




## Faculty Profile on University Website

[www.mjpru.ac.in](http://www.mjpru.ac.in) (NAAC A++ University)

<b>Title</b>	<b>Dr.</b>	<b>First Name</b>	<b>Manoj Kumar</b>	<b>Last Name</b>	<b>Singh</b>	
<b>Designation</b>		<b>Associate Professor</b>				
<b>Department</b>		<b>Mechanical Engineering</b>				
<b>Address</b>	<b>Campus</b>					
	<b>Residence</b>	<b>39, Phase-3, Ashish Royal Park, Bareilly, U.P. Pin-243006</b>				
<b>Mobile No.</b>		<b>9457113429</b>				
<b>Email ID</b>		<b>Personal</b>	<a href="mailto:manojksiet@gmail.com">manojksiet@gmail.com</a>			
		<b>University Domain</b>	<a href="mailto:manojksiet@mjpru.ac.in">manojksiet@mjpru.ac.in</a>			
<b>Professional Networking ID, i.e. LinkedIn, Twitter etc.</b>						
<b>Educational Qualification (Graduation Onwards)</b>						
<b>Course/Degree</b>	<b>Institution</b>	<b>Year</b>	<b>Details/Thesis Topic/Subjects</b>			
<b>B. Tech.</b>	<b>MJPRU</b>	<b>2000</b>	<b>B. Tech in Mechanical Engineering</b>			
<b>M. Tech.</b>	<b>IIT Delhi</b>	<b>2009</b>	<b>M. Tech in Industrial Engineering</b>			
<b>Ph.D</b>	<b>IIT Delhi</b>	<b>2018</b>	<b>Competitiveness of The Electronics Manufacturing Industry In India: A Study of Select Issues</b>			
<b>Career Profile</b>						
<b>Organization/ Institution</b>	<b>Designation</b>	<b>Duration</b>	<b>Name of Duties</b>			
<b>MJPRU</b>	<b>Assistant Professor</b>	<b>2002-2018</b>	<b>Teaching</b>			
<b>MJPRU</b>	<b>Associate Professor</b>	<b>2018 onwards</b> <b>Continue</b>	<b>Teaching</b>			
<b>Research Interests/Specialization</b>						
<b>Strategy, Industrial Policies, Manufacturing</b>						
<b>Research Experience in Years: 03 Years during Ph.D work</b>						
<b>No. of Research Scholars Successfully Guided</b>						

<b>Name of Programme</b>		Awarded		Under Supervision	
<b>Ph.D.</b>		01		02	
<b>Researcher/ Expert ID</b>	Scopus	Orchid	Publons	Vidwan	Google Scholar
	57214312794	0000-0001-8535-1886	S-8650-2016	154249	DBN-2DIAAAAJ
	H-Index	I 10-Index	Citations		
	12 as on 08.11.2023	12 as on 08.11.2023	761 as on 08.11.2023		
<b>Teaching Experience (Subjects/Courses Taught)</b>					
<b>18 Years</b>					
<b>Courses Taught</b>					
<ol style="list-style-type: none"> <li>1. Manufacturing Technology</li> <li>2. Production Process-I</li> <li>3. Production Process-II</li> <li>4. Automatic Mechanics</li> <li>5. Statistical Quality Control</li> <li>6. Production Planning and Control</li> <li>7. Operation Management</li> <li>8. Industrial Management</li> <li>9. Value Engineering</li> </ol>					
<b>Honours/Awards &amp; Fellowship FOR OUTSTANDING WORK</b>					
<b>Name of Award/ Fellowship</b>		<b>Awarded By</b>			
		<b>Name of Governmental Agency</b>	<b>Name of Government Supported Organization Department</b>	<b>Name of International Recognized Body</b>	
National Overseas Scholarship 2007		Ministry of Social Justice and Empowerment, GoI	Ministry of Social Justice and Empowerment, GoI	Ministry of Social Justice and Empowerment, GoI	
National Overseas Scholarship 2011		Ministry of Social Justice and Empowerment, GoI	Ministry of Social Justice and Empowerment, GoI	Ministry of Social Justice and Empowerment, GoI	
2014 AGBA Scholar		Academy for Global Business Advancement	Academy for Global Business Advancement	Academy for Global Business Advancement	

