

## Sri Ramakrishna Institute of Technology

## (An Autonomous Institution)

(Accredited by NAAC with "A" Grade)
Pachapalayam, Perur Chettipalayam, Coimbatore – 641 010
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## **Faculty Profile**

# Full name with Qualification, Designation and Department:

Dr. S.Sangeetha, B.E., M.E, Ph.D.,

Associate Professor,

Electrical and Electronics Engineering



Date of birth	:	02-04-1980	Gender	:	Female
Nationality	:	Indian	Marital status	:	Married
Address for		B 23 Cheran colony	Permanent	•	B 23 Cheran colony
correspondence	•	Thudiyalur,Coimbatore	address	:	Thudiyalur,Coimbatore
Mobile no	:	9486918713	e-mail (official)	:	sangeetha.eee@srit.org
Landline	:	-	e-mail (personal)	:	sangeetha.ram02@gmail.com
Date of joining	:	02.06.2008	Post of joining	:	Lecturer
No of promotions since D.O.J	:	3	Present post	:	Associate Professor
Present pay scale	:	37100	Gross pay	:	52303
Employee ID	:	TE008	Bank account No. (Salary credited)	:	500101010539018
P.F. No	:	TN/CBE/56764/317	Group Insurance No	:	
PAN Number	:	CNSPS8664P	Aadhar Number	:	536555737331
AICTE ID	:	1-474808027	AICTE Institution ID	:	1-7841521

#### **Educational Qualification**

Doggeo	Cassisliantian	Year of	Name of the	Name of the	Class
Degree	Specialization	Passing	College	University	Obtained
	B.E. Electrical	2001	Bharath	University of	First Class
	and Electronics		Institute of	Madras	
UG	Engineering		Science and		
			Technology,		
			Chennai-73.		
	M.E(Power	2006	Sona College	Anna	First Class
PG	Systems		of	University	(Distinction)
rG	Engineering)		Technology,	Chennai	
			Salem-5		
	Ph.D(Electrical)	2020	-	Anna	-
Ph.D				University,	
				Chennai	

Registration for Ph.D. with area of interest: Renewable Energy

Year of Ph.D. Registration: 2012 Year of Ph.D. Completed: 2020

Thesis Title: Certain Investigations on Power Quality of Grid Connected Wind Energy Systems

Using Intelligent Controller Based FACTS Devices

Supervisor Recognition Number: Nil

Ph.D. Scholar Details

S.No.	Name of the scholar	Registration details	College	Status
		Nil		

#### Academic Experience

Name of the College	Designation	Joining	Relieving	Experience		
rume of the conege	Designation	Date	Date	Years	Months	Days
Annai Teresa College of Engg,Thirunavalur	Lecturer	04.07.2001	15.05.2002	-	10	10
V.R.S College of Engineering and Technology, Arasur	Lecturer	17.06.2002	24.11.2003	1	5	7

	Lecturer	02.06.2008	30.06.2010	2	-	28
Sri Ramakrishna	Assistant Professor	01.07.2010	30.09.2014	4	2	-
Institute of Technology, Coimbatore	Assistant Professor(Sr.Gr)	01.10.2014	30.05.2019	4	7	-
	Assistant Professor(Sl.Gr)	01.06.2019	30.10.2021	2	4	-
	Associate Professor(I)	01.11.2021	till date	2	-	-
				17	4	15

## Industrial Experience

Name of the	Designation	Nature	Joining Relieving Exper		Experience	•	
Organization	Designation	of Work	Date	Date	Years	Months	Days
Nil							

## Courses Handled

Academic Year	Semester	Course Code	Course Name	Type of Course (T	Pass Percentage
				/L) `	0
2023-24	V			Т	ongoing
2023-24	VII			Т	ongoing
2022-23	VII	UEEE104	Flexible AC Transmission	Т	95
			Systems		
2022-23	I	20EEG01	Basic Electrical and	Т	78
			Electronics Engineering		
2022-23	IV	20EE008	Transmission and	T	90
			Distribution		
2021-22	V	UEEC102	High voltage Engineering	Т	100
2021-22	VII	UEEC102	Protection and Switch gear	Т	100
2021-22	VI	UEEC104	Power system Operation and	T	80
			Control		
2020-21	V	UEEC009	Power System Analysis	Т	
2020-21	VII	UEEC102	Protection and Switch gear	Т	100
2020-21	IV	UEEC006	Generation, Transmission	Т	100

			and Distribution		
2020-21	VI	UEEC104	Power system Operation and	Т	100
			Control		
2019-20	V	UEEC009	Power System Analysis	T	84
2019-20	VII	EE6005	Power Quality	T	100
2019-20	IV	UEEC006	Generation, Transmission	T	100
			and Distribution		
2019-20	VI	UEEC104	Power system Operation and	T	100
			Control		

