#### **Curriculum Vitae**



Brief Profile: **Dr. S. S. Karthikeyan** received the B.E degree in Electronics and Communication Engineering from the Bharathidasan University, M.E. Degree in Applied Electronics from Sathyabamaba Institute of Science and Technology, and Ph.D. degree from the Indian Institute of Technology Guwahati (IIT G). From Dec. 2010 to Aug. 2011, he worked as an Assistant professor (Senior) at VIT Vellore. Following his PhD Viva, he joined the Department of Electronics Engineering, Indian Institute of Information Technology, Design and Manufacturing (IIIT DM) Kancheepuram in Aug. 2011. Currently he is a faculty member of ECE department, NIT Tiruchirappalli. His research areas include analysis and design of passive microwave devices with emphasis on dual band and wideband operation, printed antennas/arrays, frequency selective surfaces and SIW based devices/components. He has authored or co-authored over 70 international journal and conference papers in the areas of his research interests.

Name: : Dr. Karthikeyan S S
Designation : Assistant Professor

3. Office Address: #314, Department of ECE

4. Telephone (Direct) (Optional):

Telephone: Extn (Optional):

Mobile (Optional):

5. Email (Primary):sskarthikeyan@nitt.edu Email (Secondary) :

6. Field(s) of Specialization: RF/Microwave Engineering, Antennas, Additive manufacturing of RF components/Circuits

### 7. Employment Profile

Job Title	Employer	From	То
Assistant Professor	NITT	18.5.2018	Till Date
Assistant Professor	IIITDM K	17.8.2011	17.5.2018
Assistant Professor (Senior)	VIT	15.12.2010	16.8.2011
Lecturer	AVCCE	2002	2006

Design Engineer	Vi Microsystems	2001	2002
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### 8. Academic Qualifications:

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	IIT Guwahati	2011	-	Electronics and Electrical Engineering
M.E	SIST, Chennai	2005	First Class	Applied Electronics
B.E	Bharathidasan University	2001	First Class	Electronics and communication Engineering
D.E.E.E	Muthiyah Polytechnic	1998	First Class with honours	Electrical and Electronics Engineering

### 9. Academic/Administrative Responsibilities within the University

Position	Institution	From	То
Hostel Warden	NIT T	2018	Till Date
Hostel warden	IIITDM K	2017	2018
UG Project Coordinator	IIITDM K	2017	2018
Cultural Coordinator	IIITDM K	2014	2017
Ph.D Selection Committee Chairman	IIITDM K	2016	2016
Ph.D Admission Scrutiny Committee	IIITDM K	2012	2014
M.Des. Selection Committee Chairman	IIITDM K	2016	2016
Refreshment Committee Chairman	IIITDM K	2015	2017
Class committee Chairman	IIITDM K	2017	2017

### 10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	То
Ph.D Thesis Examiner	Various Universities	2011	
Doctoral Committee member	Various Universities	2011	
Chair	IEEE AP-S, Madras Chapter		
	_	2017	

### 11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2009	IEEE Student Author Award	IEEE AEMC

### 12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
-	-	-	-	-

### 13. Details of Academic Work

### (i) Curriculum Development

RF and Microwave Circuit Design

Antenna Theory and Design

Electromagnetic Interference and Compatibility

Electromagnetic Interference and Compatibility Practice Course

RF and Microwave Circuit Design Practice Course

### (ii) Courses taught at Postgraduate and Undergraduate levels

Electronic Manufacturing and Packaging

Digital Signal Processing and Architecture

Analog and Digital Communication

Electronic Circuit Design

Electronic Circuit Design Practice course

Microprocessor and Microcontrollers

Data Networks

RF and Microwave Circuit Design

Antenna Theory and Design

Electromagnetic Interference and Compatibility

Electromagnetic Interference and Compatibility Practice Course

RF and Microwave Circuit Design Practice Course

### (iii)Projects guided at Postgraduate level

Year	Title	Name of the Student
2013	Size miniaturization and performance	K. V. Phani Kumar#
	enhancement of microwave devices	
2015	Design and development of microwave	Purushothaman.B
	filters	
2015	Remote Monitoring of elevators	K.T.Venkatesan
2015	Design of multi band branch line	Iqram Haider
	coupler	
2015	Design of a low noise amplifier	Pradyumna Kumar Bishoyi
2015	Compact Wideband Branch Line	Rusan Kumar Barik#
	Coupler for Arbitrary Coupling Level	
	with Harmonic Suppression	

