




Faculty Profile on University Website

www.mjpru.ac.in (NAAC A++ University)

Title	Dr.	First Name	KARUNA	Last Name	M.S	Photograph
Designation		Senior Assistant Professor				
Department		Department of Chemical Engineering				
Address	Campus	Pilibhit Bye Pass Road, Mahatma Jyotibha Phule Rohilkhand University Bareilly				
	Residence	E16 TYPE4 Professors Quarters. MJP Rohilkhand University Campus				
Mobile/Landline No.		+91581-2521947				
Email ID		Personal	mysore_karuna@hotmail.com			
		University Domain	m.karuna@mjpru.ac.in			
Professional Networking ID, i.e. Linkedin, Twitter etc.		https://www.linkedin.com/in/karuna-mysuru facebook: Karuna Mysore /karuna.mysore				
Educational Qualification (Graduation Onwards)						
Course/Degree	Institution	Year	Details/Thesis Topic/Subjects			
Ph. D	IFTM University	2019	Trend of Air Quality and its impact on Vegetation			
M. Tech.	University of Mysore	1995	Environmental Engineering			
B. E	University of Mysore	1991	Civil Engineering			
Career Profile						
Organization/ Institution		Designation	Duration	Name of Duties		
Department of Mechanical Engineering, FET, MJPRU		Lecturer	1997-2002	Teaching, Proctor		
Department of Chemical Engineering, FET, MJPRU		Senior Assistant Professor	2002 to till date	Head In Charge, Teaching & Research. Proctor (2002-2010)		
Research Interests/Specialization						
Environmental Engineering: (1) Waste Water Treatment (2) Atmospheric Air Pollution (3) Solid Waste Management						

Research Experience in Years: 12 Years									
No. of Research Scholars Successfully Guided									
Name of Programme		Awarded			Under Supervision				
Ph.D.		Nil			Nil				
M.Phil.		Nil			Nil				
Dissertation (M.Ed./M.A.)		Nil			Nil				
Researcher/ Expert ID	Scopus	Orchid	H Index	Publons	Vidwan	Google Scholar			
	57402662100	0000-0002-6115-6055	04	AAX-9380-2020	165774	7R63I10AAAAJ			
Teaching Experience (Subjects/Courses Taught)									
1997 to till date (27 years 6 month) Fluid Mechanics, Engineering Mechanics, Industrial Pollution Control (Wastewater). Atmospheric Air Pollution. Municipal & Bio Medical Waste Management, Environmental Management.									
Honours/Awards & Fellowship FOR OUTSTANDING WORK									
Felicitated on the occasion of Teachers Day 2021 for significant contribution to the field of Higher Education.									
Name of Award/ Fellowship		Awarded By							
		Name of Governmental Agency	Name of Government Supported Organization Department		Name of International Recognized Body				
Nil		Nil	Nil		Nil				
Publication/Academic Activities (Numbers Only)									
Books & Monographs (Single Author)	01	Research Papers Published in International Journals	18	Papers Presented in Seminar/ Conferences	34	Seminar/ Conferences Organized	01	Research Project (Completed)	02
Books (Co-authored)	06	Research Papers Published in Other Journals	06	Seminar/ Conferences Attended	35	Workshops Organized	09	Research Project (Ongoing)	Nil
Books (Edited)		Articles Published in Popular For a, e.g., Websites, Blogs Newspapers, Magazines etc	01	Sessions Chaired in Seminars/ Conferences	01	Membership of Academic/ Professional Bodies	02	Total citations	158
Chapters in Edited Books	06			Resource Lectures Delivered	14				

Details of Publication / Academic Activities (2010 Onwards)					
(a) Authorised Books/ Monographs					
Name of Book		Year of Publication	Publisher	ISBN No.	
Current Trends in Engineering and Technology VOLUME- 2		February 2025	P.K. Publishers & Distributors New Delhi	978-93-49060-14-2	
Water & Wastewater Engineering		January 2024	AGPH, Bhopal, M.P. India	978-81-968738-0-6	
Environmental Management in Hostel		November 2022	P.K. Publishers & Distributors New Delhi	978-93-92239-30-4	
Pollution, Health and Environment		October 2022	AGPH, Bhopal, M.P. India	978-93-95468-39-8	
Solid Waste Management Processing and Disposal		September 2022	AGPH, Bhopal, M.P. India	978-93-95468-12-1	
Environmental Management		March 2019	Kindle Direct Publishing Washington United States	979-8-493-03684-2	
(b) Edited Books					
Year of Publication	Title	Publisher	ISBN No.	DOI No.	Citations
Nil	Nil	Nil	Nil	Nil	Nil
(c) Papers Published in UGC Care Listed/Indexe d/Peer Reviewed Journals					
Year of Publication	Title	Name of Journals	ISBN No.	Citations	Impact Factor
April 2025	Advancements in dental implant materials Mechanical enhancement through chitosan jute and nano bio-silica reinforced composites	AIP conf proc	https://doi.org/10.1063/5.0261528	-	0.7
April 2025	Development and characterization of high strength composites reinforced with Limonia acidissima shell powder: An epoxy matrix approach	AIP conf. proc	https://doi.org/10.1063/5.0263777	-	0.7
April 2024	Automated Device Prototype using ANN for the Transesterification of Biodiesel	10 th International Conference on Communication and Signal Processing (ICCSP)	10.1109/ICCSP60870.2024.10543596	-	-

