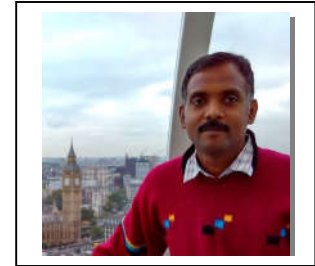


National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

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 100 international journal and conference papers in the areas of his research interests.

1. Name: : Dr. Karthikeyan S S
2. Designation : Associate 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	To
Associate Professor	NITT	21.9.2022	Till Date
Assistant Professor	NITT	18.5.2018	20.9.2022
Assistant Professor	IIITDM K	17.8.2011	17.5.2018
Assistant Professor (Senior)	VIT	15.12.2010	16.8.2011
Lecturer	AVCCE	2002	2006

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

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	To
IEEE MTT SB-Faculty Advisor	NITT	2019	2022
DPEC Member	NITT	2020	2022
Hostel Warden	NIT T	2018	2021
Hostel warden	IITDM K	2017	2018
UG Project Coordinator	IITDM K	2017	2018
Cultural Coordinator	IITDM K	2014	2017
Ph.D. Selection Committee Chairman	IITDM K	2016	2016
Ph.D. Admission Scrutiny Committee	IITDM K	2012	2014
M.Des. Selection Committee Chairman	IITDM K	2016	2016
Refreshment Committee Chairman	IITDM K	2015	2017
Class committee Chairman	IITDM K	2017	2017

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Ph.D. Thesis Examiner	Various Universities	2011	Till Date
Doctoral Committee member	Various Universities	2011	Till Date
Chair	IEEE AP-S, Madras Chapter	2017	2019

11. Awards, Associateships etc.

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

12. Fellowships

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

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 enhancement of microwave devices	K. V. Phani Kumar#
2015	Design and development of microwave filters	Purushothaman.B
2015	Remote Monitoring of elevators	K.T.Venkatesan
2015	Design of multi band branch line coupler	Iqram Haider
2015	Design of a low noise amplifier	Pradyumna Kumar Bishoyi
2015	Compact Wideband Branch Line Coupler for Arbitrary Coupling Level with Harmonic Suppression	Rusan Kumar Barik#
2015	Design and development of the microwave sensors using split ring resonator	Amitabh
2016	Design of dual band impedance transformer and its application	Rehana Siddiqui#

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

2016	Design and implementation of SIW passive devices	Shivam Awasthi
2016	Design of wideband and dual band microwave filters	Solunke Yogesh Shriram
2016	Design and development of SIW antennas for X, Ku and K band application	Soumyakanta Pradhan
2017	Frequency selective surfaces and its applications	Adeline Melita
2017	Design of dual band cross over with Flexible Frequency ratio	Idury Satya Krishna#
2018	Design and Implementation of Tri-Band Microwave Passive Devices	T S Laxman Deep
2018	Design of Multiband and Beam steering Antenna for 5G Applications	Agathiyam Rejendran
2018	Design of RF sensor for detection of adulteration in edible oils	Jairein S
2018	Design and implementation of Reconfigurable antenna	Sirimella Praveena
2020	Design and development of Reconfigurable branch line coupler using pin diode	Prerna Nidhi
2020	Study of wideband three section branch line coupler using open complementary split ring resonator and the open stubs	G Arvind
2021	Design of X-band Circulator	Sandeep Kumar Reddy
2021	Miniaturization of rat-race coupler using superstructure based DGS	Suryaprakash Pasi
2022	Substrate integrated waveguide based triple band Self-triplexing antenna for C-band applications	Ekanash Bhardwaj
2022	Design of dual-band wearable button antenna	Priyanka Lade

Received the Best Project Award

14. Details of Major R&D/Consultancy Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Design and development of a dual band RF Energy Harvester for Wireless Sensor Networks using Aerosol Jetting Technology	DST-IMPRINT	2019	2022	Ongoing
Development of 3D printed Wearable Button Antenna for Soldier Performance Monitoring Applications	DST-IMPRINT	2019	2022	Ongoing
Design, Development and Characterization of high performance multi band Microwave Devices/Components	NITT	2019	2021	Completed
Design and Development of Ferrite Dielectric	ISRO	2021	2023	Ongoing

