

Faculty Profile

Title	Dr.	Vishal	Saxena	Photograph	
Designation		Assistant Professor (Sr. Scale)			
Department		Mechanical Engineering			
Address	Campus	Mechanical Engineering Department			
	Residence	12/13- Civil Lines, Bareilly (U.P) 243001			
Mobile No.		09412738873			
Email ID		Personal	vishal25111977@gmail.com		
		University Domain	vishal.saxena@mjprou.ac.in		
Professional Networking ID, i.e. Linkedin, Twitter etc.		vishal.saxena@mjprou.ac.in AAZ-5747-2021 (Web of Science) ORCHID ID – 0009-0007-2443-7206			
Educational Qualifications (Graduation Onwards)					
Course/Degree		Institution	Year	Division	Details/Thesis Topic/Subjects
1. B.E (Mechanical)		North Maharashtra University, Jalgaon- M. S	1998	1 st with Dist.	Design and Fabrication of Pneumatic Knuckle press.
2. M.E (Mechanical)		NIT(GEC)- Raipur C. S	2000	1 st with Hon.	Thermal analysis for performance augmentation of cryogenic oxygen air separation plant.
3. Ph.D. (Fuel Engineering)		IIT- Dhanbad	2020	Awarded	Experimental investigations on the feasibility of emulsified biodiesel with nanoparticle\ additives (modified fuel) in a modified compression ignition engine.
Career Profile					
Organization / Institution		Designation	Duration		Nature of Duties
1. IET, MJP, Rohilkhand University- Bareilly (U.P)		Guest Faculty	Aug.2000- 18May2004 03years, 09 months		Academics (teaching)
2. IET, MJP, Rohilkhand University- Bareilly (U.P)		Lecturer	19May2004- 18May2009 05years.		Academics (teaching/ research)
3. IET, MJP, Rohilkhand University- Bareilly (U.P)		Lecturer/ Assistant Prof. (Sr. Scale)	19May2009- 19May 2014.		Teaching/ Research (other allied duties related to academics)
3. IET, MJP, Rohilkhand University- Bareilly (U.P)		Assistant Prof. (Sr. Scale) 8000/- (G.P)	19May2014- till date.		Teaching/ Research (other allied duties related to academics)
3. IET, MJP, Rohilkhand University- Bareilly (U.P)		Associate Prof. 8000/- (G.P)	14Jan2020 - till date.		Teaching/ Research (other allied duties related to academics)
Research Interests / Specialization: Thermal Engineering, Energy and Fuel.					

Research Experience in Years: 04 years									
No of Research Scholars Successfully Guided									
Name of Programme		Awarded			Under Supervision				
Ph.D.		-----			05 (02 As Guide/03 coguide)				
M.Phil./ M.Tech.		04			As Guide.				
Dissertation (M.Ed./M.A.)		-----			-----				
Researcher/ Expert ID	Scopus		Orchid		Publons	Vidwan	Google Scholar		
	vishal.saxena@mjprou.ac.in		-----		15526066	-----	vishal25111977@gmail.com		
Teaching Experience (Subjects/Courses Taught)									
Thermodynamics, Heat transfer, Energy conversion, Gas dynamics, Power plant, IC engines, Fluid mechanics, Turbo and fluid machinery, Operation research, Production management, Refrigeration and Air conditioning.									
Honours / Awards & Fellowship FOR OUTSTANDING WORK									
Name of Award/ Fellowship		Awarded By							
		Name of Governmental Agency			Name of Government Supported Organization/ Department		Name of International Recognized Body		
		NIL							
Publications /Academic Activities (Numbers Only)									
Books & Monographs (Single Author)		Research Papers Published in International Journals	20	Papers Presented in Seminars/ Conferences	15	Seminar/ Conference Organized	08	Research Projects (Completed)	02
Books (Co-authored)		Research Papers Published in Other Journals	05	Seminar/ Conference s Attended	21	Workshop Organized	02	Research Projects (Ongoing)	00 (submitt ed)
Books (Edited)	02	Articles Published in Popular Fora, e.g., Websites, Blogs, Newspapers, Magazines etc.	02	Sessions Chaired in Seminars/ Conferences	03	Member ship of Academic/ Profession al Bodies	02	Foreign Countries Visited for Academic Assignme nts	00
Chapters in Edited Books	03			Resource Lectures Delivered	09				