## **Projects Guided**

Academic Year	Semester	Project Title	UG / PG
2023-24	VII	AI based Battery Management system for EV charging	UG
2022-23	IV&III	Design and Development of High voltage output DC	PG
		to DC push pull converter	
2022-23	VIII	Intelligent Public Transport System	UG
	IV&III	Power Quality analysis and Enhancement	PG
		methods in Power System due to the Impact	
		of EV Charging Stations	
2021-22	VIII	Smart Gas Leakage Detection and Prevention System	UG
2021-22	VIII	Solar Power Monitoring and Tracker Using IoT	UG
2020-21		Impact analysis of power quality in the grid due	UG
		Electric vehicle Charging	
2020-21	VII&VIII	Smart Washroom Management System	UG
2019-20	IV&III	Design of hysteresis controller for three phase	PG
		induction motor using Thingspeak	
2019-20	VII&VIII	Power quality Analysis of Electric vehicle	UG
		Charging and Design of Filter circuit	

## **Publications**

Publications	SCI / Scopus / Web of Sciences	Others
Journal	6	10
Conferences	2	3

#### Journal Publications (IEEE format)

- 1. L.Alagarasan, S.Sangeetha, "Smart Power Quality Management in EV Charging Station", NeuroQuantology, Volume 20, No. 10, P-6590- 6597, Sep 2022. (Scopus Indexed)
- 2. S.Sangeetha, Yoousuf Vannarath, "Impact of EV Charging stations on Power system Quality", Journal of Algebraic statistics, Volume 13, No.3, P-2765-2774, Aug 2022
- 3. L.Alagarasan, S. Sangeetha "Artificial tree Energy Harvesting Topology- A Future Electricity", NeuroQuantology, Volume 20, No. 6, P-1982- 1991, May 2022. (Scopus Indexed)
- 4. Poornima D,Sangeetha S, "Smart Monitoring of Food ware houses", Pensee International Journal, Volume-51 Issue-5, May 2021 (Scopus Indexed)
- Sangeetha S, Poornima D, "Smart Public Addressing System", International Journal of Interdisciplinary Global Studies, ISSN No: 2324-755XVolume: 14, Issue No: 04, Oct-Dec' 2020 (Scopus Indexed)
- Poornima D,Sangeetha S, "Cuk Converter for Waste Heat Recovery from Automobile Engine using Thermoelectric Generator with Air as Coolant", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-4, February 2020 (Scopus Indexed)
- 7. Sangeetha S, Poornima D "Analysis of STATCOM with PSO Controller in Grid Connected Wind Energy System", Journal of Emerging Technologies and Innovative Research, vol. 6,No.2, pp. 1178-1182, Feb 2019
- 8. Sangeetha S, Mahalakshmi R "Effective Power Quality Management in Grid Connected Wind Energy System through Performance Enhanced STATCOM", Journal of Electrical Engineering, vol. 19, pp. 349-362 .(SCI)
- 9. Poornima D,Sangeetha S "Design of a Biomass cook stove with co-ogeneration using Thermoelectric Generators", International Journal of Applied Engineering Research, Vol. 13, No. 12, June 2018.
- 10. Pradeep Balaji,Maharaja K,Sangeetha S,Poornima D,"Harmonic Analysis of Three phase salient pole Alternator under various loading conditions using Power Quality analyzer", Journal of advanced research in Dynamical and Control system, special issue 2,2017.
- 11. Sangeetha S ,Arun Kumar G, "Design of Interline Power Flow Controller for Grid Connected Wind Energy Conversion System", International Journal of Electronics, Electrical and Computational System, Volume 5, Issue 6, pp 42-46, June 2016
- 12. Pradeep Balaji, Maharaja K, Sangeetha, "Solar PV fed Current pumped Battery charger", Middle east Journal of Scientific Research, Vol 23, issue 9 and pp.2270-2277, Dec 2015.
- 13. Sangeetha S,Shenbaga Priya S,"Modelling and Analysis of UPFC controller for power flow control", International Journal of Applied Engineering Research, Vol. 10, No. 10, April 2015.
- 14. Sangeetha S,Hemalatha R,"Power quality analysis of grid connected wind energy conversion system under varying wind speed conditions with Synchronous generator and doubly fed Induction generator", International Journal of Applied Engineering Research, Vol. 10, No. 10, April 2015.

- 15. Sangeetha S ,Smirthi Ramakrishnan, "Microcontroller Based Current Detection in AC Locomotives", International Journal of Engineering Research and Applications, Vol. 4, Issue 3, pp 20-25, March 2014.
- **16.** Maharaja K, Sangeetha S, "Sizing of Solar PV Power Plant for Stand- alone operation" in International Journal of Engineering Research and Technology, Vol. 3, Issue 6, June 2014.