2015	Design and development of the microwave sensors using split ring	Amitabh
	resonator	
2016	Design of dual band impedance	Rehana Siddiqui#
	transformer and its application	-
2016	Design and implementation of SIW	Shivam Awasthi
	passive devices	
2016	Design of wideband and dual band	Solunke Yogesh Shriram
	microwave filters	
2016	Design and development of SIW	Soumyakanta Pradhan
	antennas for X, Ku and K band	
	application	
2017	Frequency selective surfaces and its	Adeline Melita
	applications	
2017	Design of dual band cross over with	Idury Satya Krishna#
	Flexible Frequency ratio	
2018	Design and Implementation of Tri-Band	T S Laxman Deep
	Microwave Passive Devices	
2018	Design of Multiband and Beam steering	Agathiyan Rejendran
	Antenna for 5G Applications	
2018	Design of RF sensor for detection of	Jairein S
	adulteration in edible oils	
2018	Design and implementation of	Sirimella Praveena
	Reconfigurable antenna	

<sup>#</sup>Received the Best Project Award

### 14. Details of Major R&D/Consultancy Projects

	Funding	Duration		Status
Title of Project	Funding Agency	From	То	Ongoing/
	Agency			Completed
Design and development of a dual band RF	DST-	2019	2022	Ongoing
Energy Harvester for Wireless Sensor	IMPRINT			
Networks using Aerosol Jetting Technology				
Development of 3D printed Wearable Button	DST-	2019	2022	ongoing
Antenna for Soldier Performance Monitoring	IMPRINT			
Applications				

### 15. Number of PhDs guided

Name of the PhD	Title of PhD Thesis	Role	Year
Scholar			
K. V. Phani Kumar	Design, analysis and implementation of	Supervisor	2017
	RF/Microwave planar passive		
	Devices for wireless applications		

Rusan Kumar Barik	Design and Implementation of wideband and Multi-Band RF/Microwave Components	Supervisor	2018
Chandu D S	Investigations and implementations of novel methods in the design of circularly	Supervisor	2019
	polarized printed antennas		

## 16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of	Level of Event	Role (Participant/	Event	Venue
	Activity	(International/	Speaker/	Organized	
		National/ Local)	Chairperson, Paper	by	
			presenter, Any other)		
$6^{\rm h}$ to $10^{\rm th}$ ,	Mission	National	Participant	Wipro	VIT
June 2011	10X				
$4^{th}$ to $6^{th}$ ,	FDP	National	Participant	IITM	IITM
Jan. 2015					
20 to 22	FDP	Local	Participant	NITT	NITT
June 2018					

## 17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convener / Co-Convener)

Title of Activity	Level	of	Date (s)	Role	Venue
	Event				
	(Internation	nal/			
	National/				
	Local)				
One Day seminar on Advanced	National		23 <sup>rd</sup> June,	Coordinator	IIITDM K
Antennas for Satellite			2017		
Applications					
Advanced Topics in Signal	National		$13^{th}$ to $15^{th}$ ,	Coordinator	IIITDM K
Processing, RF and Wireless			June, 2016		
Communication,					
Next Generation RF and	National		4 <sup>th</sup> & 5 <sup>th</sup>	Coordinator	IIITDM K
Wireless Technologies for Rural			June, 2015.		
India,					
Research Challenges in RF and	National		21st & 22nd	Coordinator	IIITDM K
Wireless Communication			June, 2013.		