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

Based Microstrip Isolator for X –Band Application (Co-PI)				
LC Band pass Filter for Space Technology (Co-PI)	ISRO	2021	2023	Ongoing
Design and development of X –band & Ka-band Passive devices (Co-PI)	ISRO	2021	2023	Ongoing

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role	Year
K. V. Phani Kumar	Design, analysis and implementation of RF/Microwave planar passive Devices for wireless applications	Supervisor	2017
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 polarized printed antennas	Supervisor	2019
Dr. Nrusingha Charan Pradhan	Design and analysis of substrate Integrated Waveguide Based compact devices for Multiband Applications	Supervisor	2022
Dr. Adeline Melita,	Design and Development of Printed Periodic Structures for Microwave Applications	Supervisor	2022
Mrs. Tharini D	Design and Development of Passive SIW Components	Supervisor	Thesis Submitted

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

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

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

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
TEQIP-III Sponsored IMICPW	International	May 2019	Organizing Secretary	NITT
One Day seminar on Advanced Antennas for Satellite Applications	National	23 rd June, 2017	Coordinator	IITDM K
Advanced Topics in Signal Processing, RF and Wireless Communication.	National	13 th to 15 th , June, 2016	Coordinator	IITDM K
Next Generation RF and Wireless Technologies for Rural India,	National	4 th & 5 th June, 2015.	Coordinator	IITDM K
Research Challenges in RF and Wireless Communication	National	21 st & 22 nd June, 2013.	Coordinator	IITDM K

18. Invited Talks delivered (Selected & Recent Talks)

Topic	Date	Inviting Organization
Microwave sensor techniques	Dec. 2021	IITDM Kancheepuram
Introduction to Antennas	September-2020	NITPY

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 AP-S	Since 2011
Life Member	ISTE	Since 2005

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Singapore	10-13 Dec. 2019	Asia Pacific Microwave Conference
UK	3-7 Oct. 2016	European Microwave Week
France	7-10 Sept. 2015	European Microwave Week

21. Publications

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

(A) Refereed Research Journals:

1. R. A. Mellita, **S. S. Karthikeyan** and P. Damodharan, "Dual-Band Ultrathin Polarization Converter for 'S' -Band Microwave Transmission," in *IEEE Microwave and Wireless Components Letters*, 2022, doi: 10.1109/LMWC.2022.3180677.
2. D. Tharani, K. Selvajyothi, **S. S. Karthikeyan**, R. K. Barik & Q. S. Cheng, "Compact HMSIW diplexer loaded with modified circular complementary split ring resonators for WiMAX /WLAN applications", *Journal of Electromagnetic Waves and Applications*, 2022, DOI: 10.1080/09205071.2022.2051754
3. Nrusingha Charan Pradhan, **Karthikeyan Sholampettai Subramanian**, Rusan Kumar Barik & Qingsha S. Cheng (2022) "A shielded QMSIW ultra-compact self-diplexing antenna for WiMAX/WLAN applications", *Journal of Electromagnetic Waves and Applications*, DOI: 10.1080/09205071.2022.2046179
4. Duraisamy, T., Kamakshy, S., **Sholampettai Subramanian, K.**, Barik, R., & Cheng, Q. (2022). "Design and implementation of compact tri- and quad-band SIW power divider using modified circular complementary split-ring resonators", *International Journal of Microwave and Wireless Technologies*, 1-9. doi:10.1017/S1759078721001720
5. D. Tharani, K. Selvajyothi & **S. S. Karthikeyan** (2021) "Highly Miniaturized Dual-band Power Divider based on HMSIW for 5G/ WLAN Applications", *IETE Journal of Research*, DOI: 10.1080/03772063.2021.2007800
6. N. C. Pradhan, **S. S. Karthikeyan**, R. K. Barik & Q. S. Cheng (2022) "A novel compact diplexer employing substrate integrated waveguide loaded by triangular slots for C-band application", *Journal of Electromagnetic Waves and Applications*, 36:6, 830-842, DOI: 10.1080/09205071.2021.1987991
7. S. K. K. Dash, Q. S. Cheng, R. K. Barik, F. Jiang, N. C. Pradhan and **K. S. Subramanian**, "A Compact SIW Cavity-Backed Self-Multiplexing Antenna for Hexa-Band Operation," in *IEEE Transactions on Antennas and Propagation*, vol. 70, no. 3, pp. 2283-2288, March 2022, doi: 10.1109/TAP.2021.3112626.
8. N. C. Pradhan, **K. S. Subramanian**, R. K. Barik and Q. S. Cheng, "A Shielded-QMSIW-Based Self-Diplexing Antenna for Closely Spaced Bands and High Isolation," in *IEEE Antennas and Wireless Propagation Letters*, vol. 20, no. 12, pp. 2382-2386, Dec. 2021, doi: 10.1109/LAWP.2021.3112610.
9. Althuwayb, Ayman A., Barik, Rusan Kumar, Cheng, Qingsha S., Pradhan, Nrusingha C. and **Subramanian, Karthikeyan S.** "Design and experimental verification of

