




## FACULTY - PROFILE

**DR RAKESH KUMAR MAURYA**

**Professor**

Website:- [www.mjpru.ac.in](http://www.mjpru.ac.in), E-mail:- [rakesh\\_maurya@mjpru.ac.in](mailto:rakesh_maurya@mjpru.ac.in)

Title	Dr.	First name	RAKESH KUMAR	Last Name	MAURYA	
Designation			Professor			
Department			Electronics and Instrumentation Engineering			
Address: (Campus) :			Department of E&I Engineering, Faculty of Engineering & Technology, MJP, Rohilkhand University, Bareilly			
(Residence) :			105/8 B Umang-1 Mahanagar Colony, Bareilly UP-243006			
Mobile No.			(+91)7906087089, (+91)9412401695			
Email ID			Personal	rkm96ei42@gmail.com		
			University Domain	rakesh_maurya@mjpru.ac.in		
Professional Networking ID, i.e. Linkedin, Twitter etc.			<a href="http://www.linkedin.com/in/dr-rakesh-kumar-maurya">www.linkedin.com/in/dr-rakesh-kumar-maurya</a> <a href="https://scholar.google.com/citations?user=7Bi5Ms4AAAAJ&amp;hl=en">https://scholar.google.com/citations?user=7Bi5Ms4AAAAJ&amp;hl=en</a>			
Education:						
Degree	Institution		Year	Details		
B.Tech.	FET, MJP, Rohilkhand University, Bareilly, (U.P.)		2000	Electronics and Instrumentation Engineering		
M.E.	NITTTR Chandigarh, (U.T.)		2009	Instrumentation and Control Engineering		
Ph.D.	U.K Technical University, Dehradun, (U.K)		2017	ANFIS Model for Design & Analysis of Microstrip Patch Antenna		
Career Profile:						
Organization / Institution			Designation	Duration	Nature of Duties	
IET, VBS Purvanchal University, Jaunpur (U.P.)			Lecturer (Guest Faculty)	Sep-2000 to Nov-2002	Research and Academic	
MJP, Rohilkhand University, Bareilly (U.P.)			Asst. Professor	Nov-2002 to Sep-2017	Research and Academic	
MJP, Rohilkhand University, Bareilly (U.P.)			Assoc. Professor	Sept-2017 to Sep-2020	Research and Academic	
MJP, Rohilkhand University, Bareilly (U.P.)			Professor	Sept-2020.....Cont...	Research and Academic	
Research Interests / Specialization						
(i) Design, Analysis and Fabrication of Microstrip Antennas (ii) Soft Computing Optimization Techniques: Artificial Neural Network, Adaptive Neuro-Fuzzy Inference System, Support Vector Machine etc. (iii) Microprocessor and Embedded System (iv) IoT, Python etc						
Research/Research Experience in Years:			21			



### Teaching Experience (Subjects/Courses Taught)

More than 21 Year:

- \* Microprocessor and its Application
- \* Microcontroller and Embedded System
- \* Soft Computing Techniques
- \* Basic Electronics
- \* Digital Electronics

### Publications /Academic Activities (Numbers Only)

Books & Monographs	3	Research Papers Published in International Journals	18	Papers Presented in Seminars/ Conferences	17	Seminars/ Conferences Organized	02	Research Projects (Completed)	2
Books (Co-authored)	1	Research Papers Published in Other Journals	04	Seminar/ Conferences Attended	08	Workshops Organized	02	Research Projects (Ongoing)	1
Books (Edited)				Sessions Chaired in Seminars/ Conferences	02				
Chapters in Edited Books	0	Articles Published in Popular Fora, e.g., Websites, Blogs, Newspapers, Magazines etc.		Resource Lectures Delivered	04	Membership of Academic/ Professional Bodies	5	Foreign Countries Visited for Academic Assignment	