Details of Publications /Academic Activities (2010 Onwards)											
(a) Authored Books/ Monographs											
Name of Book		Year of Publication		Publisher		ISBN No					
NIL											
(b) Edited Books											
Year of Publication		Title		Publisher		ISBN		DOI No.		Citations	
07 book chapters in Elsevier/springer/MHRD/IGI-USA											
(c) Papers Published in UGC Care Listed /Indexed/ Peer Reviewed Journals											
Year of Publication		Title		Name of Journal		ISSN/DOI. No		SCI/Scopus/UGC Care/Peer reviewed/etc.		Impact Factor	
2014		Development of Mathematical model of chiller system considering heat as well as pressure losses”		International Journal of Mechanical Engineering MIT-Publications		2230-7680		Peer reviewed		----	
2012		Influence of process parameters on non conventional machining of Stainless steel. Vol.2, 2012 Page No.53-64.		Kala Sarovar		0975-4520		UGC care		-----	
2013		Supply chain method for effective capacity planning in manufacturing semiconductors in India. 2013 Page No.54-63.		Kala Sarovar		0975-4520		UGC care		-----	
2014		The impact of Fouling on the condenser and evaporator of the chiller system: “An experimental observation”		BLB, International Journal of Science and Technology		0976-3074		Peer reviewed		----	
2015		Investigations on Surfactant behavior and variable nozzle standoff distance on heat transfer rates of extruded hot metal surfaces in a sub boiling region.		Journal of Emerging Technologies and Innovative Research Vol.2, Issue 2, page no.1440-1451, February-2015. Paper URL: https://www.ijet.ir/		2349-5162		UGC Approved Journal		7.95	

		w.jetir.org/view?paper=JETIR1701619			
2015	A review paper on most significant and sub significant parameters of Abrasive water jet Machining”	International Journal of Advance Research in Science and Engineering	2319-8354(E).	Peer reviewed	----
2015	Effect of different operating parameters on heat transfer characteristics using impingement Spray cooling	International Journal of Advance Research in Science and Engineering	2319-8354(E).	Peer reviewed	----
2016	Exhaust emission analysis of a diesel engine fueled with emulsified biofuel blends.	Journal of Emerging Technologies and Innovative Research Vol.3, Issue 1, page no.1452-1457, January-2016 URL :: https://www.jetir.org/view?paper=JETIR1701620	2349-5162	UGC approved Journal	7.95

(d) Papers Published in SCI/Scopus Journals

2017	Combustion and stability aspects of metal nanoparticles and its additive effect on diesel and biodiesel fueled C.I. engine	Renewable and Sustainable Energy/RSER Elsevier	doi.org/10.1016/j.rser.2016.11.067	SCI	18.0
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2018	Biodiesel synthesis from Acacia Concinna seed oil: A comprehensive study	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects. Taylor and Francis	doi.org/10.1080/15567036.2018.1486912	SCI	3.447
2019	Experimental investigations for rheological characteristics of TiO ₂ nanoparticles doped diesel, biodiesel fuel blends for use in compression ignition engine.	IOP- Material science and Engineering	doi:10.1088/1757-899X/691/1/012022.	Scopus	0.53
2019	Numerical simulation of flow past a flat plate with anti-singing trailing edge.	IOP- Material science and Engineering	doi:10.1088/1757-899X/691/1/012021	Scopus	0.53
2019	Multi-objective optimization of modified nanofluid fuel blends at different TiO ₂ nanoparticle concentration in diesel engine: Experimental assessment and Modeling.	Applied Energy (Elsevier)	doi.org/10.1016/j.apenergy.2019.04.091	SCI	12.5
2020	RSM/DFA computation approach for optimization and modeling of CI engine performance and emission characteristics fueled with	Materials Today: Proceedings (Elsevier)	doi.org/10.1016/j.matpr.2020.07.421	Scopus	0.43