	(AGBA) 11 <sup>th</sup> Annual World Congress- Business and Entrepreneurship development in globalised Era and Rise of India under new leadership, IIT Delhi	(AGBA) 11 <sup>th</sup> Annual World Congress- Business and Entrepreneurship development in globalised Era and Rise of India under new leadership, IIT Delhi	
Best Paper Award Certificate 2019	Academy for Global Business Advancement (AGBA) 16 <sup>th</sup> Annual World Congress, IIT Delhi	Academy for Global Business Advancement (AGBA) 16 <sup>th</sup> Annual World Congress, IIT Delhi	Academy for Global Business Advancement
Best Teacher Award-2021	Dr. Sarvepalli Radhakrishnan Best Teacher Award-2021 in Industrial Engineering, Center for Professional Advancement Continuous Education (CPACE)	Dr. Sarvepalli Radhakrishnan Best Teacher Award-2021 in Industrial Engineering, Center for Professional Advancement Continuous Education (CPACE)	Dr. Sarvepalli Radhakrishnan Best Teacher Award-2021 in Industrial Engineering, Center for Professional Advancement Continuous Education (CPACE)
Out Standing Scientist Award 2021	Out Standing Scientist Award, International Conference for award winners on Engineering, Science and Medicine, Chennai, India, organized by VDGGOOD Professional Association.	Out Standing Scientist Award, International Conference for award winners on Engineering, Science and Medicine, Chennai, India, organized by VDGGOOD Professional Association.	Out Standing Scientist Award, International Conference for award winners on Engineering, Science and Medicine, Chennai, India, organized by VDGGOOD Professional Association.
Publication/Academic Activities (Numbers Only)			
Books & Monographs (Single	Research Papers Published in International	28	Papers Presented in Seminar/ Seminars
			29
			Seminar/ Conferences
			06
			Research Project (Complete
			02

Author)		Journals		Conferences		Organized		d)	
Books (Co-authored)	05	Research Papers Published in Other Journals		Seminar/ Conferences Attended	25	Workshop s Organized	17	Research Project (Ongoing)	01
Books (Edited)	01	Articles Published in Popular For a, e.g., Websites,		Sessions Chaired in Seminars/ Conferences		Membersh ip of Academic/ Profession al Bodies	02	Foreign Countries Visited for Academic Assignme nts	02
Chapters in Edited Books	05	Blogs Newspapers, Magazines etc		Resource Lectures Delivered	03				

**Details of Publication / Academic Activities (2010 Onwards)**

**(a) Authorised Books/ Monographs**

Name of Book	Year of Publication	Publisher	ISBN No.
Sustainable Smart Industry 4.0 Future Assessment	2021	IIP InSc International Publishers	978-1-956102-54-3
Technological advances and applications in Additive Manufacturing	2021	IIP InSc International Publishers	978-1-956102-77-2
Reforms and Disinvestment of Public Enterprises	2019	Lulu Publication, USA	978-1-387-53967-3
Operations Management	2019	Kindle direct publishing	978-981-16-5281-3
Environmental Management	2019	Kindle direct publishing	979-8-493-03684-2

**(b) Edited Books**

Year of Publication	Title	Publisher	ISBN No.	DOI No.	Citations

**(c) Papers Published in UGC Care Listed/Indexe d/Peer Reviewed Journals**

Year of Publication	Title	Name of Journals	ISBN No.	Citations	Impact Factor
2013	Hollistic View of BPR for E-District Services	International Journal of Advance	2319-8354 (E)		1.11 (2020-

		Research in Science and Engineering			2021)
2017	Evaluating the competitiveness of Indian metro cities: in smart city context	International Journals Information Technology and Management	1461-4111	16	0.62 (Scopus)
2018	Analyzing the Determinants Affecting the Industrial Competitiveness of Electronics Manufacturing in India by Using TISM and AHP.	Global Journal of Flexible Systems Management	0972-2696	40	7.018 (Scopus)
2018	Socio-influences of users' generated content in emerging markets	Marketing Intelligence and Planning	0263-4503	22	4.443 (Scopus)
2018	Smart neighborhood: A TISM approach to reduce urban polarization for the sustainable development of smart cities	Journal of Science and Technology Policy Management (2018)	2053-4620	27	3.268 (Scopus)
2018	Competitiveness of the Indian electronics manufacturing industry: an ISM-Fuzzy MICMAC and AHP Approach	Measuring Business Excellence	1368-3047	24	2.69 (Scopus)
2019	A policy framework for city eligibility analysis: A TISM and fuzzy-MICMAC weighted approach to select a city for smart city transformation in India	Land Use Policy Elsevier (2019)	0264-8377	60	6.403 (Scopus)
2020	Moving towards smart	Journal of	0040-		11.146

