


## STANDARD TEMPLATE OF FACULTY PROFILE FOR UPLOADING OF UNIVERSITY WEBSITE

Title	Dr.	First Name	Neeta	Last Name	Singh	
Designation		Assistant Professor				
School /Dept. Name		University School of Automation and Robotics				
Address:		East Delhi Campus of Guru Gobind Singh Indraprastha University, New Delhi- 110092				
Phone No.		Office				
		Residence	(optional)			
		Mobile	(optional)			
Email		1. neeta.usar@ipu.ac.in				
Web Page (if any)		<a href="https://scholar.google.com/citations?hl=en&amp;user=XYBgj-8AAAAJ&amp;view_op=list_works">https://scholar.google.com/citations?hl=en&amp;user=XYBgj-8AAAAJ&amp;view_op=list_works</a>				
Subjects Taught		<ul style="list-style-type: none"> <li>• Electrical Science</li> <li>• Internet of Things</li> <li>• Computer Networks</li> <li>• Java with OOPS concept</li> <li>• VLSI</li> <li>• Antenna Theory</li> <li>• Microwave Engineering</li> </ul>				
Areas of Interest/ Specialization		<ul style="list-style-type: none"> <li>• Microwave Devices</li> <li>• Antennas</li> <li>• Rf Energy Harvesting</li> <li>• IoT Sensors</li> </ul>				
Experience (in years)		Total	Seven years and Nine months			
		Industry	Nil			
		Teaching	<ul style="list-style-type: none"> <li>• As a Teaching Assistant in AIACTR, GGSIPU from October 2015 to October 2019</li> <li>• As an Assistant Professor (Regular) at in G. D. Goenka University from December 2021 to October 2022.</li> <li>• As an Assistant Professor (Regular) at University School of Automation and Robotics (USAR), East Delhi Campus, GGSIPU from November 2022 till date.</li> </ul>			
		Research	1 years 5 Months : JNU- Research Associate (DRDO Project)			

Educational Qualifications	UG	Bachelor of Technology (B.Tech.) from GGSIPU (2012)
	PG	Master of Technology (M.Tech.) from GGSIPU (2015) (Gold Medalist)
	Doctorate	PhD in Electronics Department (RF Energy Harvesting) from Jamia Millia Islamia University (2020)
	Any other – Diploma in IPR	NA
Research Publications in Journals (last 5 years)	<ul style="list-style-type: none"> <li>• D. Sharma, S. Kumar, N. Singh, B. K. Kanaujia, S. P. Singh and A. Lay-Ekuakille, "Far-Field Wireless Power Transmission and Measurement for a Leadless Transcatheter Pacing System," in <i>IEEE Transactions on Instrumentation and Measurement</i>, vol. 72, pp. 1-12, 2023, Art no. 5503912, doi: 10.1109/TIM.2023.3302377.</li> <li>• S. Ahlawat, N. Singh, B. K. Kanaujia and K. Rambabu, "A Dual-Band Differential Intraoral Antenna and System for Wireless Data and Radiative Near-Field Power Transfer," in <i>IEEE Transactions on Antennas and Propagation</i>, vol. 71, no. 3, pp. 2145-2157, March 2023, doi: 10.1109/TAP.2022.3232723.</li> <li>• Nirmal Kumar Agarwal, Manish Prateek, Neeta Singh, Abhinav Saxena, <i>An Implicit Controlling of Adaptive Neuro Fuzzy Inference System Controller for The Grid Connected Wind Driven PMSG System</i>, <b>Journal of Fusion: Practice and Applications</b>, Vol. 12 , No. 2 , (2023) : 193-205 (Doi : <a href="https://doi.org/10.54216/FPA.120216">https://doi.org/10.54216/FPA.120216</a>).</li> <li>• V. Kaim, N. Singh, B. K. Kanaujia, L. Matekovits, K. P. Esselle and K. Rambabu, "Multi-Channel Implantable Cubic Rectenna MIMO System With CP Diversity in Orthogonal Space for Enhanced Wireless Power Transfer in Biotelemetry," in <i>IEEE Transactions on Antennas and Propagation</i>, vol. 71, no. 1, pp. 200-214, Jan. 2023, doi: 10.1109/TAP.2022.3222695.</li> <li>• S. Ahlawat, Neeta Singh., "Design and Performance Measurement of Implantable Differential Integrated Antenna for Wireless Biomedical Instrumentation Applications," in <i>IEEE Transactions on Instrumentation and Measurement</i>, vol. 71, pp. 1-10, 2022, Art no. 5502110, doi: 10.1109/TIM.2022.3185622. Study of proton parton distribution functions at high x using ZEUS data, <i>Phys. Rev. D</i> 101 (2020) 112009.</li> <li>• D. Sharma, V. Kaim, B. K. Kanaujia, N. Singh, S. Kumar and K. Rambabu, "A Triple Band Circularly Polarized Antenna for Leadless Cardiac Transcatheter Pacing System," in <i>IEEE Transactions on Antennas and Propagation</i>, vol. 70, no. 6, pp. 4287-4298, June 2022, doi: 10.1109/TAP.2022.3145461.</li> <li>• Bhushan, S., Kumar, S., Singh, N. <i>et al.</i> Defected Ground Split Ring Resonator-Based Sensor for Adulteration Detection in Fluids. <i>Wireless Pers Commun</i> <b>121</b>, 1593–1606 (2021). <a href="https://doi.org/10.1007/s11277-021-08686-8">https://doi.org/10.1007/s11277-021-08686-8</a>.</li> </ul>	