	preheated fuel blend modified with TiO ₂ nanomaterial				
2021	Combustion, performance and emissions of <i>Acacia concinna</i> biodiesel blends in a diesel engine with variable specific heat ratio.	Journal of Thermal Analysis and Calorimetry Springer	doi.org/10.1007/s10973-020-10483-7.	SCI	4.626
2022	Tribological response of modified nanofluid fuel using titanium dioxide nano material under the influence of contact parameters	<i>J. Energy Resource. Technol. (ASME)</i>	doi.org/10.1115/1.4049739	SCI	3.09
2023	Performance of rocket nozzle with polymer material and its numerical analysis	Bulgarian Chemical Communications, Volume 55, Special Issue A (pp. 245-249) 2023	DOI: 10.34049/bcc.55.A.0037	Scopus	0.5
2023	Fabrication and performance evaluation of calcium bentonite-reinforced epoxy composites	Bulgarian Chemical Communications, Volume 55, Special Issue A (pp. 239-244) 2023	DOI: 10.34049/bcc.55.A.0036	Scopus	0.5
2024	To Study the Effects of Micro emulsion Based Hybrid Biofuel on Emission Characteristics of CI Engine: A Short Review	<i>Macromolecular Symposia (Wiley-VCH)</i>	Online ISSN:1521-3900 Print ISSN:1022-1360 DOI: 10.1002/masy.202400117	Scopus	1.5
2025	Understanding cuproptosis through FDX1-mediated lipoylation and proteotoxic stress in <i>Channa punctatus</i>	Journal of Hazardous Materials Advances (Elsevier)	doi.org/10.1016/j.hazadv.2025.100788	SCI	9.24
2025	Fiscal Sustainability and Economic Impacts of GST Rate Adjustments: A Multi-Dimensional Analysis	Journal of Information Systems Engineering and Management	2025, 10(44s) e-ISSN: 2468-4376 DOI: https://doi.org/10.55267/iadt	Scopus	3.6

2025	Impact of Reduced GST Rates on India's GDP Growth: A Sectoral Analysis	Journal of Information Systems Engineering and Management	2025, 10(44s) e-ISSN: 2468-4376 DOI: https://doi.org/10.55267/iadt	Scopus	3.6
2025	Transmission Mechanisms and Moderating Factors in GST Reform: Evidence from India's Experience	Journal of Information Systems Engineering and Management	2025, 10(44s) e-ISSN: 2468-4376 DOI: https://doi.org/10.55267/iadt	Scopus	3.6
2025	Digital Transformation and GST Revenue Performance: Implications for Rate Policy Design	Journal of Information Systems Engineering and Management	2025, 10(44s) e-ISSN: 2468-4376 DOI: https://doi.org/10.55267/iadt	Scopus	3.6
2026	Integrated thermal–hydrodynamic modeling of vertical tube evaporators in multi-effect distillation: Influence of feedwater temperature and turbulence on heat transfer	International Communications in Heat and Mass Transfer (Elsevier)	177 (2026) 111444 DOI: 10.1016/j.icheatmasstransfer.2026.111444	SCI	6.2

(d) Chapter/Paper Published in Edited Books

Publication		Title of the Book	Title of the Chapter	Name & Address of Publisher	Year	ISB N	DOI	Citation Google/ web of science
National/ International								
International	Int.	Advances in Interdisciplinary Engineering	Multi-objective process optimization of biodiesel synthesis from Acacia-Concinna seed oil using TOPSIS and GRA approach	(Springer-Singapore)	2018	798-981-13-6576-8	10.1007/978-981-13-6577-5_33	Yes
National	Nat.	Software Applications in Engineering and Technology	Analysis of Centrifugal Compressor Unit (IFFCO, AONLA) Using Computer Aided Simulation Technique	2009		978-	----	-----

		Proceedings of National conference- GB Pant univ. of Ag & Tech, Pantnagar				81-92-11-24-7-3		
National	MHRD GOI	विज्ञान गरिमा सिद्ध, हिन्दो मं	वाष्प सपीडन प्रशीतन पणाली क प्रदर्शन और हानि	www.sttpp publication .mhrd. gov.in		2320 - 7736		Yes
International	Int.	Advancement in Oxygenated Fuels for Sustainable Development Feedstocks and Precursors for Catalysts Synthesis	"Methodologies for modification of characteristics of biodiesel for wider acceptability"	Elsevier	2023	978-0-323-90875-7	doi.org/10.1016/B978-0-323-90875-7.00014-9	Yes
International	Int.	Analysis of the Potential Metal Hydrides for Hydrogen Storage in Automobile Applications. Advanced Combustion for Sustainable Transport (pp.299-330)	Chapter in book Energy, Environment, and Sustainability	Springer	Jan 2022	978-981-16-8417-3	DOI:10.1007/978-981-16-8418-0_10	Yes
International	Int.	Experimental Analysis of CI Engine Fueled with Musa Balbisiana Colla Underground Stem (MBCUS Ash- Based Catalyst for Biodiesel Production	IGI Global Scientific Publishing Hershey, Pennsylvania (USA)	IGI Global Scientific Publishing Hershey, Pennsylvania (USA)	2024	DOI: 10.4018/979-8-3693-5320-2.ch010	DOI: 10.4018/979-8-3693-5320-2.ch010	Yes