### Details of Publications /Academic Activities (2010 Onwards)

#### (a) Books/Monographs

Year of Publication	Title	Publisher	ISBN	Author/Co-Author
2017	Fundamentals of Microprocessor, Interfacing and Applications	LuLu Publication 3101 Hillsborough St, Raleigh, NC 27607, US	978-1-387-53969-7	<b>Rakesh Kumar Maurya</b>
2019	Fundamentals of Soft Computing Techniques and Applications	Kindle Direct Publishing 410 Terry Ave N Seattle Washigton 98109	979-8-492-53637-4	<b>Dr. Rakesh Kumar Maurya</b>
2022	Deep Learning with Python	Haiyagrev Publications 189, Sivachitra Apartment Bhawani, Erode-638301	978-81-955121-1-9	Prof. S Venkatasur, Dr K. Vimla Devi, Dr. Jose Anand, <b>Dr. Rakesh Kumar Maurya</b>

#### (b) Papers Published in UGC Care Listed /Indexed/ Peer Reviewed Journals

Year of Publication	Title	Name of Journal	ISSN /Indexing
2013	ANFIS Model for CAD Application of Annular Ring Microstrip Antenna with Circular Polarization, vol. 04, 2013, pp. 65-68.	International Journal of Science Technology & Management	ISSN (Print) 2394-1529 (Online) 2394-1537
2013	ANN Model of Triple-Frequency Triangular Ring MPA with Defected Ground Structure, vol. 03, 2013, pp. 59-62.	International Journal of Science Technology & Management	ISSN (Print) 2394-1529 (Online) 2394-1537
2014	Comparative Analysis of PI, PID and Fuzzy Logic Controller for Speed Control of DC Motor. vol.3, pp. 1319-1324	International Journal of Engineering Research & Technology	ISSN:2278-0181
2014	Artificial Neural Network Model for Analysis Of Elliptical Microstrip Patch Antenna, vol.6, pp. 459-463.	International Journal of Research in Engineering & Technology	ISSN:2321-8843
2014	Optimization and Designing of PID, Fuzzy and PID-Fuzzy Controller, vol.5, pp. 2040-2048	International Journal of Scientific and Research	ISSN: 2229-5518
2015	An ANN-Based Model and	International Journal of	ISSN:2394-3386



	Design of Single-Feed Cross-Slot Loaded Compact Circularly Polarized Microstrip Antenna for Indoor WLAN Applications Vol. 2, Special Issue, pp. 111-119	Engineering Technology Science and Research (IJETSR)	
2016	An ANN-based synthesis model of wide-band microstrip line-fed antenna with defected ground structure. Vol. 9, pp. 289-295	IJCTA, International Science Press	ISSN:1751-8644
2016	An ANN-based model and design of single-feed cross-slot loaded compact circularly polarized microstrip antenna Vol. 4, pp. 1-7, 2016.	IPASJ, international journals of electronics & communication (IJECE).	ISSN:2321-5984
2018	Android Based Home Automation System Using Bluetooth and Voice Command, vol. 6, issue 2, pp. 1220-1222	International Journal of Creative Research Thoughts - IJCRT	ISSN: 2320-2882
2018	Image De-Blurring using Blind De-convolution Technique Volume 6 Issue IV, pp. 3952-3956	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	ISSN: 2321-9653
2018	Zigbee Based Automatic Street Light System Vol. 6, Issue 2, pp. 1319-1324	International Journal of Creative Research Thoughts - IJCRT	ISSN: 2320-2882
2019	Circularly polarized hexagonal ring microstrip patch antenna with asymmetrical feed and DGS. Vol. 62, Issue 4, pp. 1702-1708	MOTL, WILEY Interscience	ISSN:1098-2760 <a href="https://doi.org/10.1002/mop.32220">https://doi.org/10.1002/mop.32220</a>
2020	An ANN Model of Miniaturized Multi-Band-Pass Filter Vol. 29, No.7, pp. 10245-10250	International Journal of Advanced Science and Technology,	ISSN: 2005-4238
2020	Constraint length inflation in fixed high rate convolutional codes and their impact on performance of O-IDMA Vol. 20, No.2, pp. 837~844	Indonesian Journal of Electrical Engineering and Computer Science	ISSN: 2502-4752, DOI: 10.11591/ijeecs.v20.i2
2020	A Simplified Approach for the betterment of Linearity in a 10 bits Segmented Current Steering DAC, Vol. 29, No.7, pp. 10223-10232.	International Journal of Advanced Science and Technology,	ISSN: 2005-4238
2020	Contrastive Performance Analysis of US-OIDMA using Different Code Rate and Constraint Length". Vol. 29,	International Journal of Advanced Science and Technology,	ISSN: 2005-4238