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

- compact dual-band SIW power dividers with arbitrary power division" *Frequenz*, vol. 75, no. 7-8, 2021, pp. 313-318. <https://doi.org/10.1515/freq-2020-0171>
10. "Design of Compact Substrate Integrated Waveguide Based Triple-and Quad-Band Power Dividers", Nrusingha Charan Pradhan, **Karthikeyan S S**, Rusan Kumar Barik, Qingsha S. Cheng, *IEEE Antennas and Wireless Propagation letters*, vol. 31, no.4 pp. 365-368, 2021.
 11. Kanaparathi V. Phani Kumar, Rusan Kumar Barik, Idury Satya Krishna, **S S Karthikeyan**, "Compact branch-line balun using coupled-line and open stubs fabricated on paper substrate", *AEU - International Journal of Electronics and Communications*, Vol. 140, pp. 153953, 2021.
 12. Kanaparathi V Phani Kumar, **S S Karthikeyan**, Rengasamy Rajkumar "Highly Compact and Harmonic Suppressed Branch Line Balun Using Artificial Transmission Lines" *AEU - International Journal of Electronics and Communications*, Vol. 140, pp. 153928, 2021.
 13. Barik, Rusan & Cheng, Qingsha & S S, Karthikeyan & Duraisamy, Tharani & Kamakshy, Selvajyothi. (2021), "Compact Wideband SIW Based Bandpass Filter for X, Ku and K Band Applications", *Radioengineering*. 30. 288-295. 10.13164/re.2021.0288.
 14. R K Barik, QS Cheng, NC Pradhan, **Karthikeyan S S** "A miniaturized quad-band branch-line crossover for GSM/WiFi/5G/WLAN applications", *AEU-International Journal of Electronics and Communications*, Vol. 132, 153611, May, 2021.
 15. R A Mellita, **S S Karthikeyan**, P Damodharan, D S Chandu, "A miniaturized quad-band frequency selective surface for C-band applications", *Journal of Electromagnetic waves and Application*, Vol. 35, no. 14, pp. 1882–1893, 2021.
 16. Sounik Kiran. Q.S. Cheng, Rusan Kumar, Taimoor Khan, **Karthikeyan S S** "A compact dual-fed highly isolated SIW based self-diplexing antenna", *AEU-International Journal of Electronics and Communications*, Vol. 132, 153613, April, 2021.
 17. D Tharini, RK Barik, QS Cheng, Selvajyothy Kamakshy, **Karthikeyan S S** "Compact dual-band SIW filters loaded with double ring D-shaped resonators for sub-6 GHz applications", *Journal of Electromagnetic Waves and Applications* vol. 35, no. 7, pp. 923-936, 2021.
 18. T Duraisamy, **Karthikeyan S S**, Selvajyothy Kamakshy, RK Barik, QS Cheng, "Compact Wideband SIW Based Bandpass Filter for X, Ku and K Band Applications" *Radio Engineering*, Vol. 29, no. pp. 288-295, 2021.

