

# JSS Mahavidyapeetha JSS Academy of Technical Education Department of Electrical Engineering



# FACULTY PROFILE

# 1. Personal Details

NAME	Dr. Amit Kumar Roy	
DEPARTMENT	Electrical Engineering	
DESIGNATION	Assistant Professor (AP-2)	06
PHONE	+91-9968411857	2
EMAIL ID	amitroy.eed@jssaten.ac.in, amitroy.in@ieee.org	
Date of Joining (JSSATEB)	13/12/2011	

# 2. Experience

Total Experience in Years	Teaching: 10 Years	Industry: NIL	Research: 7 Years
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# 3. Qualifications

COURSES	SPECIALIZATION	Year of Award	INSTITUTION	UNIVERSITY
B.E.	Electrical & Electronics Engineering	2009	Sathyabama University, Chennai	Sathyabama University, Chennai
M.E.	Power Systems & Electric Drives	2011	Thapar University, Patiala	Thapar University, Patiala
Ph.D.	Department of Electrical & Instrumentation Engineering	2021	Thapar Institute of Engineering & Technology, Patiala	Thapar Institute of Engineering & Technology, Patiala

#### 4. Research & Publications

	International	National
Papers Published in Web of Science indexed Journals	International: 02	National: NIL
Papers Published in SCOPUS indexed Journals	International:	National: NIL
Papers Published in other Journals	International: 01	National:
Papers Presented in Conferences / Symposium	International: 09	National: 1
Books / Book chapters Published	Name of the book: NA Publisher: NA Year of Publication: NA	

# 5. Research Guidance

PhD Guide? Give field & University	NA	University: a. NA
PhDs / Projects Guided	Ph.D. Awarded: NA Guiding: NA	Projects at Master's Level: NIL Projects at Bachelor's Level: 15

#### 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
	NIL	

#### 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	NIL
Award"	

# 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	An integrated rule-based power management and dynamic feed- forward low voltage ride through scheme for a grid- connected hybrid energy system	Amit Kr. Roy, Gyan Ranjan Biswal, and Prasenjit Basak	J. Renewable Sustainable Energy	vol. 12, Issue 5	Both	2.219	AIP
2	Low voltage ride through capability enhancement in a grid-connected wind/fuel cell hybrid system via combined feed-forward and fuzzy logic control	Amit Kr. Roy, P. Basak, and G.R. Biswal	IET Generation, Transmission & Distribution	vol.13, Issue 13	Both	2.862	IET
3	Improved Transmission Line Contingency Analysis in Power System using Fast Decoupled Load Flow	Amit Kr. Roy and S.K. Jain	International Journal of Advances in Engineering & Technology (IJAET)	vol. 6, Issue 5	NA	NA	IJAET

# ii. National Journals

<b>SI.</b> ]	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

SI. 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	Characterization Studies of a Grid- Connected Photovoltaic Power Plant Under Various System Dynamics	Amit Kr. Roy, Mukul Chauhan, Shreyam Singh, Nilabh Srivastava	Int. Conf. Intelligent Control and Computation for Smart Energy and Mechatronic Systems, 25-26 September 2020, JSS Academy of Technical Education, Noida.	2020	_	_	_
2	Design and Modeling of Hybrid Power Generation System using Solar PV and Wind Turbine	Udit Mittal, Gunjan Varshney, Amit Kr. Roy, Abhilasha Pawar	Int. Conf. Intelligent Control and Computation for Smart Energy and Mechatronic Systems, 25-26 September 2020, JSS Academy of Technical Education, Noida.	2020	-	-	-
3	A Study on Power Quality Improvement by Active Power Filter in Hybrid Sustainable Energy Systems	Amit Kr. Roy, G.R. Biswal, and P. Basak	Int. Conf. on Power Electronics, Control and Automation (ICPECA-2019), Jamia Millia Islamia, New Delhi, India, 16-17 Nov. 2019	2019	Scopus	-	IEEE
4	Characterization Study of a Grid Connected DFIG Based WECS Under Variable Wind Speed and Loading Conditions	Amit Kr. Roy, P. Basak and G. R. Biswal	Intelligent Control and Energy Systems (ICPEICES), Delhi, India, 2018	2018	Scopus	-	IEEE
5	A hybrid filter as an integral component of HSES for	Amit Kr. Roy and G. R. Biswal	7th India International Conference on Power Electronics (IICPE), Patiala,	2016	Scopus	-	IEEE