	No.8, pp. 4842-4852					
2021	Defected Ground Co-planer Multi-band-pass Microstrip Filter, vol. 9, no. 1, 64-68	IT in Industry	ISSN:2203-1731 <a href="https://doi.org/10.17762/itij.v9i1.102">doi.org/10.17762/itij.v9i1.102</a>			
<b>(c) Chapter/Paper Published (Proceedings)</b>						
Publication	Title of the Book	Title of the Chapter	Name of Publisher	Year	ISBN	DOI
National / International						
International	International Conference on Communication Systems and Network Technologies SMVD Univ. Katra Jammu	Fuzzy Inference system (FIS) for the Synthesis of Rectangular Microstrip Antenna with Thin and Thick substrates, 2011, pp. 253-257	IEEE Proceedings	2011	ISBN: 978-1-4577-0543-4	DOI: 10.1109/CSNT.2011.62
International	International Conference on Machine Intelligence and Research Advancement SMVD Univ. Katra Jammu	Model for Calculation of Patch Radius of Circular Microstrip Antennas Using Artificial Neural Network (ANN), 2013 pp. 167-173	IEEE Proceedings	2013	ISBN:978-0-7695-5013-8	DOI: 10.1109/ICMIRA.2013.39
International	International conference on Academic Research in Engg. Mgt. and Information Technology MJPRU, Bareilly	ANFIS Model of DGS Triangular Ring MPA for Multi Frequency Application, 2016 pp. 182-185	Proceeding of 2 <sup>nd</sup> Int. Conf. ICAREMIT-2016	2016	ISBN: 978-93-82972-19-8	
International	International conference on Academic Research in Engg. Mgt. and Information Technology MJPRU, Bareilly	Hybrid Model for Design and Analysis of Conventional Microstrip Antenna,2016 pp. 175-181	Proceeding of 2 <sup>nd</sup> Int. Conf. ICAREMIT-2016	2016	ISBN: 978-93-82972-19-8	
International	ANN and ANFIS Analysis Model for Physical Parameters of Circularly Polarized Annular Ring	ANN and ANFIS Analysis Model for Physical Parameters of Circularly Polarized Annular Ring Slot	Proceeding of 11 <sup>th</sup> INDIACo m IEEE	2017	ISSN: 0973-93-80544-24-3	



	Slot Antenna with Truncated Corners 2017, pp. 7190-7196.	Antenna with Truncated Corners 2017, pp. 7190-7196.				
International	International Conference on Academic Research in Engineering, Management and Information Technology (ICAREMIT - 2020)	CAD Applications of ANFIS Model for Annular Ring MPA, 2020, pp. 23-26.	Proceedings of ICAREMIT-2020 MJPRU, Bareilly	2020	<b>ISBN</b> 978-81-933433-9-5	
International	International Conference on Academic Research in Engineering, Management and Information Technology (ICAREMIT - 2020)	ANFIS Model of DGS Triangular Ring MPA for Multi frequency Application, 2020, pp. 27-30	Proceedings of ICAREMIT-2020 MJPRU, Bareilly	2020	<b>ISBN</b> 978-81-933433-9-5	
International	International Conference on Academic Research in Engineering, Management and Information Technology (ICAREMIT - 2020)	A miniaturized multi-band-pass filter using defected ground structure, 2020, pp. 31-33	Proceedings of ICAREMIT-2020 MJPRU, Bareilly	2020	<b>ISBN</b> 978-81-933433-9-5	
International	International Conference on Academic Research in Engineering, Management and Information Technology (ICAREMIT - 2020)	Smart grid in distributed system: a review, 2020, pp. 112-115	Proceedings of ICAREMIT-2020 MJPRU, Bareilly	2020	<b>ISBN</b> 978-81-933433-9-5	



