Somaiya Vidyavihar University

Name: Dr. Makarand Govind Kulkarni		**E-mail:makarandkulkarni@somaiya.edu**	
Contact No: 022-66449212 (Office), 09969256375 (Mobile)			
Department/Section: Department of Electronics Engineering			
College: K J Somaiya College of Engineering			
DOJ Somaiya: 01/08/2002	Career Experience: 20 Yrs	Industry Experience:06 months	Teaching Experience: 20Yrs
Present Academic Designation: Assistant Professor (Professor/Associate Professor/Assistant Professor)		Present Administrative Designation: Joint Associate Dean Resource and Infrastructure Management (Principal/Vice-Principal/ Associate Dean/ HOD etc)	

Area of research/specialization and Courses Delivered

Research domain/interests/areas

1. Internet of Things (IoT) and Sensor Technology
2. RF and Microwave Communication
3. Wireless Sensor Networks
4. Computer Networks
5. Optical Fiber Communication

Courses Delivered

Classes / Branch	Subjects
UG	Cloud Computing, Discrete Mathematics, Engineering Electromagnetic, Basics of Communication Engg., Microwave & Fiber Optic Communication, Digital communication & Coding Techniques, Control System Engg., Mobile Communication, Wireless Sensor Networks.
PG	Advanced Wireless Networks
Ph. D.	Research Publication and Ethics, Wireless Sensor Network

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D : Yes

Details of Recognitions

- Recognized teacher and guide for Ph. D. since 2021
- Recognized teacher and guide for PG since July 2017
- Recognized teacher for UG since August 2002

Education

Examination	Name of the Degree	University/Board	Institute/College	Year	CPI/SPI/ %Marks
Ph.D	Ph.D. (Technology)	University of Mumbai	VJTI, Mumbai	2020	Awarded
PG	M. Tech. (Electronics & Telecommunication)	University of Mumbai	VJTI, Mumbai	2011	CPI = 9.7
UG	B.E. (Electronics & Telecommunication)	University of Mumbai	S. S. Jondhale Collage of Engineering	2001	60.63%
Diploma	--	--	--	--	--
NET/SET/Other	--	--	--	--	--

Notable Experience Details					
Sr. No	Name of the organization	Designation	Date of Joining	Date of Leaving	Experience (Years)
1.					
2.					

Research Accomplishments and Projects		
No of students pursuing Ph.D as on date: 02		No of students completed Ph.D as on date:0
No of students completed PG thesis / Project work as on date:01		No of students / groups completed UG projects as on date:30
Publications Total: 18	Number of Peer review Journal papers: 08	Number of Conference papers:10

Details of Publications:

International Journals:

1. M. G. Kulkarni, A. N. Cheeran, K. P. Ray, and S. S. Kakatkar, "Coplanar Waveguide Band Reject Filter Using Electromagnetic Band Gap Structure," Progress In Electromagnetic Research Letter (PIER-L), Vol. 70, pp. 53-58, ISSN/ISBN No. 1937-6480, September 2017, DOI : 10.2528/PIERL17070204**.**

2. M. G. Kulkarni, A. N. Cheeran, K. P. Ray, and S. S. Kakatkar, "Novel Coaxial Cable Implementation of Miniaturized Wilkinson Power Divider and Quadrature Hybrid Coupler for VHF Applications", Telecommunications and Radio Engineering (TRE), Vol. 77, No. 15, pp. 1365-1374, ISSN 0040-2508, September 2018. DOI: 10.1615/TelecomRadEng.v77.i15.70.

3. M. G. Kulkarni, A. N. Cheeran, K. P. Ray, and S. S. Kakatkar, " Design and Analysis of Coplanar Waveguide Band Stop Filter using Asymmetric Defected Ground Structure for Fine Alteration of Stop Band", International Journal on Electronics & Applied Research, Vol. 05, No.01, pp.17-31, ISSN 2395-0064, June 2018.

4. M. G. Kulkarni, A. N. Cheeran, K. P. Ray, and S. S. Kakatkar, "Design and development of a compact 1: 4 unequal Wilkinson power divider using coaxial cables for VHF radar applications", Telecommunications and Radio Engineering (TRE), Vol. 78, No. 14, pp. 1287-1294, ISSN 0040-2508, September 2019. DOI: 10.1615/TelecomRadEng.v78.i14.60**.**

5. M. G. Kulkarni, Nisha Sarwade, "Suppression of Harmonics in Wilkinson Power Divider using Defected Ground Structure", International Journal on Electronics & Communication Technologies, Vol. 2, Issue 2, June 2011.