#### Conference Publications (IEEE format)

- 1. G Mahalakshmi, S Sangeetha, Maladhi Maladhi, T Bhavatharini, "Automation of Industrial Drives using PLC and SCADA", AIP Conference Proceedings, Vol. 2527,2022
- 2. Sangeetha S,Poornima D "Analysis of STATCOM with PSO controller in Grid Connected Wind Energy Systems", International conference on Applied Science Engineering and Technology (ICASET-18)" held at 29.12.2018 and 30.12.2018 at Pondicherry.
- 2. Sangeetha S, Mahalakshmi R,"Analysis of power quality in grid-connected wind energy system with UPFC", International conference on Innovations in Electrical, Information and Communication Engineering (ICIEICE'17), Kongunadu College of Engineering and Technology on 24.03.2017 &25.03.2017.
- 3. Maharaja K,Pradeep Balaji P,Sangeetha S,"Development of Bidirectional Net meter in Grid connected Solar PV system for Domestic consumers" in the International Conference on International conference on Energy Efficient Technologies for Sustainability-2016 on 07.04.16 and 08.04.16.
- 4. Sangeetha S,Brindha Devi, "Design and Analysis of FACTS Devices for Grid connected WECS" in the International Conference on Innovations in Embedded and Communications Systems (ICIIECS '16) on 17.03.16 and 18.03.16.
- 5.Sangeetha S, Mahalakshmi R,"Analysis and Harmonic Mitigation in Variable Speed Wind Turbines using Hybrid Filter" in the Fourth National Conference on Innovations in Power Electronics Controls & Systems on 16.03.12 and 17.03.12.

#### Books / Book Chapters (IEEE format)

1. Sangeetha S,Deepa S,Balamurugan S, "Revolution in Technology Enabled Health care: Internet of Things" Evolving Predictive Analytics in Health Care: New AI techniques for real time interventions,IET,2022.

- 2. Sangeetha S, Poornima D, "Robotic Technology for Pandemic Situation", Predictive and Preventive Measures for COVID-19 Pandemic, Springer publication, Singapore, Chapter 17,pp 273-291,2021.
- 3. Sangeetha S, Poornima D, "Stand Alone Solar PV Module Power Plant Requirements and Design for a Commercial load", Advances in Renewables Energy Engineering, Akinik Publications, New Delhi, Chapter 7,pp 123-139,2019

#### Sponsored Research

S.No	Project Title	Funding Agency	Amount Rs.	Duration
	Washroom Management for hospitals	Tamilnadu State Council for Science and Technology (TNSCST)	Rs.7500	6 months
	Development of a Test Rig for Design of Boost Converter for Waste Heat Recovery from Automobiles	SRIT Research Promotion Scheme	Rs.1,42,500	2 Years

#### Consultancy

S. No.	Organization/ Agency	Nature of Work		Year
1	Foretec Engineers, Coimbatore	Power Quality Improvement & Preparation of O&M Manual for passive harmonic filter in RSM Autokast.	Rs 15,000	2015-16

#### Workshops / Seminars attended

#### Faculty Development Program attended (from recent)

- 1. Design and Development of Industry led Curriculum in Technological Era" during 14-22 December 2022 conducted by Amet University, Chennai.
- 2. Recent Trends in Electrical Engineering: A Research Perspective -2020", from 20.07.20 to 26.07.20, organised by Department of Electrical and Electronics Engineering and IEEE PES &IAS Student BranchChapter of Amrita School of Engineering –Bangalore
- 3. Online FDP On "Electric Vehicles" By PSG College Of Technology Under AICTE Training And Learning (ATAL) Academy From 24.08.2020 To 28.08.2020
- 4. AICTE Sponsored Six Days Online Short Term Training Program on "IoT Based Control Strategies for AC/DC Microgrid in Smart City Implementation" by Sri Ramakrishna Engineering College from 14.12.2020 to 19.12.2020

- 5. AICTE Sponsored Six Days Online Short Term Training Program on "Machine Learning and IoT for Industrial Applications" by Dr.N.G.P.Institute of Technology from 27.07..2020 to 01.08.2020
- 6. Short-Term Training Program (Sponsored by TEQIP-III) on "Power Electronics Applications to Industrial Systems" by Electrical Engineering Department, National Institute of Technology (NIT), Silchar, Assam from 07.09.2020 to 11.09.2020
- 7. Universal Human Values on the theme Including Universal Human values in Technical Education from 02.11.2020 to 06.11.2020
- 8. Participated in AICTE sponsored two weeks Faculty Development Programme on "Smart Power Grid Technologies" from 17.11.17 to 30.11.17 at Government College of Technology ,Coimbatore.
- **9.** Participated in Faculty Development Programme on "Power Systems" from 12.06.17 to 15.07.17 conducted by IIT Khargpur.