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

19. Barik, Rusan & Cheng, Qingsha & Kiran, Sounik & Pradhan, Nrusingha & **S S, Karthikeyan**, “Design of a compact orthogonal fed self-diplexing bowtie-ring slot antenna based on substrate integrated waveguide”, *International Journal of RF and Microwave Computer-Aided Engineering*. 30. 10.1002/mmce.22422.
20. Barik, Rusan & Cheng, Qingsha & Pradhan, Nrusingha & **S S, Karthikeyan**, “Design of Miniaturized SIW Filter Loaded with Open-Loop Resonators and Its Application to Diplexer”, *Radioengineering*. 29. 609-616. 10.13164/re.2020.0609.
21. Sounik Kiran. Q.S. Cheng, Rusan Kumar, N Pradhan, **Karthikeyan S S**, “A Compact Triple-Fed High-Isolation SIW Based Self-Triplexing Antenna”, *IEEE Antennas and Wireless Propagation letters*, vol. 19, no.5 pp. 766-770, 2020.
22. Rusan Kumar Barik, Qingsha S. Cheng, Nrusingha Charan Pradhan, **Karthikeyan S S**, “Highly miniaturized wideband 3-dB branch-line hybrid with second harmonic-suppression”, *Microwave and Optical Technology Letters*, vol. 62, no.6 pp. 2248-2256, 2020.
23. T Duraisamy, RK Barik, QS Cheng, S Kamakshy, **Karthikeyan S S**, “Miniaturized SIW filter using D-shaped resonators with wide out-of-band rejection for 5G applications” *Journal of Electromagnetic Waves and Applications*, Vol. 34, no. 18, pp. 2397–2409, 2020
24. R A Mellita, D S Chandu, **S S Karthikeyan**, P Damodharan, “A Miniaturized Wideband Frequency Selective Surface with Interconnected Cell Structure” *AEU-International Journal of Electronics and Communications*, vol. 120, pp. 153-196, 2020.
25. R K Barik, QS Cheng, S K K Dash, N C Pradhan, **S S Karthikeyan**, “Compact high-isolation self-diplexing antenna based on SIW for C-band applications”, *Journal of Electromagnetic Waves and Applications*, vol. 34, no. 7, pp. 960-974, 2020.
26. R. K. Barik, Q. S. Cheng, N. C. Pradhan, **S S Karthikeyan**, “A Compact SIW Power Divider for Dual-Band Applications”, *Radio Engineering*, Vol. 29, no. 1, pp. 94-100, 2020.
27. 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.
28. Chandu D S and **S S Karthikeyan**, “A quad-band linear to circular reflective polarisation transformer and its application in dual-sense circularly polarised antenna design”, *IET Microwaves, Antennas & Propagation*, vol.13, pp. 819 – 826, 2019.

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

29. 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.
30. **S S Karthikeyan**, "Compact Dual-Band Substrate Integrated Waveguide Crossover with High Isolation", *Progress in Electromagnetics Research*, vol. 83, pp. 23-28, 2019
31. 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
32. 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.
33. 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.
34. 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.
35. 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.
36. 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.
37. 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.
38. 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.

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

39. 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.
40. 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.
41. 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.
42. 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.
43. 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.
44. 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
45. 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
46. 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.
47. 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.
48. 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.
49. Rusan Kumar Barik, K.V. Phanikumar and **S. S. Karthikeyan**, "A compact wideband harmonic suppressed 10 dB branch line coupler using cascaded symmetric PI

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

- sections”, *Microwave and Optical Technology Letters*, Vol. 58, no. 7, pp. 1610-1613, 2016.
50. 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.
51. 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.
52. 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.
53. K. V. Phani Kumar and **S. S. Karthikeyan**, "A novel design of ratrace coupler using defected microstrip structure and folding technique," 2013 *IEEE Applied Electromagnetics Conference (AEMC)*, 2013, pp. 1-2, doi: 10.1109/AEMC.2013.7045084.
54. **S. S. Karthikeyan** and Rakesh 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.
55. **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.
56. **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.
57. **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.
58. **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.
59. **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.

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

60. **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.
61. **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.
62. 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.
63. 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.
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(B) Conferences/Workshops/Symposia Proceedings

1. Mettu Goutham Reddy, Nrusingha Charan Pradhan & **S S Karthikeyan**, "Fluidically Reconfigurable SIW Based Self-Diplexing Antenna for Sub-6 GHz band Applications", IEEE International Conference on Signal Processing and Communications (SPCOM), IISc Bangalore, 2022.
2. Mettu Goutham & Pradhan, Nrusingha & **S S, Karthikeyan**, "Design of Microstrip Based Dual Junction Four-Port Circulator for 8.2 GHz X-band", IEEE Wireless, Antenna and Microwave Symposium (WAMS), NIT Rourkela, 2022.
3. Deepal Deepak Patil & **S S Karthikeyan**, "Additively Manufactured Dual Band Antenna Array for Wi-Fi Application", IEEE Wireless, Antenna and Microwave Symposium (WAMS), NIT Rourkela, 2022
4. Dalal, Priyanka & Pradhan, Nrusingha & **S S, Karthikeyan**, "Dual-band wearable antenna for wireless body area networks on a flexible substrate", IEEE Wireless, Antenna and Microwave Symposium (WAMS), NIT Rourkela. **(Received the Dr. C. J. Reddy Best Paper Award for Young Professionals WAMS 2022)**
5. Pradhan, Nrusingha & **S S, Karthikeyan** & Barik, Rusan & Dalal, Priyanka & Cheng, Qingsha, "Design of Compact Shielded QMSIW Based Self-Diplexing