### 18. Invited Talks delivered (Recent Talks)

Topic	Date	Inviting Organization
Metamaterials and its	6.04.2018	SSN CE
Application		
Electromagnetic Theory:	March 2018	St. Joseph College
Application perspective		
Wearable Antenna	9.11.2017	KCG College of technology

### 19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Member	IEEE, IEEE MTT-S, IEEE	Since 2011
	AP-S	
Life Member	ISTE	Since 2005

### 20. Academic Foreign Visits

Country	Duration of Visit	Programme
UK	3-7 Oct. 2016	European Microwave Week
France	7-10 Sept. 2015	European Microwave Week

#### 21. Publications

### (A) Refereed Research Journals:

- 1. D S Chandu and **S S Karthikeyan**, "A Miniaturized Broadband High Impedance Surface With Flexible Circular Polarization Sense", *IEEE Transactions on Antennas and Propagation*, vol. 67, no. 4, pp. 2819 2824, 2019.
- 2. Chandu D S and **S S Karthikeyan**, "A quad-band linear to circular reflective polarisation transformer andits application in dual-sense circularly polarised antenna design", *IET Microwaves, Antennas & Propagation*, vol.13, pp. 819 826, 2019.
- 3. S K Tharani Duraisamy, R K Barik, S S Karthikeyan, Selvajyothi Kamatchi, "A novel SIW based dual-band power divider using double-circular complementary split ring resonators", *Microwave and Optical Technology Letters*, vol. 61, pp. 1529-1533, 2019.

- 4. **S S Karthikeyan**, "Compact Dual-Band Substrate Integrated Waveguide Crossover with High Isolation", *Progress in Electromagnetics Research*, vol. 83, pp. 23-28, 2019
- 5. R K Barik, IS Krishna, **S S Karthikeyan**, "Design of a tri-band 180-degree directional coupler with spurious suppression based on extended pi-shaped microstrip line" *Microwave and Optical Technology Letters*, Vol. 60, No. 7 pp. 1612-1619, 2018
- 6. KVP Kumar, **S S Karthikeyan** "Compact, high selectivity and wideband bandpass filter with multiple transmission zeros", *AEU-International Journal of Electronics and Communications*, Vol. 94, pp. 79-83, 2018.
- 7. S Y Shriram, KVP Kumar, S S Karthikeyan, "Compact dual-wideband bandpass filter for wireless applications", *AEU-International Journal of Electronics and Communications*, Vol. 95, pp. 69-72, 2018.
- 8. R Adeline Mellita, D S Chandu, S S Karthikeyan, "A novel open loop design technique for frequency selective surface miniaturization", *Microwave and Optical Technology Letters*, Vol. 60, No.10, pp. 2599-2604, 2018.
- 9. R K Barik, T S Laxman Deep, **S S Karthikeyan**, "An equal split triple-band Wilkinson power divider employing extended cross-shaped microstrip line, *Microwave and Optical Technology Letters*, Vol. 60, no. 10, pp. 2488-2492, 2018.
- 10. Chandu DS and **S S Karthikeyan**, "Broadband Circularly Polarized Printed Monopole Antenna with Protruded L-Shaped and Inverted L-Shaped Strips," *Microwave and Optical Technology Letters*, Vol. 60, no. 1, pp. 242–248, 2018.
- 11. Rusan Kumar Barik, Rathod Rajender and S S Karthikeyan, "A Miniaturized Wideband Three-Section Branch-Line Hybrid with Harmonic Suppression Using Coupled-Line and Open-ended Stubs," *IEEE Microwave and Wireless Components Letters*, Vol. 27, no. 12, pp. 1059-1061, 2017.
- 12. Rusan Kumar Barik and S S Karthikeyan, "Design of dual/tri-frequency impedance transformer with ultra-high transforming ratio," *International Journal of Microwave and Wireless Technologies*, Vol. 9, no. 10, pp. 1951-1960, 2017.
- 13. Rusan Kumar Barik and **S S Karthikeyan**, "Dual-Frequency Impedance Transformer Using Coupled-Line for Ultra-High Transforming Ratio," *Radio Engineering*, Vol. 26, no. 4, pp. 1067-1074.
- 14. Rusan Kumar Barik and S S Karthikeyan, "A Novel Quad-Band Impedance Transformer with Ultra-High Transforming Ratio", *International Journal of Electronics and Communications*, Vol. 78, pp. 157-161, Aug. 2017.

