### K.S.R. COLLEGE OF ENGINEERING, TIRUCHENGODE – 637 215.

# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING FACULTY PROFILE

01. Name : Dr.R.SANKARGANESH (CEEE16)

02. Designation : Associate Professor

03. Date of Birth : 05.06.1977

04. Date of Joining : 13.09.2007

05.Professional Membership : ISTE

06. Qualification:



S.No.	Qualification	Specialization	Name of the Institution	Affiliated to	Year of Completio n	Class & % of Marks
1.	Ph.D.,	Power Electronics	-	Anna University	2015	-
2.	M.E.,	Power Electronics and Drives	Annai Mathammal Sheela Engineering College	Anna University	2008	I Class 73%
3	B.E.,	EEE	Coimbatore Institute of Technology	Anna University	2005	I Class 72%
4	Diplo.	EEE	K.S.R Institute of Technology	DOTE, CHENNAI	1996	I First Class 75%

**07. Area of Interest** : Power Electronics and Drives & Renewable

Renewable Energy

### **08.** Experience, Promotion & Designation Details (Chronological):

S.No.	Name of the Organization	Designation	Period		
	Tume of the Organization	Designation	From	To	
1.	K.S.Rangasamy Institute of Technology	Lecturer	08.01.2005	28.11.2006	
2.	K.S.R. College of Engineering	Lecturer	11.09.2007	30.06.2010	
3.	K.S.R. College of Engineering	Assistant Professor	01.07.2010	31.10.2017	
4.	K.S.R. College of Engineering	Associate Professor	01.11.2017	Till date	

### 09. Publication Details:

	National Level		Intern	ational Level
	Journal(s)	Conference(s)	Journal(s)	Conference(s)
KSRCE	-	07	07	09
Others	-	-	-	-

<sup>\*-</sup>Annexure

### 10. Details of Monographs, Books & Patterns

S.No.	Title	Name of the author(s)	Publisher Name	Year of Publication
1	Wireless Vehicle Movement and Density Monitoring with Substitute Route Suggestion	Dr.R.Sankar Ganesh & Dr.S.Ramesh	The Patent office at CHENNAI	Applied 05.02.2019
2	Smart and Energy Efficient Cooking System	Dr.R.Sankar Ganesh	The Patent office at CHENNAI	Applied 09.05.2018

## 11. Details of Proposal

S.No.	Title of the Proposal	Funding Agency Details	Date & Duration	Status
1	Self Tuning Electric Scooter Hover Board	TNSCST	2017-2018	NA
2	Traffic Control System using GSM	TNSCST	2017-2018	NA
3	Internet of Things and its Application for Micro electrical machine in Medical Sciences	ICMR	2017-2018	NA
4	Maize peeler and dehusker machine	TNSCST	2018-2019	NA

### 12. Details of Winter/Summer Schools Attended

	S.No.	Name of the programme	Organized by	Date &Duration
Ī	-	-	-	-

13. Details of Workshops/ Seminars Attended

S.No	Name of the programme	Organized by	Date &Duration
1.	SciTech Product Fest	Scientech Tech Pvt Ltd, Indore.	26 <sup>th</sup> Dec 2008
2.	Mobile Communications	VelalarCollege of Engineering and Technology, Coimbatore	1 <sup>st</sup> Aug 2008
3.	Power Quality and Energy Management Perspectives in Indian Industries	Coimbatore Institute of Technology, Coimbatore	24 <sup>th</sup> and 25 <sup>th</sup> July 2009
4.	Current and Potential issues in Renewable Energy Sources	Kongu Engineering College, Erode	28 <sup>th</sup> and 29 <sup>th</sup> Aug 2009
5.	Wind Energy Technology	Sri Krishna College of Engineering and Technology, Coimbatore.	20 <sup>th</sup> February 2010
6.	Faculty Development Programme on Electric Power Utilization and Energy Auditing	K.S.R. College of Engineering, Tiruchengode	03 <sup>th</sup> & 10 <sup>th</sup> Dec 2010
7.	Research Issues on Photovoltaic cells in Renewable Energy Sources	Kongu Engineering College, Erode	15 <sup>th</sup> to 16 <sup>th</sup> Dec 2010
8.	Solar PV Installations	PSG College of Technology, Coimbatore	17 <sup>rd</sup> to 19 <sup>th</sup> March 2011
9.	Applications of Biologically Inspired Algorithms for Power system and Power Electronics Engineering	National Institute of Technology, Tiruchirappalli	28 <sup>th</sup> June 2011.
10.	Recent Advancements in Generation and Utilization of Renewable Energy	K.S.R. College of Engineering, Tiruchengode	15 <sup>th</sup> to 28 <sup>th</sup> May 2013
11.	Basics of Laboratory Virtual Instrumentation Engineering Workbench	K.S.R. College of Engineering, Tiruchengode	18 <sup>th</sup> and 19 <sup>th</sup> October 2013