	<ul style="list-style-type: none"> <li>• Singh, N., Kumar, S., Kanaujia, B.K. <i>et al.</i> A compact broadband GFET based rectenna for RF energy harvesting applications. <i>Microsyst Technol</i> <b>26</b>, 1881–1888 (2020). <a href="https://doi.org/10.1007/s00542-019-04737-0">https://doi.org/10.1007/s00542-019-04737-0</a>.</li> <li>• Neeta Singh, Sachin Kumar, Binod Kumar Kanaujia, Mirza Tariq Beg, Mainuddin, Sandeep Kumar, A compact and efficient graphene FET based RF energy harvester for green communication, <i>AEU - International Journal of Electronics and Communications</i>, Volume 115, 2020, 153059.</li> <li>• Neeta Singh, Binod Kumar Kanaujia, Mirza Tariq Beg, Mainuddin &amp; Sachin Kumar (2019) A triple band circularly polarized rectenna for RF energy harvesting, <i>Electromagnetics</i>, 39:7, 481-490, DOI: <a href="https://doi.org/10.1080/02726343.2019.1658164">10.1080/02726343.2019.1658164</a> .</li> <li>• Neeta Singh, B. K. Kanaujia, M. T. Beg, Mainuddin, Sachin Kumar, Hyun Chul Choi &amp; Kang Wook Kim (2019) Low profile multiband rectenna for efficient energy harvesting at microwave frequencies, <i>International Journal of Electronics</i>, 106:12, 2057-2071, DOI: <a href="https://doi.org/10.1080/00207217.2019.1636302">10.1080/00207217.2019.1636302</a> .</li> <li>• Singh N., Kanaujia B.K., Beg M.T., Mainuddin, Khan T., Kumar S.(2018). A dual polarized multiband rectenna for RF energy harvesting, <i>AEU - International Journal of Electronics and Communications</i>, 93 , pp. 123-131.</li> <li>• Singh, N., Kanaujia, B.K., Beg, M.T. <i>et al.</i> A dual band rectifying antenna for RF energy harvesting. <i>J Comput Electron</i> <b>17</b>, 1748–1755 (2018). <a href="https://doi.org/10.1007/s10825-018-1241-6">https://doi.org/10.1007/s10825-018-1241-6</a></li> </ul>
Papers Published in Conference Proceedings(last 5 years)	<ul style="list-style-type: none"> <li>• N. K. Agarwal, N. Singh and A. Saxena, "PID/FO-PID Controller Implementation for the Optimal Controlling of Wind Driven PMSG," <i>2023 2nd International Conference on Edge Computing and Applications (ICECAA)</i>, Namakkal, India, 2023, pp. 1571-1575, doi: 10.1109/ICECAA58104.2023.10212188.</li> <li>• Agarwal, N.K., Singh, N., Saxena, A. (2023). Modeling and Analysis of Wind-Driven PMSG for Healthy and Unhealthy Conditions . In: Rani, A., Kumar, B., Shrivastava, V., Bansal, R.C. (eds) <i>Signals, Machines and Automation. SIGMA 2022. Lecture Notes in Electrical Engineering</i>, vol 1023. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-99-0969-8_18">https://doi.org/10.1007/978-981-99-0969-8_18</a></li> <li>• N. Singh, V. Kaim and B. K. Kanaujia, "Dual Band Slot Antenna with Suppressed Higher Order Harmonics for Wireless Power Transmission," <i>2021 IEEE USNC-URSI Radio Science Meeting (Joint with AP-S Symposium)</i>, Singapore, Singapore, 2021, pp. 7-8, doi: 10.23919/USNC-URSI51813.2021.9703537.</li> </ul>
Books Authored/ Book Volume Chapters	<ul style="list-style-type: none"> <li>• Book Authored: Rectenna: Wireless Energy Harvesting System” Springer Singapore, 2021.</li> <li>• Book Chapter :</li> <li>• Singh, N., Kumar, S., Kanaujia, B.K. (2019). A New Trend to Power Up Next-Generation Internet of Things (IoT) Devices: ‘Rectenna’. In: Mittal,</li> </ul>

