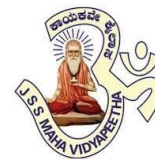





**JSS Mahavidyapeetha**  
**JSS Academy of Technical Education, Noida**  
**Department of Electrical Engineering**



**FACULTY PROFILE**

**1. Personal Details**

NAME	Dr. NIRMAL KUMAR AGARWAL	
DEPARTMENT	ELECTRICAL ENGINEERING	
DESIGNATION	ASSISTANT PROFESSOR	
PHONE	8287918529	
EMAIL ID	<a href="mailto:nirmalkragarwal.eed@jssaten.ac.in">nirmalkragarwal.eed@jssaten.ac.in</a>	
Date of Joining (JSSATEN)	07/04/2011	

**2. Experience**

Total Experience in Years 17	Teaching: 17 Years	Industry: NIL	Research: 05 Years
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**3. Qualifications**

COURSES	SPECIALIZATION	Year of Award	INSTITUTION	UNIVERSITY
B.Tech.	Electrical Engineering	2005	Laxmi Devi Institute of Engineering & Technology, Alwar	Rajasthan University, Jaipur
M.Tech.	Advanced Power System & Control	2008	N.I.T. Hamirpur, (HP)	N.I.T. Hamirpur, (HP)
Ph.D.	Electrical & Electronics Engineering	2024	G D Goenka University, Gurugram	G D Goenka University, Gurugram (Haryana)

**4. Research & Publications**

	INTERNATIONAL	NATIONAL
Papers Published in Web of Science indexed Journals	04	
Papers Published in SCOPUS indexed Journals	04	

Papers Published in other Journals	05	
Papers Presented in Conferences / Symposium	15	02
Books / Book chapters Published	NIL	
	Name of the book: NIL Publisher: NIL Year of Publication: NIL	

## 5. Research Guidance

PhD Guide? Give field & University	NIL	NIL
Projects Guided	Ph.D. Awarded: NIL Guiding: NIL	Projects at Master's Level: NIL Projects at Bachelor's Level: 20

## 6. Grants

### i. Funds Received (Projects)

Project Name	Grant Amount	Date of receiving the Grant	Duration	Grant issuing authority/ Body / Organization
NIL				

### ii. Patents

Sl. No.	Title Details	Details of award of patent / Filed
1	Detection and Monitoring of Covid-19 from Smart Phone and Digital Clock using Intelligent Technique	Date of filing: 12/11/2020 and Publication Date: 09/09/2022
2	An Intelligent Design Of Hybrid Fuzzy Poisson Fractional Order Proportional Integral Derivative Controller For The Optimal Controlling Of Wind Turbine Based Permanent Magnet Synchronous Generator	Date of filing: 12/07/2024 and Publication Date: 26/07/2024

### iii.Consultancy

Title of the work	Amount in Rs.	Date of receiving the Grant	Duration	Grant issuing authority/ Body / Organization
NIL				

## 7. Awards Received

Awards "Best Paper Award"	NIL
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## 8. Publications

### i. International Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1	MPPT Based PMSG Wind Turbine System Using Sliding Model Control (SMC) and Artificial Neural Network (ANN) Based Regression Analysis	Nirmal Kr. Agarwal, P K Sadhu, S Chakraborty	IETE Journal of Research		SCI	1.24	Taylor & Francis
2	Smart Grid in Distributed System: A Review	Abhinav Saxena, Nirmal kumar Agarwal, Sudhanshu, Rakesh	Journal of mechanics of continua and mathematical sciences, 2020	Accepted	WoS & ESCI	accepted	Journal of mechanics of continua and mathematical sciences
3	Optimal Converging distributed load allocation of three generating units using Genetic Algorithm (GAs)	Abhinav Saxena, Nirmal Kumar Agarwal, Prashant, Md. Abul Kalam, Nitin K Pal	Baltica Journal (Publisher Thomson and Router)	Vol 33, Issue 12	Both scopus & SCI	1.037	BALTICA Journal
4	Optimal Load Distribution of Thermal Generating Units using Particle Swarm Optimization (PSO)	Abhinav Saxena, Nirmal Kr. Agarwal, Prashant, Parveen P Terang	International Journal of Recent Technology and Engineering (IJRTE)	Volume-8, Issue-2S7, 2019	SCOPUS	0.16	Elsevier
5	Geothermal: Future Prospects	Nirmal Kr. Agarwal, V Kakkar	International Journal (IJAET)	Vol-4, Issue-2, Sept- 2012		3.43	IJAET
6	Improvement of Power System Operation Using Simulink Model of UPFC	Nirmal Kr. Agarwal, V Kakkar	International Journal (IJCSC)	Vol-4, Issue-1		5.1	Computer Science & Electronics Journals