12.	Recent Trends in Power System	Vidyaavikas College of Engineering and Technology, Tiruchengode	04 <sup>th</sup> &05 <sup>th</sup> Dec 2013
13.	Modeling and Simulation of Power Electronic Circuits	C.A.R.E. Group of Institutions, Tiruchirapalli	09 <sup>th</sup> May 2014.
14.	Energy Management in Industries and Institutions	RVS College of Engineering and Technology	06 <sup>th</sup> Sep 2014
15.	Concepts and Design of PWM Controller and Data Logger using Embedded System	K.S.R. College of Engineering, Tiruchengode	22 <sup>nd</sup> Sep 2014
16.	Blooms Taxonomy and Its Assessments	K.S.R. College of Engineering, Tiruchengode	20 <sup>tn</sup> March 2015
17.	Power Electronics	Sengunthar Engineering College, Tiruchengode	21 <sup>th</sup> to 27 <sup>th</sup> May 2015
18.	Design and Manufacture of Electronics Products	TSK India Electronics, Tiruchengode	02 <sup>nd</sup> & 03 <sup>rd</sup> Aug 2015
19.	International Conference on Nano Material's and NanoTechnology	K.S.Rangasamy College of Technology, Tiruchengode	07 <sup>th</sup> to 10 <sup>th</sup> Dec 2015
20.	Two week ISTE STTP on Technical Communication	Indian Institute of Technology Bombay(VidhyaVikas Engg and Tech)	08 <sup>th</sup> Oct to 05 Dec 2015 (2 weeks)
21.	INSA sponsored national Seminar Research Perspectives on Power Quality monitoring and Mitigation in future Smart Grids	Nandha Engineering College, Erode	09 <sup>th</sup> May 2016
22.	One day seminar on Patent Filling in India and other Countries	K.S.R. College of Engineering, Tiruchengode	08 <sup>th</sup> Aug 2016
23.	Two week ISTE STTP on Electric Power system	Indian Institute of Technology Kharagpur(VidhyaVikas Engg and Tech)	12 <sup>th</sup> June 2017 to 15 <sup>th</sup> July 2017
24.	Professional Development Skill Accreditation Board of Engg and Tech	K.S.R. College Of Engineering, Tiruchengode	13.10.2017

25.	Professional Development Skill inRole of DST in promoting S&T ecosystem in India Avenues & Opportunities	K.S.R. College Of Engineering, Tiruchengode	18 <sup>th</sup> Nov 2017
26.	ETD on Computational Vivalenandha Callaga of		20 <sup>th</sup> Nov 2017 to 03 <sup>rd</sup> Dec 2017
27.	Workshop on Industrial Automation using PLC	Dhirajlal Gandhi College of Technology, Salem	17 <sup>th</sup> Feb 2018
28.	Professional Development Skill on How to Access eResources	K.S.R. College Of Engineering, Tiruchengode	23.01.2018
29.	Workshop on Outcome Based Education	K.S.R. College Of Engineering, Tiruchengode	01.11.2018
30.	Workshop on Challenges, issues and possible solutions in future smart grid integration of renewable energy system	Nandha Engineering College, Erode	27 <sup>th</sup> & 28 <sup>th</sup> Feb 2019
31.	Workshop on An Electronic Gateway for Research	K.S.R. College Of Engineering, Tiruchengode	10 <sup>th</sup> July 2019
32.	Workshop on Arduino based Realtime Products	Knogunadu College of Engg & Tech, Trichy	30 <sup>th</sup> & 31 <sup>st</sup> Aug 2019