- 15. Rusan Kumar Barik and **S S Karthikeyan**, "A Novel Design of Ultra-High Impedance Transforming Ratio Quad-Band Matching Network", *Microwave and Optical Technology Letters*, Vol. 59, No. 8, pp. 2021-2026, Aug. 2017.
- 16. Idury Satya Krishna, Rusan Kumar Barik and S. S. Karthikeyan, "A Dual-Band Crossover Using Cross Shaped Microstrip Line for Small and Large Band Ratios", *International Journal of Microwave and Wireless Technologies*, pp. 1-7, Apr. 2017.
- 17. Rusan Kumar Barik, K.V. Phanikumar and S. S. Karthikeyan, "Design of a Dual-Band Microstrip Branch-Line Balun Using T-Shaped Coupled Lines", *Microwave and Optical Technology Letters*, Vol. 59, no. 5, pp. 1197-1202, 2017.
- 18. K.V. Phanikumar and S. S. Karthikeyan, "Highly compact wideband double-section rat-race hybrid with harmonic suppression using series and shunt stepped impedance transmission lines", *International Journal of Microwave and Wireless Technologies*, Vol. 9, no. 4, pp. 797-803, 2017. DOI: 10.1017/S1759078716000982, IF: 0.976
- 19. Idury Satya Krishna, Rusan Kumar Barik and S. S. Karthikeyan A Miniaturized Harmonic Suppressed 3 dB Branch Line Coupler Using H-shaped Microstrip Line", *Microwave and Optical Technology Letters*. Vol. 59, no. 4, pp. 913-918, 2017. DOI: 10.1002/mop.30428, IF: 0.731
- 20. Chandu D S and **S S Karthikeyan**, "A Novel Broadband Dual Circularly Polarized Microstrip-Fed Monopole Antenna", *IEEE Transactions on Antennas and Propagation*, Vol. 65, no. 3, pp. 1410 1415, 2017.
- 21. K.V. Phanikumar and **S. S. Karthikeyan**, "Miniaturized quadrature hybrid coupler using modified T-shaped transmission line for wide-range harmonic suppression", *IET Microwaves, Antennas & Propagation* Vol. 10, no. 14, pp. 1522-1527, 2016.
- 22. Rusan Kumar Barik, K.V. Phanikumar and S. S. Karthikeyan, "Design of a Quad-Band Branch Line Balun Using Extended Pi-Shaped Coupled Lines", *IEEE Microwave and Wireless Components Letters*, Vol. 26, no. 10, pp. 771-773, 2016.
- 23. Rusan Kumar Barik, K.V. Phanikumar and S. S. Karthikeyan, "A compact wideband harmonic suppressed 10 dB branch line coupler using cascaded symmetric PI sections", *Microwave and Optical Technology Letters*, Vol. 58, no. 7, pp. 1610-1613, 2016.
- 24. K.V. Phanikumar, Rusan Kumar Barik and S. S. Karthikeyan, "A novel two section branch line coupler employing different transmission line techniques", *International Journal of Electronics and Communication*, Vol. 70, no. 5, pp. 738-734, 2016.