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- Antenna for High-Isolation”, IEEE Wireless, Antenna and Microwave Symposium (WAMS-2022), NIT Rourkela. **(Received the Best Paper Competition Award from WAMS 2022)**
6. R Adeline Mellita, P Damodaran, **Dr. S S Karthikeyan** “Additively Manufactured Conformal All-Dielectric Frequency Selective Surface” 50th European Microwave Conference, Netherlands, pp. 772-775, 2020. **(Received the Travel Grant from EuMA)**
 7. Sounik Kiran. Q.S. Cheng, Rusan Kumar, N C Pradhan, **Karthikeyan S S** “A Compact Substrate Integrated Self-Diplexing Antenna for WiFi and ISM Band Applications” 50th European Microwave Conference, Netherlands, pp. 232-235, 2020.
 8. Nrusingha Charan Pradhan, **Karthikeyan Sholampettai Subramanian**, Rusan Kumar Barik, Qingsha S Cheng “Design of a compact SIW diplexer with square cavities for C-band applications”, URSI Regional Conference on Radio Science (URSI-RCRS), 2020.
 9. R K Barik, Q S Cheng, **Karthikeyan S Subramanian** “An Automatic Design Approach for Microstrip Line Impedance Transformer for Triple-Band Application”, Asia Pacific Microwave Conference, Singapore, pp. 207-209. 2019.
 10. D Tharani, Rusan Kumar Barik, Qingsha S Cheng, K Selvajyothi, **S S Karthikeyan** “A compact wideband SIW power divider with CSRR and slots for Ku and K band applications”, IEEE MTT-S International Microwave and RF Conference (IMARC), India, 2019.
 11. R Adeline Mellita, P Damodaran, **Dr. S S Karthikeyan** “An Ultrathin Quad-band Microwave Absorber with Small Frequency Ratio”, European Microwave Conference, 29th Sep-4th Oct. Paris, 2019. **(Received the Travel Grant from EuMA)**
 12. Pooja N Kakani, DS Chandu, **S S Karthikeyan** “Open Complementary Split Ring Resonator Based RF Sensor with Improved Sensitivity for Detection and Estimation of Adulteration in Edible Oils”, TEQIP III Sponsored International Conference on Microwave Integrated Circuits, Photonics and Wireless Networks (IMICPW), India, pp.479-482, 2019
 13. 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.

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14. 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)**
15. Gunjan Kumari, Rusan Kumar Barik, Purna 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.
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18. 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
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23. 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.
24. 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.
25. 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.
26. 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.
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33. 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**)
34. 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.
35. **S. S. Karthikeyan** and M. Arulvani, “Double negative metamaterial design using open split ring resonator”, IEEE Students Technology Symposium (TechSym).
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42. 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.

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(C) Books/Monographs

1. **Karthikeyan, S.S.**, Mellita, R.A. (2022). Additive Manufacturing of MTM-FSS. In: Narayan, S., Kesavan, A. (eds) Handbook of Metamaterial-Derived Frequency Selective Surfaces. Metamaterials Science and Technology, vol 3. Springer, Singapore. https://doi.org/10.1007/978-981-15-8597-5_32-1
2. Adeline Mellita, R., Chandu, D.S., **Karthikeyan, S.S.** (2018). A Compact Dual-Band Frequency Selective Surface for Gain Enhancement of a Dual-Band Antenna. In: Janyani, V., Tiwari, M., Singh, G., Minzioni, P. (eds) Optical and Wireless Technologies. Lecture Notes in Electrical Engineering, vol 472. Springer, Singapore. https://doi.org/10.1007/978-981-10-7395-3_67