#### **Events Organized (from recent)**

#### Conference

"International Symposium On Emerging Trends in AI, Robotics and Renewable Energy" on 09.03.2023

#### **FDP**

- 1. "Research Perspectives: Renewable Energy in Electric Vehicle Charging",22.11.2021 to 26.11.2021 with the Grant of Rs.93000 by ATAL academy, New Delhi.
- 2. "Research Perspectives of Artificial Intelligence in Electrical Engineering" conducted by Department of Electrical and Electronics Engineering from 27.07.2020 to 31.07.2020

#### Workshops

- 1. Hands on training in the topic "Hands on training of simulation of FACTS devices in MATLAB" was organised on 7th September 2022
- 2.Hands on Training on Solar PV System Design, Installation and Maintenance" on 13.12.2021 for polytechnic students
- 3. Boot camp for first B.E EEE and Mech students on "Solar power and its application" on Dec 2021

#### Seminars

- 1. Quiz competition on eve of National sports day on 29.08.2022
- 2. Guest lecture on "My Story -Motivational Speech by Successful Innovator" was jointly organised on 25th February on 2022
- 3. Research Opportunities in AI, IoT, Big Data and Robotics –A Paradigm Shift towards SDG Perspectives" on 25.06.2022
- 4. Online webinar Sizing of Roof Top Solar Panel and Battery for Consumer on 31.07.21

- 5. Online guest lecture on "Monitoring & Fault restoration in Power System by Substation Automation "-Er.Shihab Abdulvahid,B.Tec,MIE,C.Eng,System Protection section,Qatar General Electricity &water corporation ,Doha, Qatar on April 2021
- 6. Webinar on "Electric Automotive system design through MBD using MATLAB" by Mr.Mathan Muthusamy Senior Engineer, Tata Elxsi Thiruvananthapuram in May 2020
- 7. Webinar on "Augmented Reality and its Future in Industries" by Mr.Nagarchunan Palanisamy, Co –Founder and R&D Director, 9 to 5 Universe, Coimbatore in August 2020.
- 8. Webinar on "Evolution Of Embedded Systems In Electrical Engineering" by Dr.Hariram Satheesh Principal Scientist at ABB in Oct 2020
- **9.** Webinar on "Network Attacks And Security Mechanisms" by S.Anuradha, Cyber Security Analyst and Project Engineer, Wipro Technologies, Cochin in Nov 2020

#### Online Courses Completed

Sl. No.	Title	Platform
1	Electronic Waste Management – Issues and Challenges	NPTEL
2	Yoga and Positive Psycology for Managing career and life	NPTEL
3	ICT in Teaching and Learning	NPTEL
4	Introduction to Artificial Intelligence	Skill up
5	Outcome Based Pedagogic Principles for Effective Teaching	NPTEL
6	Electric Vehicle	NPTEL
7	Educational Leadership	NPTEL
8	Internet of Things	NPTEL
9	Introduction to Sustainability	Coursera
10	Introduction to IoT and Embedded Systems	Coursera
11	Electric Power Systems	Coursera
12	Renewable Energy and Green Building Entrpreneurship	Coursera
13	Electric Cars:Introduction	EDX
14	Smart Cities	OpenLearnx
15	Enhancing Soft Skills And Personality	NPTEL
16	BEC Preliminary	Cambridge University

#### Awards and Recognitions Secured

- 1. Received "ICONIC Awards 2023" under category of Mentorship for Tech startups from Covai chronicle and Global Ties on 22.07.2023.
- 2. Received "Senior Woman Educator & Researcher" Award from National Foundation for Entrepreneurship Development on 8th March 2018.

- 3. Received "Dr Radhakrishnan Award" from SRIT Alumini association on 15th August 2018.
- 4. Reviewer in the International Conference on "Research Perspectives:IoT in Hybrid Grid Integrated Renewable Energy Sources",24.03.2021 & 26.03.2021.
- 5. Resource Person in AICTE sponsored two weeks FDP on "Role in IoT in Renewable Energy Sources driving Electrical Power Grids" at New Horizon College of Engineering College, Bengaluru ,18.01.2021 to 23.01.2021

#### Self-appraisal

### **Major Strengths**

- 1. Work with team members progressively
- 2. Participate in any development activities conducted in the college towards students
- 3. Aspire to learn new technologies and interact with outside world

#### Major Weakness

- 1. Research Publications in Reputed journals with eminent researchers
- 2. Patent recognition for the innovation
- 3. Consultancy work undertaken for the industry

Signature