- 25. K. V. Phanikumar and S. S. Karthikeyan, "Wideband three section branch line coupler using triple open complementary split ring resonator and open stubs", *International Journal of Electronics and Communication*, Vol. 69, no. 10, pp. 1412-1416, 2015.
- 26. K. V. Phanikumar and S. S. Karthikeyan, "A compact 1:4 lossless t-junction power divider using open complementary split ring resonator", *Radio Engineering*, Vol. 24, no. 3, pp. 717-721, 2015.
- 27. **S. S. Karthikeyan** and Rakhesh Singh Kshetrimayum, "Compact and Wide Stopband Lowpass Filter Using Open Complementary Split Ring Resonator and Defected Ground Structure", *Radio Engineering*, Vol. 24, no. 3, pp. 708-711, 2015.
- 28. **S. S. Karthikeyan** and R. S. Kshetrimayum "Compact, harmonic suppressed power divider using open complementary split-ring resonator", *Microwave and Optical Technology Letters (MOTL)*, Vol. 53, pp. 2897-2899, 2011.
- 29. **S. S. Karthikeyan** and R. S. Kshetrimayum "Size miniaturized rat-race coupler using open complementary split ring resonator", *IEICE Transaction on Electronics*, Vol. E94-C, pp. 1601-1604, 2011.
- 30. **S. S. Karthikeyan** and R. S. Kshetrimayum, "Compact, Deep and Wide Rejection Bandwidth Lowpass Filter using Open Complementary Split Ring Resonator, *Microwave and Optical Technology Letters (MOTL)*, Vol. 53, pp. 845-848, 2011.
- 31. **S. S. Karthikeyan** and R. S. Kshetrimayum "Composite right/left handed transmission line based on open slot split ring resonator", *Microwave and Optical Technology Letters (MOTL)*, Vol. 52, pp. 1729-1731, 2010.
- 32. **S. S. Karthikeyan** and R. S. Kshetrimayum, Notched UWB bandpass filter using Complementary Single Split Ring Resonator", *IEICE Electronics Express (ELEX)*, Vol. 7, pp. 1290-1295, 2010.
- 33. **S. S. Karthikeyan** and R. S. Kshetrimayum, "Compact Wideband Bandpass Filter using Open Slot Split Ring Resonator and CMRC," Progress *in Electromagnetics Research Letters (PIERL)*, Vol. 10, pp. 39-48, 2009.
- 34. S. S. Karthikeyan and R. S. Kshetrimayum, "Harmonic suppression of parallel coupled microstrip line bandpass filter using CSRR," *Progress in Electromagnetics Research Letters (PIERL)*, Vol. 7, 193-201, 2009.
- 35. R. S. Kshetrimayum, S. S. Karthikeyan and D. Dey, "Bandgap determination of triangular lattice EBGs in the ground plane", International *Journal of Electronics and Communication*, Vol. 63, no. 8, pp. 699-702, 2009.

- 36. R. S. Kshetrimayum, S. Kallapudi and S. S. Karthikeyan, "Stop Band Characteristics for Periodic Patterns of CSRRs in the Ground Plane and its Applications in Harmonic Suppression of Band Pass Filters", *International Journal of Microwave and Optical Technology*, Vol. 3, No. 2, pp. 88-95, 2008.
- 37. R. S. Kshetrimayum, S. Kallapudi and **S. S. Karthikeyan**, "Stopband Characteristics for Periodic Patterns of CSRRs in the Ground Plane", *IETE Technical Review*, Vol. 24, no 6, pp 449-460, 2007.