	establishing smart cities		India, 17th-19th Nov. 2016				
6	An improvised fuel cell system for stand-alone mode application	Amit Kr. Roy, G.R. Biswal and N.P. Padhy	2016 IEEE Power & Energy Society General Meeting, Boston, MA, USA, 17th- 21st Jul. 2016	2016	Scopus	-	IEEE
7	Modeling and control of hybrid power filter using p-q theory,"1st IEEE International conference on Power Electronics	A. Abdullah, G.R. Biswal, and Amit Kr. Roy	1st IEEE International conference on Power Electronics, Intelligent control and Energy Systems (ICPEICES- 2016), Delhi Technical University, New Delhi, 4th- 6th Jul. 2016	2016	Scopus	_	IEEE
8	Investigation of a Fuel Cell System Operating in Stand Alone and Grid Connected Mode	Amit Kr. Roy and G.R. Biswal	12th IEEE India International conference (INDICON-2015), Jamia Millia Islamia, New Delhi, 17th- 20th Dec. 2015	2015	Scopus	-	IEEE
9	Learning through Modern Tools in Power Quality to Evaluate Course Outcomes	Amit Kr. Roy, G. Varshney, and V.K. Chandna	3rd IEEE International Conference on MOOC's Innovation and Technology in Education (MITE- 2015), Amritsar College of Egg. & Technology, Amritsar, Punjab, 1st & 2nd Oct. 2015	2015	Scopus	_	IEEE
10	Effect of Unbalance Fault and Load transients on a Standalone Fuel Cell System	Amit Kr. Roy and G.R. Biswal	National Conference on Emerging Trends in Electrical and Electronics Engineering	2015	-	-	Excel Publisher

(ETEEE-2015),		
Jamia Millia		
Islamia, New		
Delhi		

# iv. Workshops /Conferences Attended

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	Inculcating Universal Human Values in Technical Education	All India Council for Technical Education (AICTE)	19 July, 2021 to 23 July, 2021.
2	Peer to Peer Energy Transaction in Smart Distribution Systems	AICTE Training and Learning (ATAL) Academy Online Elementary FDP	26 <sup>th</sup> July to 30 <sup>th</sup> July
3	Microgrid an Opportunity: Electric Vehicles and Renewable Energy Resources	AICTE Training and Learning (ATAL) Academy Online Elementary FDP	5 <sup>th</sup> July to 9 <sup>th</sup> July 2021
4	Electric Vehicle	LNCT BHOPAL, AICTE under AQIS New Delhi.	8th to 13th Feb. 2021
5	Power Electronics Applications in Microgrid and Electric Vehicle Systems	J. C. Bose University of Science and Technology, YMCA, Faridabad	March 01-06, 2021
6	Advances in Renewable Energy & Smart Grid Integration	Amity University Uttar Pradesh, Noida, India	31 <sup>st</sup> May 2021 to 4 <sup>th</sup> June 2021.
7	Typhoon HIL Real Time HIL Simulation Tool for Power Electronics, Power Systems, EV and Microgrid	Jointly organized by School of Electrical Engineering and Centre of Automation (CFA) at VIT-Chennai in association with QUARBZ info system, Kanpur.	14 <sup>th</sup> to 18 <sup>th</sup> June 2021
8	Optimal Operation of Power System Incorporating Renewable Energy Sources	SIRT, Bhopal	27 <sup>th</sup> July to 1 <sup>st</sup> August 2020
9	Hardware in the Loop Simulation: Learning and Teaching Tool from Typhoon HIL	VIT, Chennai	31 <sup>st</sup> Aug. to 4 <sup>th</sup> Sep 2020

10	One-week short term training program on "Power Electronic Applications for Smart Grid, Electric Vehicles and Renewable Energy	JSSATE, Noida	26 <sup>th</sup> Nov. to 1 <sup>st</sup> Dec 2020
11	Role of IoT, Embedded, Electric Vehicles & Power Electronic Converter for Smart World	St. Joseph College of Engineering, Chennai	18 <sup>th</sup> May 2020 to 22 <sup>nd</sup> May 2020
12	Sustainable Technologies for Energy & Environment	Raj Kumar Goel Institute of Technology & Management, Ghaziabad,	17 <sup>th</sup> June to 22 <sup>nd</sup> June, 2019

# v. Workshops / Conference (Organized)

Sl. No.	Name of the workshop / Conference	Organized by	Date	Role
1	Internal Hackathon- SIH-2020	JSSATEN	21 <sup>st</sup> January 2020	Member of Jury Committee

# 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	Intelligent Control and Sensing of Smart Grid and Smart Cities (ICSSGSC)	Veer Surendra Sai University of Technology, Burla, Odisha	30 <sup>th</sup> April to 5 <sup>th</sup> May, 2018
2	Two-Weeks ISTE STTP On "Electric Power System	Remote center of IIT, Kharagpur/Bombay for ISTE Workshop under the National Mission on Education through ICT, MHRD, Govt. of India	12 <sup>th</sup> June to 15 <sup>th</sup> July, 2017
3	STC on "MATLAB and Its Hardware Interface" in ICT mode	National Institute of Technical Teachers Training 4and Research, Chandigarh	11 <sup>th</sup> -15 <sup>th</sup> Jan. 2016
4	Short Term Course on "Instructional Planning and Delivery through ICT	National Institute of Technical Teachers Training and Research, Chandigarh	11th- 15th May, 2015

# 9. Details of NPTEL / COURSERA courses completed

Sl. No.	Name of the subject	Organized by	Date of completion / Award	Grade / Marks
1	DC-Microgrid	NPTEL	July to September 2019	-
2	Electromagnetic Theory	NPTEL	Jan. To April 2016.	-
3	Industrial Automation and Control	NPTEL	Jan. To April 2016.	-

# **10. Membership of Professional Bodies:**

1. Life Membership in Indian Society for Technical Education (MISTE)- LM83198	
2. IEEE Member since 2012: Membership Number- 90301261	

# 11. Any other information you will like to share about your professional experience