# ${\bf 14.\ Details\ of\ Winter/Summer\ Schools/Workshops/Seminar sorganized:}$

S.No	Name of the programme	Sponsored by	Acted as	Duration	Coordinator
1	Printed Circuit Boards design using Photo Resist Method	Department	Organizer	13 <sup>th</sup> & 14 <sup>th</sup> Oct 2016	Dr.R.Sankar Ganesh

# 15. Details of the Subjects Handled(in KSRCE):

S.No	Academic Year	Semester	Name of the Subject	Class/Sem
1	2007 2009	Odd	Basic Electrical and Electronics Engg	I B.Sc CT
1.	2007-2008	Even	Measurement and Instrument Lab	III EEE
		Odd	Telecommunication and Switching Network	IV EEE
2.	2008-2009	F	Linear Integrated Circuits and Applications	II EEE
		Even	Mobile Communication	IV EEE
	2000 2010	Odd	Telecommunication and Switching Network	IV EEE
2.	2009-2010	Even	Embedded Systems	III EEE
		Odd	Electric Drives and Control	IV EEE
3.	2010-2011	Г	Renewable Energy Sources	IV EEE
		Even	Basic Electrical and Electronics Engg	I AUTO
		Odd	Electric Drives and Control	IV EEE A
4.	2011-2012	Г	Linear Integrated Circuits and Applications	II EEE A
		Even	Solid State DC Drives	I ME PED
		Odd	Power Quality	IV EEE A
5	2012-2013	E	Linear Integrated Circuits and Applications	II EEE A
		Even	Solid State DC Drives	I ME PED

	2012 2014	Odd	Electric Drives and Control	IV EEE A
6	2013-2014	Even	Linear Integrated Circuits	II EEE B
		Odd	Electrical Energy Conservation and Management	II ME PED
7		Odd	Electric Drives and Control	II Mech D
/	2014-2015	Even	Solid State DC Drives	I ME PED
		Lven	Linear Integrated Circuits	II EEE A
		Odd	Electrical Energy Conservation and Management	III ME PED
0	2015 2016	Odd	Measurement and Instrumentations	II EEE A
8	2015-2016	EVEN	Electrical Machines –I	II EEE A
			Solid State DC Drives	II ME PED
			Measurements and Instrumentation	II EEE A
		ODD 2016-2017	Solid State Drives	IV EEE B
	2017 2017		Solid State Drives Lab	IV EEE B
9.	2016-2017		Electrical Machines – I	II EEE A
		EVEN	Computer Networks	VIII EEE
			Principles of Management	III EEE B
10	2017-2018	ODD	Soild State Drives	IV EEE A
10	2017-2018		Solid State Drives LAB	IV EEE A
		EVEN	Analog Integrated Circuits	II EEE A & B

			Analog and Digital Integrated Circuits LAB	II EEE A
	2018-2019	ODD	Computer Networks	III EEE A
			Soild State Drives	IV EEE A
			Solid State Drives LAB	IV EEE A
11			Power Electronics inWind and Solar Power Convesion	PED II
		EVEN	Electrical Machines-I	II EEE B
			Electrical Machines-I LAB	II EEE B
			Industrial Electronics	III EEE B
12	2019-2020	ODD	Energy Management Audit	IV EE A&B
			Power Electronics inWind and Solar Power Convesion	PED II
			Electrical Machines II - Lab	III EEE B