(e) Invited as Resource Lectures Person/Examiner/Expert				
Resource person	Detail of Event	Title of Lecture	Date	Institution
Invited lecture	Lecture series	Thermal Engineering and Fluid Mechanics	2008	Invertis institute of engineering and technology- Bareilly (U.P)
Invited lecture	Technical lecture	Turbo machines	2011	Future institute of engineering and technology- Bareilly
Technical lecture	Technical workshop	Advances in heat exchanger design	2012	Prem Prakash Gupta Institute of Engineering- Bareilly
Technical lecture	Int. Conference (ICAREMIT-2015),	Cryogenics	2015	M.J.P, Rohilkhand University- Bly (U.P).
Key speaker	Int. Conference (ICAREMIT-2016)	Internal combustion engines.	2016	M.J.P, Rohilkhand University- Bly (U.P).
Lecture delivered	M.Tech sequential Program	Advanced heat transfer, advanced fluid mechanics, internal combustion engines	2014,2015	WCET, Uttarakhand Technical University- Dehradun
Technical lecture	National Con. Advancement in engineering materials (NCAEM-2016)	Biofuels and lubricants.	2016	M.J.P, Rohilkhand University- Bly (U.P).
Speaker	International Workshop	Youth empowerment through skill development	2018	M.J.P, Rohilkhand University- Bly (U.P).
Technical lecture	Int. Conference (ICAREMIT-2016)	Concepts of spray cooling in Industrial applications	2019	M.J.P, Rohilkhand University- Bly (U.P).
Technical session chair	Int. Conference	Future learning aspects of Mechanical Engineering, FLAME-2020	2020	Amity University- Noida
Panel of	Technical fest	Technical literary and	2019	Dr. APJ Abdul Kalam Technical University-

judges		management		Luck now (U.P)
Key Note Speaker	All India Seminar (The institution of Engineers-Bareilly)	Latest technological advancements in Bio-Fuels towards Energy security and environmental protection	29,30Aug. 2023	Kesar Enterprises Ltd. (Sugar division) – Baheri.
Key Note Speaker	All India Seminar (The institution of Engineers-Bareilly)	Solar energy for sustainable development	29,30 Nov. 2023	ANA institute of technology – Bareilly

(f) Seminars/Conferences/Workshops Organized

1. National Seminar on “Software Applications in Engineering and Technology” (SAET-2012), ISBN:978-81-921124-7-3.
Organizing Committee (Souvenir & Proceeding).
2. National conference “Advancements in engineering materials, NCAEM-2016”. M.J.P, Rohilkhand University- Bareilly (U.P).
Organizing Committee (Convener).
3. International conference “Academic research in Engineering Management and information technology (ICAREMIT-2015), M.J.P Rohilkhand University- Bly (U.P).
Organizing Committee (Member).
4. 2nd International conference “Academic research in Engineering Management and information technology (ICAREMIT-2016), M.J.P Rohilkhand University- Bly (U.P).
Organizing Committee (Convener).
5. 4th International conference “Academic research in Engineering Management and information technology (ICAREMIT-2019), M.J.P Rohilkhand University- Bly (U.P).
Organizing Committee (Convener).
6. 5th International conference “Academic research in Engineering Management and information technology (ICAREMIT-2020), M.J.P Rohilkhand University- Bly (U.P).
Organizing Committee (Convener).
7. National Workshop on “ANSYS and Cryo parametric- 2.0” Department of ME, MJP, RU- Bly in collaboration with CCTS- Bly 14/15/April 2015.
Organizing Committee (Coordinator).
8. National Workshop on “MATLAB” Department of ME, MJP, RU- Bly. 3/4Dec2014.
Organizing Committee (organizing secretary).
9. Faculty development program on Frontier areas of research in Mechanical Engineering, sponsored by MHRD under TEQIP-II. 25/29 March 2014.
Organizing Committee (Coordinator).
10. Faculty development program on Innovations and trends in Mechanical and Production Engineering, Department of ME, MJP, RU- Bly under TEQIP-II. 25/29 March 2014.
Organizing Committee (Member).
11. Attended A Short-Term Training Programme (STTP) on “Additive Manufacturing and Material Characterization” (AMMC-2025) from 24-28 February 2025 Organized by Sant Longwall Institute of Engineering & Technology Longowal-148106, Sangrur (Pb.)- India.