	cities: Solutions that lead to the Smart City Transformation Framework	Technological Forecasting and Social Change	1625		(Scopus)
2021	A State of Art Review On Behavioral study of Work Roll made by AISI D2 HCHCr Tool Steel."	Design Engineering (2021): 13616-13627.	0011-9342		
2021	"Identification and Prioritization of Properties for Composite Materials Usage in Automobiles: An Analytical Hierarchical Process (AHP) Approach."	Design Engineering (2021): 12751-12764.	0011-9342		
2021	"Seasonal Variations of Lead Accumulation in the Spinacea Oleracea Linn. During 2014-2017."	Design Engineering (2021): 15655-15666.	0011-9342		
2021	Power quality issues in Autonomous Solar photovoltaic utility microgrid employing a STATCOM Based Intelligent Controller,	Journal of nuclear energy science and power generation technology 10:10 (2021)	2325-9809	3	0.167 (Scopus)
2021	Artificial Neural Network based Advanced Algorithm for New Generation Solar PV Systems	Journal of nuclear energy science and power generation technology 10:10 (2021)	2325-9809		0.167 (Scopus)
2021	A Smart Grid Energy Management Optimization Technique	Journal of nuclear energy science and power generation technology 10:10 (2021)	2325-9809		0.167 (Scopus)
2021	A Compressive Review on	Journal of Nuclear	2325-		0.167

	Solar Air Heater Heat Transfer and Friction Characteristic	Energy Science & Power Generation Technology 10:11 (2021)	9809		(Scopus)
2021	"Smart Farming Technologies in Agriculture in India."	International Journal of Modern Agriculture 10, no. 2 (2021)	2365-7246		
2021	An experimental and computational investigation of the flow fields using Accelerated Erosion Test Ring (AETR)	Journal of Engineering Research, ICCEMME Special Issue (2021)	2021		
2021	Field localization and density cavitation in low beta plasma, Laser and Particle Beams	Laser and particle beams Journal Cambridge University Press (2021)	0263-0346		0.884 (Scopus)
2021	Analyzing an Evacuated Tube Solar Water Heating System using Twin-Nano/Paraffin as Phase Change Material	Materials Today: Proceedings. 2021	2214-7853	40	25286 (Scopus)
2021	Experimental analysis of the metal roofed industrial building using Nano-Silica disbanded crude wax (NDCW)	Materials Today: Proceedings. 2021	2214-7853	39	25286 (Scopus)
2021	Experimental investigation of desiccant dehumidification Based Thermoelectric Air-Conditioning System	Journal of Engineering Research (JER)	2307-1885		0.193 (Scopus)

2022	Experimental investigations on the Wear Behaviour of Eutectic A1 7075/CNT/Graphite Composites Manufactured by a Combination of Two Stage Stir and Squeeze Casting Techniques.	Hindawi Journal of Nanomaterials	1687-4129	3	3.371 (Scopus)
2022	Optimization and wear properties for the composites of metal matrix AA8011/Boron Nitride using Taguchi method	Hindawi Journal of Nanomaterials	1687-4129	5	3.371 (Scopus)
2022	Study on the impact of Nano-reinforcements on the fatigue strength of adhesive joints	Materials Today: Proceedings. 2022	2214-7853	2	25286 (Scopus)
2022	Wireless Sensor Networks: Issues, Algorithms and Applications	Design Engineering	0011-9342		
2023	A Comparative Analysis of Ribs and Cans Type Solar Air Heater	Evergreen Joint Journal of Novel Carbon Resource Sciences& Green Asia Strategy	2189-0420 (Print) 2432-5953 (Online)		0.744 (Scopus)
2023	Optimum design and analysis of solar pump with the help of genetic algorithm, a MATLAB toll and RSM toll at minimum cost	Environmental Progress & Sustainable Energy	1944-7442 (Print) 1944-7450 (Online))		2.797 (Scopus)
2023	Performance optimization of solar operating by PV	Environmental Progress &	1944-7442		2.797 (Scopus)



	module	Sustainable Energy	(Print) 1944- 7450 (Online)		
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**(d) Chapter/Paper Published in Edited Books**

