquake analysis :

Introduction to single and multi-degree of freedom systems: free, forced, un-damped and damped vibration, Estimation of earthquake forces by seismic coefficient method, Estimation of combined effect of lateral forces and vertical loading on G+2 storied frames. **(Refer chapters 7, 8 and 9)**

S. B. Patil College of Engineering OFFICE Vangali, Tal. Indapur, Dist. Pune

□□□