# 16. Additional Responsibilities:-

# 16.1 College Level

S.No.	Details of Work	Work allotted by	Duration
1.	Press and Media Cell	Principal	2008–Till Date

# 16.2 Dept Level

S.No.	Details of Work	Work allotted by	Duration
1.	Library In-charge	HoD	2008–2015
2.	Library In-Charge	HoD	2017 – Till Date
3.	Class Advisor UG	HoD	2007 – 2011
4. Lab In-charge		HoD	2009 – Till Date

5.	Class Advisor PG	HoD	2012 – 2014
6.	Mini Project In-Charge	HoD	2013- Till Date
7.	Association In-Charge	HoD	2015- Till Date
8. Academic Coordinator		HoD	2015-2016 To Till Date

### 17. Self-Appraisal

- 1. Major Strengths:
- 1. Work Effectively with Different Kinds of People
- 2. Respectfulness
- 3. Honesty
- 4. Quick Learner
- 5. Ability to Motivate People
- 2. Major Weaknesses:
  - 1. Struggle to manage my time sometimes
  - 2. Communication Style can be Sometimes Harsh

Signature

(Dr.R.Sankar Ganesh)

#### NPTEL Course (1)

1. NPTEL online certification on "Research Writing" 4 Weeks Course.

#### **Guest Lectures (3)**

- Lecture on "Solar Energy Commercialization and its Utility", in the AICTE Sponsored Faculty Development Programme, Conducted at K.S.R. College of Engineering, Tiruchengode, 15<sup>th</sup> to 28<sup>th</sup> May 2013.
- 2. Guest Lecture on "DC Machines", second year EEE students, Conducted by Vidyaa Vikas College of Engineering and Technology, Tiruchengode, 17<sup>th</sup> Feb 2018.
- 3. Lecture on "Coupled circuits and magnetic Circuits" in the Anna University approved Faculty Development Programme, Conducted at K.S.R. College of Engineering, Tiruchengode, 26<sup>th</sup> Nov 2018 to 08<sup>th</sup> Dec 2018.

#### **National Conferences (7)**

- 1. **Sankarganesh R,** "Input stage of AC drive applications by novel control technique", Muthayemmal Engineering College, Rasipuram. 22<sup>th</sup> and 23<sup>rd</sup> February 2008.
- 2. **Sankar GaneshR**, "Improvement of the MPPT Technique for Solar panel using Converter", National Power Engineering Conference, Thiagarajar college of Engineering, Madurai, on 03 Dec 2010.
- Sankar Ganesh R, and Lavanya S, "PV based LUO Converter with Hybrid Multilevel Inverter for utility System", National Conference on Recent Trends in Electrical Science, Institute of road and Transport Technology, Erode, 26<sup>th</sup> Feb 2015
- 4. Sankar Ganesh R, "Space Vector of Three Phase level Neutral Point Clamped Quasi Z Source Inverter", National Conference on Recent advances in Power Electronics, Embedded and Renewable Energy Systems, K.S.R. College of Engineering, Tiruchengode, 12<sup>th</sup> March 2015.
- 5. Sankar Ganesh R, & Narmatha P "An optimised inverter with shared power switches based on fuzzy logic controller", National Conference on Recent Advances in Communication, Electronics and Electrical Engineering, Jain University, Bangalore, 3<sup>rd</sup> Feb 2018.

- Sankar Ganesh R, & Gowtham, "Minimizing travel time and overcoming the peak traffic in cities using embedded system", National Conference on Electric Power and Energy System, Kongunadu college of engineering & technology, Trichy. 24<sup>th</sup> March 2018.
- 7. **Sankar Ganesh R, & Nandhini,** "Develop a automatic coconut dehusker and waste pulverizer machine", National Conference on Emerging Trends in engineering and Technology, Nandha college of Technology, Erode. 16<sup>th</sup> March 2019.