12. Attended A Short-Term Training Programme (STTP) on “Smart Composite Materials: Technologies and Applications” (SCMTA-2025) from 22-26 Dec. 2025, Organized by Sant Longwall Institute of Engineering & Technology Longowal-148106, Sangrur (Pb.)- India.

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

Year	Name of Project	Funding Agency	Amount	Duration	
				From	Till
2019/20	Tribological and Endurance behavior of Nanobio fluid fueled diesel engine.	TEQIP (Technical education quality improvement program)	250000/-	2019	2020
18/06/2019	Solar Pump Irrigation based on PV Cell technology-	Collaborative research scheme National Project Implementation Unit- MHRD GOI + TEQIP	976700/-	2018	2020

(h) Administrative Positions/Assignments Held

Post	Organization	Duration	
		From	To
Incharge / Head ME.	Mechanical Engg Dept., IET, MJP, Rohilkhand University- Bareilly	2013.	2019.
Technical advisor	RIF- MJP RU- BLY	2021	Till date
Proctor	Chemical Engg. Dept.- MJP RU- BLY	2022	2023
Proctor	Mechanical Engg. Dept.- MJP RU- BLY	2023	Till date
ADSW	Mechanical Engg. Dept.- MJP RU- BLY.	2023	Till date
Samarth (Academic	MJP RU- BLY	2024	Till date

module Coordinator)			
AEDP (Nodal officer)	MJP RU- BLY	2025	Till date
Pradhan Mantri Uchchatar Shiksha Protsahan Yojana (PM- USPY) J&K and Ladakh	MJP RU- BLY	2025	Till date
(i) Seminar/Conference Presentations			
International Conference. 1. Design of fuel cell bio plant with gas turbine hybrid system. Energy technologies, changing environmental trends and sustainable development, Guru Jambheshwar University of Agriculture science and technology, Hissar (Haryana). 2004. Dr. O.P Upadhyay, Vishal Saxena, N. K. Kedia. 2. Experimental investigations on the lubricity of Acacia Concinna biodiesel contaminated lubricating oil in a simulated environment. Published in Proceedings of International conference “Academic research in Engineering Management and information technology” (ICAREMIT-2016), M.J.P, Rohilkhand University- Bareilly (U.P). Vishal Saxena, Niraj Kumar, Vinod Kumar Saxena. Sant Ram Chauhan, Varun. 3. Effect of surfactant at varying nozzle standoff distance on heat transfer characteristics of enhanced hot metal surfaces in a non-boiling region: An experimental evaluation. Published in Proceedings of International conference “Academic research in Engineering Management and information technology” (ICAREMIT-2016), M.J.P, Rohilkhand University- Bareilly (U.P). Vishal Saxena, AdityaPrakash. 4. Influence of surface characteristics and different operating parameters on heat transfer rates from heated metal surface via spraycooling. Published in Proceedings of International conference “Academic research in Engineering Management and information technology” (ICAREMIT-2016), M.J.P, Rohilkhand University- Bareilly (U.P). Vishal Saxena, Sarvesh Sahai. 5. Experimental investigations to analyze the effect of enhanced profile on metallic surfaces and role of surfactant on heat transfer characteristics in a non-boiling regime. New Scintillations on Materials horizon (ICNSMH-2016). M. J. P, Rohilkhand University- Bareilly (U.P). Vishal Saxena, Aditya Prakash. 6. Effect of different operating parameters on heat transfer characteristics of Heated metal surfaces using impingement spray cooling- An experimental methodology. New Scintillations on Materials horizon (ICNSMH-2016). M.J.P, Rohilkhand University- Bareilly (U.P). Vishal Saxena, Sarvesh Sahai. 7. Experimental investigations on the tribological characteristics of TiO₂ metal nano particles (MNP) additives with Acacia Concinna biodiesel- diesel fuel blends. XVII th international seminar on Mineral processing technology- MPT-2018, Department of Fuel and Mineral			

Engineering, IIT (ISM)- Dhanbad, India. 2018. Vishal Saxena, Niraj Kumar, Vinod Kumar Saxena.