### (B) Conferences/Workshops/Symposia Proceedings

- 1. An Ultrathin Quad-band Microwave Absorber with Small Frequency Ratio, European Microwave Conference, 29<sup>th</sup> Sep-4<sup>th</sup> Oct. Paris, 2019. (**Received the Travel Grant from EuMA**)
- 2. R Adeline Mellita, D S Chandu, S S Karthikeyan, "Novel Approach for Enhanced Reduction of SAR in a Mobile Phone Antenna Using High Impedance FSS", International conference on Signal Processing and Communication (SPCOM), 16-19 July, 2018, IISc Bangalore.
- 3. Chandu D S, Tharani D, S S Karthikeyan, "A Novel Circular Quarter-Mode SIW Cavity-Backed Diversity Antenna with Dual-Circular Polarization", International conference on Signal Processing and Communication (SPCOM), 16-19 July, 2018, IISc Bangalore. (Received the Best Graduation Day Talk Award)
- 4. Gunjan Kumari, Rusan Kumar Barik, Prerna Saxena, **Karthikeyan S S**, "Compact Substrate Integrated Waveguide Power Divider with Slot-Loaded Ground Plane for Dual-Band Applications", International Microwave & RF Conference (IMaRC-2018), 28-30, Nov., Kolkatta, 2018.
- 5. Chandu DS, Rusan Kumar Barik, and S S Karthikeyan, "Triple-Band Circularly Polarized Antenna on a Two-Layered High Impedance Surface with Two In-Phase Reflection Bands," In Proceedings of 47th European Microwave Conference (EuMC 2017), Nuremberg, Germany, Oct. 2017. (Received the Travel Grant from CSIR)
- 5. Rusan Kumar Barik, Chandu DS, and S S Karthikeyan, "Broadband Coupled Line Matching Network for Two Dissimilar Port Reference Impedances," In Proceedings of 47th European Microwave Conference (EuMC 2017), Nuremberg, Germany, Oct. 2017. (Received the Travel Grant from DST)

- 6. Idury Satya Krishna, Rusan Kumar Barik, and **S. S. Karthikeyan**, "Analysis and Design of a Planar Crossover for Dual-Frequency Applications", IEEE INDICON, IIT Roorkee, Dec. 2017
- 7. Adeline Melita, Chandu DS and S. S. Karthikeyan, "Gain Enhancement of a Microstrip Patch Antenna Using a Novel Frequency Selective Surface," In Proceedings of NCC-2017, IIT Madras.
- 8. Idury Satya Krishna, Rusan Kumar Barik, and **S. S. Karthikeyan**, "'A Miniaturized Wideband Bandpass Filter Based on  $3\lambda/4$  Resonator Loaded with Stepped Impedance," In Proceedings of NCC-2017, IIT Madras.
- 9. K.V. Phani Kumar, Rusan Kumar Barik, Idury Satya Krishna and S. S. Karthikeyan, "Design of Compact 1800 Hybrid Coupler for Unequal Power Division Ratio Using a High Slow Wave Structure," In Proceedings of NCC-2017, IIT Madras.
- 10. S. K. Pradhan, R K Barik, P. K. Bishoyi, S. S. Karthikeyan, and Chandu D S, "A Novel Dual-Band Matching Network Using Modified T-Shaped Line and Its Application," In Proceedings of International Conference on Wireless Communications Signal Processing and Networking (WiSPNET 2017), SSN College of Engineering, Mar. 2017.
- 11. Chandu DS, S. Pradhan and S. S. Karthikeyan, "A wideband substrate integrated waveguide slotted array antenna with multimode and multidirectional characteristics", in Proc. Annual IEEE INDICON, IISc Bangalore, 2016.
- 12. Rusan Kumar Barik, R Siddiqui, K.V. Phani Kumar, S. S. Karthikeyan, "Design of a novel dual-band low noise amplifier incorporating dual-band impedance transformer", in Proc. International Conference on Signal Processing and Communication (SPCOM), IISc Bangalore, 2016.
- 13. 10. Chandu DS, S. Pradhan and S. S. Karthikeyan, "SIW Based Modified Slotted Array Antenna with Circular Polarization for X, Ku and K Band Communications", in Proc. European Microwave Conference (EuMC), London, 2016.
- 14. Rusan Kumar Barik, K.V. Phanikumar and S. S. Karthikeyan, "Compact wideband 3dB branch line coupler with multiple symmetric PI section", in Proc. European Microwave Conference (EuMC), Paris, 2015.
- 15. Chandu D S, S.S. Karthikeyan, K.V.P. Kumar, "Reduction of mutual coupling in a two element patch antenna array using sub-wavelength resonators", in Proc. National Conference on Communication (NCC), IIT Bombay, 2015. (Received the travel grant form NI)