Year	Chapter in Edited Books	Publisher's Details	Level	ISSN/ISBN No
2018	A Glimpse of Sustainable Electronics Manufacturing for India: A Study Using PEST-SWOT Analysis	Global Value Chains, Flexibility and Sustainability Springer	International	978-981-10-8929-9
2019	Numerical simulation of flow past a flat plate with anti-singing trailing edge	IOP conference series: material science and engineering	International	691 (2019)012021
2020	Experimental investigation on the performance of nano boric acid suspensions in coconut oil during milling operation on AI 6061-T6 alloy	IOP conference series: material science and engineering	International	988 (2020) 011001
2021	Experimental analysis of a thermoelectric air-conditioning system with desiccant dehumidification	Recent advances in industrial production Springer	International	978-981-16-5281-3
2021	An experimental investigation of ribbed solar air heater-free convection	Recent advances in industrial production Springer	International	978-981-16-5281-3

**(e) Patents**

Year	Title of Patents	Funding Agency	Level	Application No.
2018	Stone Crushing Machine	NPIU/MHRD/GoI (TEQIP-III)	National	201811035040
2019	A Solar Heating Apparatus	NPIU/MHRD/GoI (TEQIP-III)	National	201911037065
2019	Pneumatic Chips Collecting Apparatus	NPIU/MHRD/GoI (TEQIP-III)	National	201911012059
2020	Buvt -face recognition bot: face	NPIU/MHRD/GoI (TEQIP-III)	National	202011041947

	recognition bot their unique voice using IoT-based technology			
2021	A machine learning and IOT based system for incorrect posture detection	NPIU/MHRD/GoI (TEQIP-III)	National	202121037944
2021	An Experimental Study carried out in orthogonal section on the titanium alloy TI-6AL-4V Using the Kinematic	NPIU/MHRD/GoI (TEQIP-III)	National	202141041759
2021	Experimental Investigation of Hybrid gas turbine and Hybrid steam Turbine to investigate the possibility of utilizing solar energy in a combined cycle	NPIU/MHRD/GoI (TEQIP-III)	National	202141049062
2022	A Metal Detector Robotic Device (GRANTED)	Government of India (GoI)	National	356017-001

**(f) Projects (With Title, Year, Grants, Funding Agency and Collaborations)**

Year	Name of Project	Funding Agency	Amount	Duration	
				From	Till
2019	Development of solar power thermo electric cooler using desiccant dehumidification (Co-PI)	NPIU/MHRD/GoI	Rs. 10.21 Lakhs	2019	2021
2019	Hybrid solar air heater for space heating and crop drying (Co-PI)	NPIU/MHRD/GoI	Rs. 12.61 Lakhs	2019	2021
2023	Monitoring of sustainable agriculture of small farms wielding Image processing integrating with Sensor Antenna and Machine learning for improving socio-economic status of farmers (Co-PI)	Science and Engineering Research Board, New Delhi	Rs. 27.02 Lakhs	08 May, 2023	On-going
2023	Development of an artificial intelligent based asset inspection system for the Energy Industries with scouting drones. (Co-PI) (Project ID 3246)	Council of Science & Technology, U.P.	Rs. 14.58 Lakhs	19 Oct. 2023	On-going