## ii. National Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
NIL							

## iii. Conferences

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Conference	Volume No. Issue No. Year	WOS / Scopus	Impact Factor	Publisher
1	Recent Trends on FACTS and DFACTS	N K Agarwal, Vinay Kakkar	International Conference on “Modern Electric Power Systems (MEPS) 2010	ISBN:978-83-921315-8-8			IEEE
2	Analysis of 3-phase Induction Motor in Different Speed Reference Frame Coordinates	Abhinav Saxena, Nirmal kumar Agarwal, Prashant	IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI)	ISBN: 978-1-5386-0814-2 (DOI: 10.1109/ICPCSI.2017.8391772), June 2018	SCOPUS		IEEE
3	SHE PWM technique for three phase three level voltage source inverter	S. K. Bisoyi, N. K. Agarwal	IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI)	ISBN: 978-1-5386-0813-5 (DOI: 10.1109/ICPCSI.2017.8392012)	SCOPUS		IEEE
4	Comparative Analysis of Hydropower Plant Using MATLAB/SIMULINK	Abhinav Saxena, Nirmal kumar Agarwal, Rajesh	International Conference on Advances in Business and Engineering for Sustainability, ABES Ghaziabad	27-28 march 2018			UGC
5	Underground Cable Fault Detection Using Arduino and GSM (5 V D.C.)	Nirmal Kr Agarwal, Priya singh, Vijay tomar, Tushar jain, Shivam	National Conference (NCSES), JSSATE Noida	ISBN: 978-93-5361-694-6, June, 2019	SCOPUS		National Conference (NCSES), JSSATE Noida

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6	A Strategic Technique for Transient Stability Enhancement by using Coordinated Control of SVC and Optimal Reclosure of Circuit Breaker	Prashant, Nirmal Kumar Agarwal, Dinanath Prasad, Sanjeev Kumar Ojha	2021 5th International Conference on Information Systems and Computer Networks (ISCON)	DOI: 10.1109/ISCON52037.2021.9702403. 14 <sup>th</sup> Feb, 2022			IEEE
7	Arduino Employed Power Theft Controller and IoT based Load Controlling for Smart Energy Meter System	Nirmal Kumar Agarwal, Kishore M P, Prateek Kumar Rastogi, Shruti Singh, Shubham Singh, Yash Raj	2023 10th International Conference on Computing for Sustainable Global Development (INDIACom)	04th May, 2023			IEEE
8	An Analysis of Solar PV System with MPPT for Home Grid Applications	Prashant, Nirmal Kumar Agarwal, Arun Kumar Rawat, Kailash Sharma, Kishore M P, Ujjawal Saxena	2023 10th International Conference on Computing for Sustainable Global Development (INDIACom)	04th May, 2023			IEEE
9	Performance Analysis of Different Techniques of Traffic Control System	Sachin Pachauri, Ramashankar Yadav, Sudhanshu Maurya, Gaurav Verma, Abhinav Saxena, Nirmal Kumar Agarwal	2021 First International Conference on Advances in Computing and Future Communication Technologies (ICACFCT)	DOI: 10.1109/ICACFCT53978.2021.9837382 27th July, 2022			IEEE

#### iv. Workshops /Conferences/FDPs Attended

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	One week FDP on “Innovations in water treatment & sustainable infrastructure”	Chandigarh Engineering College, Jhanjeri, Mohali	29 <sup>th</sup> May to 2 <sup>nd</sup> June, 2023
2	One-week FDP on “Use of Tools and Techniques in Research Based Project”	Central Project Research Committee, GNIOT, Greater	11 to 17 <sup>th</sup> Oct, 2022