6. V. Lotia, Karan Shah, M. G. Kulkarni "Design and performance Assessment of Compact Microwave Filter using Defected Ground Structure", International Journal of Engineering, Technology, Science and Research, pp- 239-289, April 2017.

7. Himadri Patil, M. G. Kulkarni "A review on Various Mood detection and Regulation Methods", International Journal of Engineering Research in Computer Science and Engineering, Vol. 7, Issue 9, September 2020.

8. Himadri Patil, M. G. Kulkarni "Mood detection and Regulation Methods", International Journal for Scientific Research & Development, Vol. 8, Issue 10, 2020, ISSN (online): 2321-0613.

Conferences:

9. M. G. Kulkarni, A. N. Cheeran, K. P. Ray, and S. S. Kakatkar, "Design of a novel CPW filter using asymmetric DGS", Proceedings of IEEE International Symposium on Antennas & Propagation (APSYM-2016), Kochi, 15-17 December 2016, pp 01-04. (ISBN: 978-93-80095-85-8). (Published on IEEE Xplore, DOI: 10.1109/APSYM.2016.7929141)
10. M. G. Kulkarni, A. N. Cheeran, K. P. Ray, and S. S. Kakatkar, "Quadrature Hybrid Coupler Using a Novel Coaxial Cable Implementation for VHF Band", IEEE International Conference on 'Advanced Antenna Technology' in Indian Antenna Week (IAW-2017) , Defence Institute of Advanced Technology (DIAT), Ministry of Defence, Govt. of India, Girinagar, Pune, June 05- 09, 2017.
11. M. G. Kulkarni, A. N. Cheeran, K. P. Ray, and S. S. Kakatkar, "Design and Analysis of CPW Low Pass Filter with Good Filter Selectivity and Sharpness Factor", Proceedings of IEEE 3rd International Conference on Microwave and Photonics (ICMAP), IIT (ISM) Dhanbad, Feb. 09-11, pp. 1-2 2018. (Published on IEEE Xplore , DOI: 10.1109 / ICMAP.2018.8354617).
12. M. G. Kulkarni, A. N. Cheeran, K. P. Ray, and S. S. Kakatkar, "Design of a Novel CPW Band Stop Filter using Asymmetric Meander-Line Defected Ground Structure", Proceedings of IEEE International Conference on Wireless Communication. Lecture Notes on Data Engineering and Communications Technologies, Vol. 19, January 2018, Springer, Singapore. DOI: https://doi.org/10.1007/978-981-10-8339-6_13.
13. M. Kulkarni, A. N. Cheeran, K. P. Ray and S. S. Kakatkar, "Novel Compact Implementation of Rat-Race Hybrid Coupler Using Coaxial Cable For VHF Applications," IEEE, TEQIP III Sponsored International Conference on Microwave Integrated Circuits, Photonics and Wireless Networks (IMICPW), National Institute of Technology (NIT), Tiruchirappalli-620015, Tamil Nadu, India, May 22-24, 2019, pp. 69-71, DOI: 10.1109/IMICPW.2019.8933215.
14. A. Khare, S. Kharat, A. Rajapkar, S. M. Rathod and Makarand Kulkarni, "Design of a Compact Wilkinson Power Divider using Four Asymmetric DGS for Harmonic Suppression," 2019 TEQIP III Sponsored International Conference on Microwave Integrated Circuits, Photonics and Wireless Networks (IMICPW), 2019, pp. 353-356, doi: 10.1109/IMICPW.2019.8933177.
15. Mr. M.G. Kulkarni, Nisha Sarwade, "Performance Evaluation Based on Harmonic Suppression & Analysis of Defected Ground Structure in Microwave Devices & Circuits", International Conference on Sunrise Technologies, SSVPS, Dhule, January 2011.
16. Mr. M.G. Kulkarni, Nisha Sarwade, "Design Analysis and Testing of Wilkinson Power Divider with Harmonics Suppression using Defected Ground Structures", IEEE sponsored International Conference on Signal Processing, Communication, Computing & Networking Technology, Dept. of Electronics & Communication Engineering, Noorul Islam Centre for Higher Education, Thuckalay, Tamil Nadu, July 2011, pp. 50-55, doi: 10.1109/ICSCCN.2011.6024513.
17. Mr. M.G. Kulkarni, Nisha Sarwade, "Performance Assessment & Recent Trends in Wilkinson Power Divider", National Conference on Emerging Trends in Computing & Communication, MIT, Indore, M. P., November 2010.
18. Mr. M.G. Kulkarni, D. P. Kulkarni, "Acousto-optic Tunable Filter for WDM Technology", National Conference on, Tends in Telecom Transmission: Copper to Fiber, Dept. of Electronics & Communication Engineering, K. J. Somaiya College of Engineering, Vidyavihar, Mumbai, March 2006.