<b>(h) Administrative Positions/Assignments Held</b>			
<b>Post</b>	<b>Organization</b>	<b>Duration</b>	
		<b>From</b>	<b>Till</b>
In-Charge, Mech. Engg.	ME, MJPRU	2009	2012
TEQIP-II Coordinator	FET, MJPRU	2010	2012
TEQIP-III Coordinator	FET, MJPRU	2017	2022
Proctor, Mech. Engg.	ME, MJPRU	2021	Continues
Head, Mech. Engg.	ME, MJPRU	2023	Continues
<b>(i) Seminar/Conference Presentations</b>			
<b>Title of paper presented</b>	<b>Conferences / Seminars / Workshops attended</b>	<b>International/ National</b>	
The social media cone: Towards achieving the manufacturing competitiveness goals	15 <sup>th</sup> IFIP I3E Conference on e-Business, e-Service and e-Society ‘ Social media: the good the bad and the Ugly 13-15 September, 2016, School of Management, Swansea university, UK	International (Abroad)	
Digitized residential address system: A necessity towards the faster service delivery and smart cities development in India	16 <sup>th</sup> Global Conference on flexible systems Management-GLOGIFT-16 4-6 December, 2016, UTS Business School, University of Technology Sydney and Global Institute of Flexible Systems Management	International (Abroad)	
Role of manufacturing sector to develop smart economy: A competitiveness study between India and China	International Conference on Smart Cities, ICEG. CRC Press, Taylor & Francis, UK	International (within Country)	
Competitive Measurement of the Indian Electronics Manufacturing Industries: Using the Analytical Hierarchy Process	Proceedings of GLOGIFT 16, December 4-6, 2016, University of Technology, Sydney, Global Institute of Flexible Systems Management	International (Abroad)	
Smart Governance for Smart Cities: A conceptual Framework from Social Media Practices (2016)	IFIP International Federation for Information Processing 2016 springer International Publishing Online	International (within Country)	

Education in Emergencies: Smart learning solutions and role of governance to mitigate the challenges	3rd IEEE International Conference on Advances in Computing, Communication and Automation (ICACCA-2017), IEEE proceedings, Sept, 14-16, 2017, Dehradun, India. IEEE	International (within Country)
Smart mobility: Crowdsourcing solutions for smart transport system in smart cities context.	ACM Press, ICEGOV 2018. Ireland, UK ICEGOV 2018	International (Abroad)
Driving competitive advantage for high technology manufacturing: A social media perspective	AGBA's 16 <sup>th</sup> World Congress, 2-4 July, 2019, IIT Delhi	International (within Country)
Investigation of flow field in accelerated erosion test rings	ICAREMIT-2020, MJP Rohilkhand University, Bareilly (U.P.) India	International (within Country)
Development of textured tool for process improvements in dry machining	ICAREMIT-2020, MJP Rohilkhand University, Bareilly (U.P.) India	International (within Country)
A review of hybrid solar air heater	ICAREMIT-2020, MJP Rohilkhand University, Bareilly (U.P.) India	International (within Country)
Conversion of waste heat to electricity using thermoelectric generator: A review	ICAREMIT-2020, MJP Rohilkhand University, Bareilly (U.P.) India	International (within Country)
Fabrication of hybrid braking system	ICAREMIT-2020, MJP Rohilkhand University, Bareilly (U.P.) India	International (within Country)
Design and construction of an ornithopter	ICAREMIT-2020, MJP Rohilkhand University, Bareilly (U.P.) India	International (within Country)
Comparative investigation on depth of cut in CO2 laser beam machining of MDF and acrylic	ICAREMIT-2020, MJP Rohilkhand University, Bareilly (U.P.) India	International (within Country)
Products and Services in Industries	Department of Mechanical Engineering, Government Engineering College Jhalawar	National
Inventory Management	Department of Mechanical Engineering, Government Engineering College Jhalawar	National
Forecasting methods in Industries	Department of Mechanical	National

	Engineering, Government Engineering College Jhalawar	
Experimental and Computation Analysis of Micro-Electric Discharge Machining	National Seminar on Software applications in Engineering and Technology, Department of Mechanical Engineering, Sant Longowal Institute of Engineering and Technology, Longowal, Sangrur, Punjab, India	National
Investigation of Vertical Dynamics of a passenger car through bond graph formulation	National Seminar on Software applications in Engineering and Technology, Department of Mechanical Engineering, Sant Longowal Institute of Engineering and Technology, Longowal, Sangrur, Punjab, India	National
Adopting Sustainable Manufacturing: The case of Indian electronics manufacturing industries	Global Institute of Flexible Systems Management, International Conference and Proceedings of GLOGIFT 16, University of Technology, Sydney	International (Abroad)
Academic Globalization: A need for competitiveness of academic institutions	International Institute of Informatics and Systemic, 19 <sup>th</sup> World Multi-Conference on Systemic, Cybernetics and Informatics (WMSCI-2015), Orlando, Florida, USA	International (Abroad)
Impact of Government Policies on Manufacturing Sector: A proposed framework for policy impact analysis	Proceedings XI Annual World Congress, titled “Business and Entrepreneurship Development in a Globaled Era and Rise of India under new leadership” IIT Delhi	International (within Country)
Investigating the Indian Electronics Manufacturing Sector using PEST-SWOT analysis tools	Proceedings XI Annual World Congress, titled “Business and Entrepreneurship Development in a	International (within Country)