- 16. 13. Rusan Kumar Barik and S.S. Karthikeyan, "Design of a novel dual-band impedance transformer using coupled lines", in Proc. IEEE Applied Electromagnetic Conference (AEMC), IIT Guwahati, 2015.
- 17. Purushothaman. B, K.V. Phani Kumar, and S. S. Karthikeyan, "Dual-Band Bandstop Filter Using Single Tri-section Stepped Impedance Open Stub", in Proc. International Conference on Microwave and Photonics, ISM Dhanbad, 2015.
- 18. P K Bishoyi, and S. S. Karthikeyan, "Design of a two stage Ku band low noise amplifier for satellite applications", in Proc. International Conference on Communications and Signal Processing (ICCSP), 2015.
- 19. R. K. Barik, P. K. Bishoyi, S. S. Karthikeyan, "Design of a Novel Dual-band Impedance Transformer", in Proc. IEEE International Conference on Electronics, Computing and Communication, IIIT Bangalore, 2015.
- 20. K. V. P. Kumar, S. S. Karthikeyan, "A compact and high performance band-stop filter using open complementary split ring resonator", in Proc. National Conference on Communication, IIT Delhi, 2013.
- 21. K. V. Phanikumar and S. S. Karthikeyan, "A novel design of rat race coupler using defected microstrip structure and folding technique", in Proc. IEEE Applied Electromagnetic Conference (AEMC), KIIT Bhubaneshwar, 2013. (Student paper contest finalist)
- 22. M. Arulvani; S. S. Karthikeyan; N. Neelima, "Investigation of process variation on register files in 65nm technology", in Proc. International Conference on Emerging Trends in VLSI, Embedded System, Nano Electronics and Telecommunication System, 2013.
- 23. S. S. Karthikeyan and M. Arulvani, "Double negative metamaterial design using open split ring resonator", IEEE Students Technology Symposium (TechSym).
- 24. S. S. Karthikeyan, M. B. Manapati and R. S. Kshetrimayum, "Reduction of specific absorption rate in human tissues using split ring resonators", in Proc. IEEE Applied Electromagnetics Conference (AEMC), Kolkatta, 2009. **{Student Author Award for S. S. Karthikeyan}**
- 25. S. Karthikeyan and R. S. Kshetrimayum, "Slot split ring resonators and its applications in performance enhancement of microwave filter", in Proc. IEEE Applied Electromagnetics Conference (AEMC), Kolkatta, 2009. {Student Author Award for S. S. Karthikeyan}

- 26. S. Karthikeyan and R. S. Kshetrimayum, "Performance Enhancement of Microstrip Bandpass Filter using CSSRR", in Proc. International Conference on Advances in Computing, Control, and Telecommunication Technologies, Trivandrum. pp. 67-70. 2009
- 27. R. S. Kshetrimayum, S. S. Karthikeyan and V. K. Meduru, "ANN for fast and accurate design of spiral inductors", in Proc. National Conference on Communications (NCC), pp. 54-58. 2009.
- 28. R. S. Kshetrimayum, V. K. Meduru and S. S. Karthikeyan, "ANN for fast and accurate determination of resonant frequency and quality factor for CSSRR in ground plane", in Proc. Annual IEEE India Conference (INDICON), Bangalore, 2007.
- 29. R. S. Kshetrimayum, V. K. R. Cholletti and S. S. Karthikeyan, "Novel wide stopband filter using CSRR and open stubs", in Proc. Annual IEEE India Conference (INDICON), India, 2007.
- 30. R. S. Kshetrimayum, D. Dey and **S. S. Karthikeyan**, "Performance comparison of micromachined patch antenna with EBGs and soft structure substrate", in Proc. Annual IEEE India Conference (INDICON), Bangalore, 2007.
- 31. R. S. Kshetrimayum, R. Pillalamarri and S. S. Karthikeyan, "Single printed monopole antenna and notched antenna with triangular tapered feed lines for triband and penta band applications", in Proc. Annual IEEE India Conference (INDICON), India, 2007.