		Noida.	
3	Three-week FDP on “Innovative Interdisciplinary Teaching-Learning & Research Practices for Outcome Based Education?”	In Association with AICTE, GD Goenka University, Gurugram (Haryana)	14 <sup>th</sup> July to 03 <sup>rd</sup> Aug, 2022
4	One-week AICTE Approved FDP on "Recent Trends in Electric Vehicles"	Vardhaman College of Engineering, Shamshabad, Telangana.	17 to 23 <sup>rd</sup> Feb, 2022
5	One week FDP on "Fuel powered, Hybrid Electric and Modern Vehicles"	Department of Automobile Engineering, VNRVJIET, Hyderabad	19 to 24 <sup>th</sup> July, 2021
6	One week FDP on "Innovation, Incubation, Start-ups: Prospects and Challenges"	Centre of Excellence for Research & Innovation, CT Inst. of Engg. Management and Tech., CT Group of Institutions, Shahpur, Jalandhar (Punjab)	12 <sup>th</sup> to 16 <sup>th</sup> July, 2021
7	One week FDP on "Future trends in Green Technology"	Energy Centre, MANIT, Bhopal (M.P.)	22 <sup>nd</sup> to 26 <sup>th</sup> June, 2020
8	Two-week FDP on "Green Energy Technologies for Sustainable Development"	jointly NIT Kurukshetra and GEC, Bikaner (RAJ).	11 <sup>th</sup> to 20 <sup>th</sup> June, 2020
9	One-week <b>TEQUIP III STTP</b> on "Life Cycle Analysis for Sustainability"	Engineering college Bikaner (Raj.)	27 <sup>th</sup> to 31 <sup>st</sup> May, 2020
10	Two-week online FDP on "Machine Learning and Its Applications"	Electronics and ICT Academy, IIT Roorkee	05 <sup>th</sup> to 14 <sup>th</sup> May, 2020
11	Two-week FDP on “Entrepreneurship”	NSTEDB, under the project of Department of Science & Technology ( <b>DST</b> ) Department of Science & Technology, Govt. Of India (GOI) at ABES Engg. College Ghaziabad, (UP)	02 <sup>nd</sup> to 15 <sup>th</sup> Jan, 2019
12	One Week FDP on “Sustainable & Reliable Solutions to Power Quality Problems in Smart Power System Network”	Dept of Electrical Engg., JSSATE, Noida sponsored by Dr. A P J AKTU, Lucknow (UP)	08 <sup>th</sup> to 13 <sup>th</sup> Oct, 2018
13	Two Week FDP on “Entrepreneurship”	NIESBUD, under the project of Department of Science & Technology ( <b>DST</b> ) Department of Science & Technology, Govt. Of India (GOI) at NIESBUD, Noida (UP)	12 <sup>th</sup> to 26 <sup>th</sup> Feb, 2018
14	One Week Quality Improvement Programme on “Basics of Cryptography and Information Security”	C-DAC, Noida	18 <sup>th</sup> to 22 <sup>nd</sup> Sep, 2017
15	One Week National Workshop	JSSATE, Noida under the	26 <sup>th</sup> to 30 <sup>th</sup> Dec, 2016.

	<b>“INSPIRE Science Camp-2016”</b>	project of Department of Science & Technology (DST)	
<b>16</b>	Two Week FDP on “Research Methodology”	NITTTR Chandigarh	28 <sup>th</sup> Dec, 2015 to 08 <sup>th</sup> Jan, 2016
<b>17</b>	Two Week FDP on “Power Generation, Transmission & Distribution”	Electrical Engineering Department, VGI, Greater Noida	15 <sup>th</sup> to 27 <sup>th</sup> June, 2015
<b>18</b>	One day IEEE UP Section “CCIP”	organized by JSSATE, Noida	02 <sup>nd</sup> March, 2015
<b>19</b>	One Week QIP on “Control System Techniques and their Applications”	Electrical Engineering Dept., at DTU Delhi	12 <sup>th</sup> to 18 <sup>th</sup> Dec, 2014
<b>20</b>	One Week QIP on “Renewable energy resources and their applications”	Energy Dept., at IIT Delhi	11 <sup>th</sup> to 17 <sup>th</sup> Dec, 2013
<b>21</b>	One Week Quality Improvement Programme on “Application of Solar system & Photovoltaics”	Energy Dept., at IIT Delhi	12 <sup>th</sup> to 18 <sup>th</sup> Dec, 2012

**v. Workshops / Conference (Organized)**

Sl. No.	Name of the workshop / Conference	Organized by	Date	Role
1	Two days national seminar on “Recent Technological Developments in the field of Electrical Engineering (RTDEE-2013)”	JSSATE, Noida	23-24 <sup>th</sup> August, 2013	Member of Organizing Team

**vi. Conference Attended (those sponsored by AICTE / ISTE /IETE /TEQIP or any other sponsoring body)**

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	Two-Days STTP on Introduction of Cadence Software (PSpice) and Its Application	Dr. Nirmal Kumar Agarwal (Assistant professor) Department of Electrical Engineering, JSS Academy of Technical Education, Noida (UP)	13 <sup>th</sup> -14 <sup>th</sup> September, 2024

**9. Details of NPTEL / COURSERA courses completed**

Sl. No.	Name of the subject	Organized by	Date of completion / Award	Grade / Marks
1	Non-Conventional Energy Resources	NPTEL	10/06/2020	85%

**10. Membership of Professional Bodies:**

1. **Senior Member of IEEE Power & Energy Society Membership (Member No. 93372452)**

**11. Any other information you will like to share about your professional experience: NIL**