	<p>M., Tanwar, S., Agarwal, B., Goyal, L. (eds) Energy Conservation for IoT Devices . Studies in Systems, Decision and Control, vol 206. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-13-7399-2_14">https://doi.org/10.1007/978-981-13-7399-2_14</a>.</p> <ul style="list-style-type: none"> <li>• Singh, N., Kumar, S., Kanaujia, B.K., Choi, H.C., Kim, K.W. (2019). Energy-Efficient System Design for Internet of Things (IoT) Devices. In: Mittal, M., Tanwar, S., Agarwal, B., Goyal, L. (eds) Energy Conservation for IoT Devices . Studies in Systems, Decision and Control, vol 206. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-13-7399-2_3">https://doi.org/10.1007/978-981-13-7399-2_3</a>.</li> <li>• Neeta Singh, Sachin Kumar, Binod Kumar Kanaujia, (2021). <a href="#">Antennas for Biomedical Applications Using RF Energy Harvesting</a>. Bioelectronics and Medical Devices, Apple Academic Press.</li> <li>• Garima Srivastava, Neeta Singh, Sachin Kumar (2021), Advances in Antenna, Signal Processing, and Microelectronics Engineering, Apple Academic Press.</li> </ul>			
No. of Conferences	National	Attended- 3		Organized
				NA
	International	Attended- 1		NA
Research Guidance	Awarded	PG	M. Tech	Doctorate
		NA	2	1
	Undergoing	NA	NA	NA
Research Projects	Completed	DRDO Project- 30,00,00 INR		
	Undergoing	ICMR Project- 33.83,00,00 INR		
Awards & Distinctions	<ul style="list-style-type: none"> <li>• Patent Awarded <b>SELF-SUSTAINABLE POWER HARVESTING DEVICE</b> on 02/08/2023 with Application No.-202111056214.</li> <li>• Patent Awarded <b>COMPACT FAR-FIELD WIRELESS POWER TRANSFER SYSTEM FOR LEADLESS CARDIAC PACEMAKER</b> on 07/11/2023 with Application No.-202211044711.</li> <li>• GGSIPU University Gold Medal - 2015: (M.Tech- Rf and Microwaves)</li> <li>• Awarded by CM of Delhi Government, Merit Certificate in Hindi (10th Standard).</li> <li>• Golden Degree in P.Hd. form Jamia Millia Islamia</li> </ul>			
Administrative Assignments Handled	<ul style="list-style-type: none"> <li>• Time Table committee member handling since 2022 till date.</li> <li>• Examination committee member handling since 2022 till date.</li> <li>• Library committee member handling since 2022 till date.</li> <li>• IEEE-W club mentor looking after all the club activities.</li> <li>• Karuyantra club (Robotics Society) mentor looking after all the club activities.</li> <li>• Dance Club Mentor, helps students to participate in various cultural activities and competitions.</li> <li>• Stage Committee Member at University fest in 2023.</li> <li>• Internet Of Things Lab In charge.</li> </ul>			

	<ul style="list-style-type: none"> <li>• Project In charge at the inauguration of university.</li> </ul>
Association with Professional Bodies	<p>(1) Associate Editor of AEUE - International Journal of Electronics and Communications (Elsevier) 2020-present</p> <p>(2) Reviewer of journals:</p> <ol style="list-style-type: none"> <li>IETE technical review India</li> <li>IEEE-MTT</li> <li>IEEE Access</li> <li>IEEE Transaction of Antenna and Wave Propagation</li> <li>Hindawi Journal</li> <li>Qeios Journal</li> <li>Microsystem Technologies</li> <li>Electromagnetics.</li> </ol> <p>(3) Member of IEEE : 2021-present.</p>
Any other Achievements	<ul style="list-style-type: none"> <li>• NET Qualified : June 2017</li> <li>• Gate Qualified- 2013</li> <li>• Gate Qualified- 2016</li> </ul>