#### **International Conferences (9)**

- Sankar Ganesh R, "Maximum Power Point Tracking in PV System using Intelligence Based P&O Technique and Hybrid CUK Converter" International Conference on Emerging Trends in Science, Engineering and Technology, J.J College of Engineering and Technology, Tiruchirappalli on 13<sup>th</sup> and 14<sup>th</sup> Dec 2012
- 2. **Sankar GaneshR**, "Simulation of Photovoltaic Based Grid Connected Micro Inverter using CUK Converter", International Conference on Engineering Technology and Science, Muthayammal College of Engineering, Namakkal on 10<sup>th</sup> & 11<sup>th</sup> Feb 2014
- 3. **Sankar GaneshR**, and Lavanya R, "Space Vector of Three Phase Three Level Neutral Point Clamped Quasi Z Source Inverter", International Conference on Scientific and Engineering Research-ICSER'15, Vidhya Mandhir Institute of Technology, Tamil Nadu, 20 March 2015.
- 4. **Sankarganesh R**, and Divya M, "Solar power system with Modified Boost Converter using MPPT Controller", International Conference at Maria College of Engineering, Kaniyakumari.2010
- Sankarganesh R, and LavanyaS, "PV Based Luo Converter with Hybrid Mutilevel Inverter for Utility System", International Conference on Convergence for trends in technology at AVS College of Technology, Salem. 28<sup>th</sup> Apr 2017
- Sankarganesh R, and Dhanushya A, "PV Interfaced Two leg Three Phase Split Source Inverter based Series Active Power Filter", International Conference on Convergence for trends in technology, at AVS College of Technology, Salem. 28<sup>th</sup> Apr 2017
- 7. **Sankarganesh R**, "An efficient multilevel inverter based on Fuzzy logic controller using shared power switches", International Conference on Advanced Science and Engineering Research at Al-Ameen Engineering College, erode. 05<sup>th</sup> Apr 2018

- Sankarganesh R, "Easy travel for Human and Material by using Skateboard with Wiper Motor", International Conference on Innovations in science, Engineering and Technology for sustainable development at Muthayammal Engineering College, rasipuram. 30<sup>th</sup> & 31<sup>st</sup> March 2018
- 9. **Sankarganesh R**, "Develop a Coconut Tree Climbing and Harvesting Machine", International Conference on Recent Trends in Engineering, Science and Technology at SBM College of Engineering and Technology, Dindigul. 2nd March 2019

#### **International Journals (07)**

- Sankarganesh, R&Thangavel, S 2012, 'An Efficient modified cuk converter with fuzzy based maximum power point tracking controller for PV system', International journal of Simulation System, Science and Technology, vol. 13, no. 1, pp. 59-67
- Sankarganesh, R&Thangavel, S 2014, 'Performance analysis of various DC-DC converter with optimum controller for PV applications', Research Journal of Applied Sciences, Engineering and Technology, vol.8, no.8, pp.929-941
- 3. **Sankarganesh, R** & Thangavel, S 2014, 'SVPWM control based bridgeless PFC cuk converter for PMSM under dynamic conditions', WSEAS Transactions on Circuits and Systems, vol.13, no. 36, pp.319-335
- Sankar Ganesh R, "Design and Simulation of Switched Boost Inverter for AC and DC Loads", International Conference on Engineering, Technology and Science, MuthayammalCollege of Engineering, Rasipuram on 01 Feb 2014.
- 5. **Sankar Ganesh R**, "Simulation of Photovoltaic Based Grid Connected Micro Inverter using CUK Converter" International Conference on Engineering, Technology and Science, MuthayammalCollege of Engineering, Rasipuram on 01 Feb 2014.
- Sankar Ganesh R, "Space Vector of Three Phase Three Level Neutral Point Clamped Quasi Z Source Inverter", International Journal for Trends in Engineering and Technology(IJTET) on 02 April 2015
- 7. **Sankarganesh, R** & Thangavel, S 2016, 'A PV Module integrated Isolated CUK Converter interfaced grid connected Microinverter", published in Journal of Testing and Evaluation, vol. 44, no. 3, pp. 1-19, May 2016.