Books/Book Chapters

1. M. G. Kulkarni, A. N. Cheeran, K. P. Ray, and S. S. Kakatkar, "Design of a Novel CPW Band Stop Filter using Asymmetric Meander-Line Defected Ground Structure", Proceedings of IEEE International Conference on Wireless Communication. Lecture Notes on Data Engineering and Communications Technologies, Vol. 19, January 2018, Springer, Singapore. DOI: https://doi.org/10.1007/978-981-10-8339-6_13.

<table>
<tr><td colspan="3">Patents/Copy Rights: Nil</td></tr>
<tr><td>No of Research / consultancy / projects completed:
Rs: 01</td><td>No of Research / consultancy / projects on-going:
Rs: 01</td><td>No of Research / consultancy / projects on applied as on date:
Rs:00</td></tr>
<tr><td colspan="3">Details of Research / consultancy / projects:
Completed
1. Minor Research Proposal 2019-20 project titled ‘Design and Development of Radial power combiner and divider for high power microwave applications’ under Minor Research Proposal Grant 2019-20 of University of Mumbai.

On-going
1. LiDAR cap for the blind with text-to-speech (TTS) navigation system SVU funded project.
Applied: Nil</td></tr>
<tr><td colspan="3">IPR/ Copyrights Nil</td></tr>
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Somaiya Vidyavihar University

FDPs/Seminars/Workshops/Training Programs Attended:

FDPs/Seminars/Workshops/Training Programs Attended	Organized by	Duration
Internet of Things: A Multidisciplinary Approach	Dept. of Electronics and Telecommunications Engineering, KJSCE and ISTE	January 02 to 06, 2023
Train The Trainer Program on PLC, HMI, SCADA and Modular Production System.	Dept. of Electronics Engineering, KJSCE	January 03 to 06, 2022
Webinar series on "Designing EMI-immune electronic system"	Technology Innovation Hub for IoT at IIT-Bombay.	April 14 and 21, 2021
Applications of Microwaves & Contribution of International Centre for Radio Science (ICRS)	International Centre for Radio Science (ICRS), Jodhpur	June 24, 2021
STTP on Next Generation Communication and Networks	Thakur College of Engineering and Technology, Mumbai	June 14 to 19, 2021
STTP on Digital Transformation in Teaching Learning Process	Department of Computer Engineering Fr. C. Rodrigues Institute of Technology, Vashi	January 18-22, 2021.
FDP on Post Covid Challenges: What industry expects from Academia.	K J Somaiya College of Engineering, Vidyavihar, Mumbai	January 08, 2021.
Webinar on 5G - Myth busters and benefits for Indian environment	Bharti Vidyapeeth Institute for Computer Applications and Management, New Delhi	July 02, 2020
STTP on Exposure & Rejuvenation of Technologies in changed Era of the World	Raj Kumar Goel Institute of Technology, Delhi	July 06 to July 10, 2020
Webinar on Internet of Things (IoT) – Industrial Perspective	Bharti Vidyapeeth Institute for Computer Applications and Management, New Delhi	July 11, 2020
STTP on "Advances in Internet of things"	FRCECE, Bandra	May 29 to June 02, 2020
STTP on "Sensors, IoT and Machine Learning"	K J Somaiya College of Engineering, Vidyavihar, Mumbai	June 01 to 05, 2020
Conference Somaiya Research Interventions in Engineering &	SVU, Mumbai	May 29. 2020

Technology Somaiya Institute for Research and Consultancy		
Online webcourse on 'Teaching with MATLAB'	Online Webcourse	April 17, 2020
Training Program on "Delta Automation Cup 2020" Delta Electronics India Pvt Ltd..	D. J. Sanghvi College of Engineering, Mumbai	February 13 to 17, 2020
STTP on "Leveraging Digital Content to Build Productive Class Room Engagement"	Thadomal Shahani Engineering College, Bandra	January 07 to 11, 2020

Notable Key Scholastic Achievements	
1.	
2.	

Notable Positions and Responsibility

Sr. No.	Name of the post Committee	My Role	Department level or Institute level
1	Resource and Infrastructure Management, KJSCE	Joint Associate Dean	Institute level
2	NAAC Criteria IV	Convener	Institute level
3	Written-off Committee	Member	Institute level
4	Laboratory Planning, Development, Budget and Purchase	Convener	Department level
5	Department Academic Committee (DAC)	Member	Department level
6	Board of Studies (BOS)	Member	Department level
7	Ph.D. Coordinator	Member	Department level
8	BOS/FOET MoM and PPT - ATR	Member	Department level

Date: 09 /02 / 2023 **Signature of Faculty Member**