# Mahatma Jyotiba Phule Rohilkhand University, Bareilly

## महात्मा ज्योतिबा फुले रुहेलखण्ड विश्वविद्यालय, बरेली

A State University - Government of Uttar Pradesh; NAAC A++ Accredited; ISO 9001:2015 & 14001:2015 Certified



International	International Conference on computational electronics for wireless communication (ICCWC-2021) NIT-Kurukshetra	Design of DGS Compact UWB Antenna for C, X, Ku and Ka-Band Applications using ANN and ANFIS Optimization	Proceedings of ICCWC-2021, Lecturer notes in networks and systems	2022	978-981-16-6246-1_1	DOI: 10.1007/978-981-16-6246-1_1
International	2021 IEEE Indian Conference on Antennas and Propagation (InCAP)	Design & Simulation of Low Profile Wide Band Circularly Polarized Patch Antenna	IEEE	2022	Electronic ISBN:978-1-6654-0110-4 Print on Demand(PoD) ISBN:978-1-6654-0111-1	DOI: 10.1109/InCAP52216.2021.9726185

### (d) Seminars/Conferences/Workshops Organized

- 1- One Week Workshop on 'Embedded IOT System Design Using MATLAB and Simulink' from 19 to 25 October 2019.
- 2- One week workshop on 'Technological Tools and Their Management in Online Teaching' From 12 to 18 August 2020.

### (e) Projects (With Title, Year, Grants, Funding Agency and Collaborations)

Year	Name of Project	Funding Agency	Amount	Duration	
				From	Till
2018	ANN and ANFIS modeling of Microstrip Patch Antenna	TEQIP-III, NPIU, MHRD, Govt. of India	2 Lakhs	2018	2020
2019	Gas Evaluation Through Burning of Agricultural Waste and their Impact on Environment	TEQIP Collaborative Research Scheme, NPIU, GOI World bank Project	16 Lakhs 80 Thousand	2019	2021

### Administrative Positions/Assignments Held

Post	Organization	Duration	
		From	To
Assistant Dean Student Welfare	MJPRU, Bareilly	2014	Till now
I/C Examination (FET)	FET, MJPRU, Bareilly	2020	Till now
Member of Purchase committee	RUSA (EI Engineering)	2017	2018
Assistant coordinator of Central Evaluation Centre	MJP Rohilkhand Univ.	2015	2019
Student Advisor (EI Deptt.)	EI, Deptt. MJPRU, Bareilly	2008	2020
BoS Convener (EI Deptt.)	EI, Deptt. MJPRU, Bareilly	2021	2023