	Globalised Era and Rise of India under new leadership” IIT Delhi	
The Future of manufacturing: Global Value chains, smart specialization and flexibility	Global Institute of Flexible Systems Management, International Conference and Proceedings of GLOGIFT 16, University of Technology, Sydney	International (Aboard)
Improving Competitiveness of Indian Electronics Manufacturing Industries: A need for FDI policy liberalization	International Institute of Informatics and Systemic, 19 <sup>th</sup> World Multi-Conference on Systemic, Cybernetics and Informatics (WMSCI-2015), Orlando, Florida, USA	International (Abroad)
Sap-Lap inquiry Model for Technology commercialization: A case of automobiles product	XVI Annual International Conference of Society of Operations Management at IIT Delhi jointly organized by IIT Delhi, IIM Lucknow and GVSU, USA	International (within Country)
Decision support systems for Ghaziabad E-District: A case of routing for stakeholder	XVI Annual International Conference of Society of Operations Management at IIT Delhi jointly organized by IIT Delhi, IIM Lucknow and GVSU, USA	International (within Country)
High-End Workshop on Photonics Sensor for Chemical & Gas Detection	Science and Engineering Research Board (SERB) Dept. of Science and Technology, Govt. of India, organized by Indian Institute of Technology (ISM) Dhanbad, Jharkhand, India	International (within Country)

**(j) Membership of Academic/Professional Bodies**

**Life member Indian Society for Technical Education (LM130017)**

**Life Member, The Institutions of Engineers (INDIA) (M-1737206)**

**(k) Participation in Community Service/ Exchange Programme / Consulting Activity**

Dr. Singh is a prominent academician in the country. He is at presently working as an Associate Professor in department of Mechanical Engineering, Faculty of Engineering & Technology, M.J.P. Rohilkhand University, Bareilly. His area of interest are in Strategy, Competitiveness, Smart Cities, Manufacturing Industries and Government Policies, Operation Management, Industrial Management, Value Engineering, and Production Planning & Control. He has authored more than 40 technical papers in various reputed national as well as international journals and conferences. Dr. Singh have filed 11

national and international patents. He has been associated in major academic research project awarded by AICTE in the field of Solar Energy. Dr Singh have also authored two books titled Sustainable Smart Industry 4.0: Future Assessment and Technological Advances and Applications in Additive Manufacturing. He is life time member of Indian Society for Technical Education and The Institution of Engineers. Apart from this Dr. Singh is Chairman trustee of Mangalam Charitable Trust which carries out social work in the country. On the administrative front, he has been the Head of the department, Mechanical Engineering department twice from (2009-2012) and (2019-2020) apart from this he has coordinated TEQIP-II (2010-2012) and TEQIP-III (2017 to present date) World Bank sponsored institutional project of run by NPIU, MHRD, Govt. of India, at Faculty of Engineering and Technology, M. J. P. Rohilkhand University, Bareilly, Bareilly. He has accomplished his Ph.D. (2018) and Masters (2009) from Indian Institute of Technology, Delhi and Graduated in Engineering (2000) from M. J. P. Rohilkhand University, Bareilly.

**(l) International Academic Exposure**

Paper Presented and Participated in International Institute of Informatics and Systemic, 19<sup>th</sup> World Multi-Conference on Systemic, Cybernetics and Informatics (WMSCI-2015), Orlando, Florida, USA

Paper Presented and Participated in 15<sup>th</sup> IFIP I3E Conference on e-Business, e-Service and e-Society ‘ Social media: the good the bad and the Ugly 13-15 September, 2016, School of Management, Swansea university, UK

**(m) Keynote Speaker & Session Chair**

**Keynote Speaker** at the National Conference on Advanced Research Trends in Engineering (NCARTE-2022) held on 25-26 March, 2022 organised by Department of Electronics & Communication, Mechanical and Electrical Engineering, Shri Ram Murti Smarak College of Engineering and Technology, Bareilly (U.P.), India.

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**Signature of Faculty Member**