8. Experimental investigations for rheological characteristics of TiO₂ nanoparticles doped diesel, biodiesel fuel blends for use in compression ignition engine, paper presented in 2nd International conference on computational and experimental methods in Mechanical Engineering (ICCEMME-2019). Vishal Saxena
9. Numerical simulation of flow past a flat plate with anti-singing trailing edge paper presented in 2nd International conference on computational and experimental methods in Mechanical Engineering (ICCEMME-2019). Vishal Saxena
10. Solar pump irrigation-A Review. ICAREMIT-2020 at MJPRU, Bareilly 2020. V. Singh, V. Saxena, V. S. Yadav, N. Kumar and A. Maheswari
11. Tribological aspects of internal combustion engine. ICAREMIT-2020 at MJPRU, Bareilly 2020. Vishal Saxena, Sudesh Kumar, Shrikesh Jalan, Mohd Taseem, Mayank Singh and Mohd. Asif Khan.
12. Exergy and Energy analysis of process industries. ICAREMIT-2020 at MJPRU, Bareilly 2020. Vishal Saxena.
13. RSM/DFA computation approach for optimization and modeling of CI engine performance and emission characteristics fueled with preheated fuel blend modified with TiO₂ nanomaterial presented in International conference Future learning aspects of Mechanical Engineering, FLAME-2020. Vishal Saxena
14. RSM/DFA computation approach for optimization and modeling of CI engine performance and emission characteristics fueled with preheated fuel blend modified with TiO₂ nanomaterial presented in International conference Future learning aspects of Mechanical Engineering, FLAME-2020. Vishal Saxena
15. Design optimization of Intake Manifold for Naturally Aspirated SI engine to improve the Volumetric Efficiency Using 1-D Approach, presented in International conference Future learning aspects of Mechanical Engineering, FLAME-2020. Vishal Saxena
16. Effect of Heat Treatment on Tribological Behavior of Roller bearing, presented at 3rd International conference on Smart structures and applications (ICMSS-2023) at Surya Engineering College, Erode – India 27-28 March 2023. Elsevier Conference.
17. Experimental Assessment and Characterization of Journal Bearing Lubricated by
18. SAE40 Grade Lube Oils Under Varying Operating Conditions. Presented at 3rd International conference on Smart structures and applications (ICMSS-2023) at Surya Engineering College, Erode – India 27-28 March 2023. Elsevier Conference.
19. Advance Synthesis and Environment Protection via 3D Aero graphene. Presented at 3rd International conference on Smart structures and applications (ICMSS-2023) at Surya Engineering College, Erode – India 27-28 March 2023. Elsevier Conference.
20. Energy and Exergy analysis of Co-generation bagasse based thermal power plant of Kesar sugar mill- Baheri. Mechanical Engineering International Conference on Advancements, Innovations and Automation for Sustainability-2024, OP Jindal University- Raigarh-496109 (C.G.) 19-20/12/2024.
21. Study of Heat Transfer and Cooling Time-Temperature Behavior of Blood Samples by Numerical and Experimental Methods. Mechanical Engineering International Conference on Advancements, Innovations and Automation for Sustainability-2024, OP Jindal University- Raigarh-496109 (C.G.) 19-20/12/2024.
22. Thermal Simulation and Performance Analysis of Evacuated Tube Solar Collectors for Heating Purpose. Mechanical Engineering International Conference on Advancements, Innovations and Automation for Sustainability-2024, OP Jindal University- Raigarh-496109 (C.G.) 19-20/12/2024.
23. Resource utilization model for sustainable waste management in edible oil industry: A Review. 7 th International Conference on Empowering Gen Alpha & Beta: AI- Driven Educational System. Rajshree Institute of Management and Technology- Bareilly. 7-8/03/2025.

National Conference/Seminars.