### Seminar/Conference Presentations

1. Rakesh K. Maurya, Binod Kumar Kannaujia, Ajay K. Maurya, Ravi Prakash, “Design of DGS Compact UWB Antenna for C, X, Ku and Ka-Band Applications using ANN and ANFIS Optimization Techniques”. International Conference on computational electronics for wireless communication, NIT-Kurukshetra, (ICCWC-2021).
2. Rakesh Kumar Maurya, Anil Kumar Singh, Reena Pant and Ajay Kumar Maurya, “CAD application of ANFIS Model for Annular ring MPA” 5<sup>th</sup> International Conference on Academic Research in Engineering, Management and Information Technology (Icaremit - 2020).
3. Rakesh Kumar Maurya, Anil Kumar Singh, Reena Pant, Ajay Yadav and Ravi P. Prajapati, “ANFIS Model of DGS Triangular Ring MPA” 5<sup>th</sup> International Conference on Academic Research in Engineering, Management and Information Technology (Icaremit - 2020)
4. Rakesh Kumar Maurya, B.K. Kanaujia, A.K. Gautam, S. Chatterji and A.K. Singh, “ANN and ANFIS model for optimization of physical parameter of annular ring slot antenna with truncated corners,” IEEE Int. Conf. ID: 40353, proceedings of the 11 INDIACOM-2017, BVICAM, New Delhi, pp. 7190-7195, 2017.
5. R. K. Maurya, Binod K. Kanaujia, A. K. Singh and A. K. Gautam, “Rectangular Microstrip Antenna Symmetrically Loaded With IMPATT Diode,” International Conference On Radio Science (ICRS-2008), International Centre For Radio Science, Jodhpur, February 2008, pp.112-115.
6. Binod K. Kanaujia A. K. Singh, R. K. Maurya and Indera Preet Kaur, “Frequency Agile Annular Ring Microstrip Antenna Loaded With IMPATT Diode,” International Conference on Wireless, Mobile and Multimedia Networks, IET, Bombay, January 2008.
7. Binod K. Kanaujia, A. K. Singh, R. K. Maurya and Siva Jiaswal, “Concentric Annular Ring Microstrip Antenna Array,” International Conference on Wireless, Mobile and Multimedia Networks, IET, Bombay, January 2008.
8. A. K. Singh, Binod K. Kanaujia, R. K. Maurya and B. R. Vishvakarma, “Frequency Agile Microstrip Antenna,” National Seminar ACST, SRMS-Bareilly, 15<sup>th</sup> April 2007, pp. 67-72.
9. A. K. Singh, Binod K. Kanaujia and R. K. Maurya, “Frequency Agile Annular Ring Microstrip Antenna Symmetrically Loaded With MOS Capacitor,” International Conference On Radio Science (ICRS-2008), International Centre For Radio Science, Jodhpur, February 2008.
10. R. K. Maurya, A. K. Singh, Binod K. Kanaujia, Brahm Deo Yadav and Ritu Rani, “Wireless Home Security & Teleguard System,” International Conference on Wireless, Mobile and Multimedia Networks, IET, Bombay, January 2008.
11. Brahm Deo Yadav, A. K. Singh and R. K. Maurya., “Microcontroller based Position Indicator on Rail Track in Track Monitoring System,” Challenges for Railway Transportation in Information Age, International Conference on Railway Engineering (ICRE-2008), Hong-Kong, China,





12. Brahm Deo Yadav, A. K. Singh, P. S. Shukla, R. K. Maurya and Ritu Rani, "A Microprocessor Based System for Instantaneous Display of Radiator and After Cooler Effectiveness of Rail Engine," Challenges for Railway Transportation in Information Age International Conference On Railway Engineering (ICRE-2008) Hong-Kong, China,
13. R. K. Maurya, Ravi sanker, Abhishek, Fuzzy inference system for analysis of circular microstrip antenna, IEEE, Int., Conference. DOI 12.2022/ICMIRA, 2011
14. R. K. Maurya, Vijay, S. Mishra, N. Chaudhary and D Kumar, Model for calculation of patch radius of circular microstrip antenna using artificial neural network, IEEE Int. Conf. DOI 10.1109/ICMIRA, 39(2013), 167-173.
15. R. K. Maurya, Brahm Dev yadav, Mukesh Rai and, Rajeev Verma, "Expert/Home Security Wireless System," National Conference On "Recent Advances and Trends in Electrical Engineering (RATE)"NITTTR,Chandigarh, February 13-14,2008.
16. R. K. Maurya, A.K.Singh, Mukesh Rai and Rajeev Verma, "Power Line Carrier Communication" National Conference On "Recent Advances and Trends in Electrical Engineering (RATE)"NITTTR,Chandigarh, February 13-14,2008.
17. R. K. Maurya, A. K. Singh and Indera Preet Kaur, "Optimization Techniques for Maze Solving" National Conference on "Wireless Sensor Network" National Seminar ACST, SRMS-Bareilly, 5<sup>th</sup> April 2009.

#### **Memberships of Academic/Professional Bodies**

- 1- Life time memberships of IETE, "The Institution of Electronics and Telecommunication Engineers" 2, Institutional Area, Lodi Road, New Delhi-110 003
- 2- Life time memberships of ISTE, "Indian Society for Technical Education", IIT (D) Campus, Katwaria Sarai, Shaheed Bhagat Singh Marg, New Delhi-110016
- 3- Life time member of The institution of engineers (India) an aiso 9001: 2015 certified organization 8, Gokhle road, Kolkata-700020

Prof. (Dr) Rakesh Kumar Maurya