1. New generation alternative refrigeration systems. National conference on advancements and futuristic trends in mechanical and materials engineering- G.Z.S college of engineering- Bhatinda (P.B)- 13/14/2006.Saxena Vishal, Pathak R.K.
2. Rapid prototyping and rapid tooling are ready for the primetime. National conference on advancements and futuristic trends in mechanical and materials engineering- G.Z.S college of engineering- Bhatinda (P.B)- 13/14/2006. Saxena Vishal, Pathak R.K.
3. Micro electro mechanical systems. A brief study.
National conference on advances in product design, materials and manufacturing engineering, B.S.A Crescent engineering college- Vandeleur, Chennai. 24/25/2008. Vishal Saxena, O.P Upadhyay, N. K. Kedia.
4. An assessment of Fluidized bed technology. National conference on Recent trends in Mechanical and Production Engineering. Pantnagar, pp. 611-615, 2009. Vishal Saxena, N. K. Kedia.
5. To determine the theoretical refrigeration possible using the given evacuated tube air heating assembly.
National conference on Recent trends in Mechanical and Production Engineering. Pantnagar, pp. 623-627, 2009. V. Saxena, H. Jaiswal.
6. Performance Analysis of Centrifugal Compressor Unit (IFFCO, AONLA) Using Computer Aided Simulation Technique. National seminar on Software Applications in Engineering and Technology” (SAET- 2012) 17th Feb, 2012 MJP, RU Bly. Vishal Saxena, Manoj Kumar Singh, Saurabh Vats.
7. Experimental investigation of different mechanical properties on glass fiber reinforced composites for Machine/structural components. National Seminar on Advancements and Futuristic trends in material science. MJP, Rohilkhand University- Bareilly 26/27 march 2011.Vishal Saxena, Aditya Prakash.
8. Characterization of Algal Oil Based Hybrid Microemulsion Biofuel and Its Comparative Assessment with Petrodiesel and Its Biodiesel. Macromolecular Symposia conference 5th National Conference on Materials and Devices (5thNCMD 2025).

(j) Memberships of Academic/Professional Bodies

1. Institution of Engineers.

(k) Participation in Community Service / Exchange Program / Consulting Activity

1. Industry institute interaction program (TEQIP-II) discussing various technical aspects of plant as well as training and placement issues of B. Tech graduates of MJP, RU- Bly. 03-07/Nov 2014. Radico- Khaitan ltd- Rampur (U.P)
2. DREAM GREEN “Tree Plantation Drive”. Green week campaign for planting 200 trees at MJP, Rohilkhand University- Bly in collaboration with CADD centreBly.2015
3. Member of panel of judges in Technical literary and management fest, organized by Dr. APJ Abdul Kalam Technical University- Lucknow.2019.
4. Member of the syllabus moderation committee (Model Curriculum) Mechanical Engineering at UP state level.2014.

Consultancy Activities

5. **Consultancy given** to M. Tech students for conducting Dissertation on various analysis on composite materials in Material testing laboratory of Department of Mechanical Engineering, MJP, Rohilkhand University – Bly. 2016/2017. (Ref letter No- INVU/1701-07/2017).
6. **Consultancy given to M.DS students** (Rohilkhand Medical and Dental college- Bly) for conducting Dissertation on various friction, wear and surface roughness analysis on developed tooth materials on Pin on Disc machine, in Tribology laboratory of Department of Mechanical Engineering, MJP, Rohilkhand University –Bly.

(I) Patents: (Details are mentioned below)

GRANTED (01)

R20221000163 03/01/2022 National “Novel air purification system”. GRANTED

Published (05)

1.	Role of machine learning and artificial intelligence techniques to enable robots to learn and adapt to dynamic environments	202411034972	30/08/2024	Published
2	Integrating renewable energy sources into mechanical systems and focusing on efficiency and reliability in renewable energy environments.	202411034975	30/08/2024	Published
3	Analysis of research algorithms and systems for autonomous navigation and decision-making in robotic applications for the medical industry.	202411034970	05/07/2024	Published
4	Analysis of waste heat recovery	202411035552	30/08/2024	Published

	efficiently capture and utilize waste heat from industrial processes for energy generation.			
5	Design and analysis of collaborative robots (Cobots) to investigate their role in industrial applications and safety	202411034960	05/07/2024	Published

m) Any Other Details

(l) New Programs/Laboratory introduced

1. Started M. Tech (Thermal Engineering)
2. Successfully started 05 course under AEDP scheme (Campus + Aff. colleges)
2. Established Advanced Material testing laboratory.
3. Established Advanced IC Engine testing laboratory.
4. Biofuels processing facility (Laboratory use)
5. Industrial cooling of metals using spray and jet impingement cooling system.
6. Tribology (Research oriented Journal Bearing test facility).

Signature of Faculty Member