May 2024	Activated Biochar from Gracilaria edulis Seaweeds: A Novel Biosorbent for Efficient Uranium Ion Removal in Wastewater Treatment	Global NEST Journal	1790-7632	-	1.1
November 2023	Synthesis of Biodegradable Film Made from Sodium Alginate Embedded with Magnesium Nanoparticles	Theoretical Foundations of Chemical Engineering	DOI: 10.1134/S0040579523050457	-	0.8
March 2023	Evaluating the effect of magnesium oxide nanoparticles on the thermal energy storage characteristics of the inorganic PCM	Materials Today Proceedings	DOI: 10.1016/j.matpr.2023.02.297	14	3.2
February 2023	Synthesis of biodegradable carboxymethyl cellulose film-loaded magnesium nanoparticles	Emergent Materials	DOI: 10.1007/s42247-023-00473-4	03	4.04
November 2022	Synthesis of magnesium oxide nanocomposite film made from sugarcane bagasse waste	Emergent Materials	DOI: 10.21203/rs.3.rs-2232994/v1	03	4.04
August 2022	Influence of nanomaterial coated condensing surface on the productivity of evacuated tube assisted solar still	Materials Today Proceedings	DOI: 10.1016/j.matpr.2022.07.285	01	3.2
May 2022	Sustainable manufacturing for turning of Inconel 718 using uncoated carbide inserts	Materials Today Proceedings	DOI: 10.1016/j.matpr.2022.05.002	01	3.2
March 2022	Study on the impact of Nano-reinforcements on the fatigue strength of adhesive joints	Materials Today Proceedings	DOI: 10.1016/j.matpr.2022.02.593	02	3.2
February 2022	Experimental Investigation on Mechanical Behaviour of Kevlar and Ramie Fibre Reinforced Epoxy Composites	Journal of Nanomaterials Hindawi	https://doi.org/10.1155/2022/8802222	07	3.791
February 2022	An investigation on synthesis, aggregation, and mechanical properties of Al 6082 nanocomposites reinforced by Titanium carbide	Materials Today Proceedings	DOI: 10.1016/j.matpr.2022.01.406	09	3.2
February 2022	Water absorption studies of pineapple leaf fiber/nano rice husk powder reinforced epoxy matrix hybrid composites	Materials Today Proceedings	DOI: 10.1016/j.matpr.2022.01.279	03	3.2

January 2022	Sustainable Concrete Ground Granulated Blast-furnace Slag Beam: Numerical Investigation Using Hybrid FRP and GFRP Techniques	International Journal of Mechanical Engineering	ISSN: 0974-5823 01.01.2022	-	2.1
December 2021	On Fundamental Algebraic Attributes of $\omega - Q$ -Fuzzy Subring, Normal Subring and Ideal	International Journal of Mechanical Engineering	ISSN: 0974-5823 03.12.2021	01	2.1
December 2021	Thermal Performances of Hybrid Nano Fluid in a Rectangular Duct	International Journal for Computational Methods in Engineering Sciences and Mechanics	ISSN1550-225 ISSN 1550-2287 (Print)	-	0.903
November 2021	A Comprehensive Review on Solar Air Heater Heat-Transfer and Friction Characteristics	Journal of Nuclear Energy Science & Power Generation Technology	Online ISSN: 2325-9809 Volume 10 • Issue 11 • 100023	-	0.155

(d) Chapter/Paper Published in Edited Books

Publication		Title of the Book	Title of the Chapter	Name & Address of Publisher	Year	ISBN No	DOI	Citation on Google/web of science
National	International							
	International	Encyclopaedia of Renewable Energy, Sustainability and the Environment	Carbon Capture by Ionic Liquids	Science Direct, Elsevier	June 2023	9780128131961	(DOI): 10.1016/B978-0-323-93940-9.00005-0	01
	International Conference December 2022		On Algebraic Characteristics of Fuzzy T-Sub algebra in T-Algebra under the Normalization	IEEE	April 2023		10.1109/ICCMSSO58359.2022.00040	01
	International Conference	Human Agro-Energy Optimization for Business and Industry	New Strategies in Treatment and Enzymatic Processes: Ethanol Production from Sugarcane	IGI Global	January 2023	9781668441183	DOI: 10.4018/978-1-6684-4118-3.ch011	46

			Bagasse (Book Chapter)					
	International	Advances in Manufacturing Engineering	Green Manufacturing: Benefits, Implementation and Challenges	Springer	August 2022	978-981-19-4207-5	DOI: 10.1007/978-981-19-4207-5_29	02
National		Academic Research In Engineering, Management and information Technology	Heavy Metals in Vegetables	Nihari Kanjali Publication Kanpur	February 2018	978-81-933433-5-7		Nil

(e) Invited as Resource Lectures Person/Examiner/Expert

Resource Person	Detail of Event	Title of Lecture	Date	Institution
Dr. M. S. Karuna	Celebrating India's G20 Residency	Pollution related laws	27.09.2023	College of Technology, GB Pant University of Ag. & Tech. Pantnagar
Dr. M. S. Karuna	One day workshop on "Clean Air Workshop"	"Urban Air Quality Management"	28.03.2023	Organized by UPSPCB, Lucknow and Bareilly
Dr. M. S. Karuna	National Conference on Strategies for Management of Bioresources (NSSMB)	Air Quality Index: An Assessment	26-27 March, 2023	Department of Animal Science, MJPRU
Dr. M. S. Karuna	Two day All India Seminar on "Recycle & Reuse of Waste Water"	"Environmental Regulations for Sustainable Growth"	17th October 2022	Organized by Institution Page No. 05-12 (India) at Rajshree Institute of Management & Technology, Bareilly. 17th and 18th October 2022
Dr. M. S. Karuna	One-week NSS coordinators camp of affiliated colleges of MJP Rohilkhand University @ T&P Cell Building, MJPRU	"Municipal Solid Waste Management through NSS"	24.03.2021	NSS coordinators of affiliated colleges of MJP Rohilkhand University, at T&P Cell Building MJPRU
Dr. M. S. Karuna	By Mysuru Akashwani (AIR) FM 100.6MHZ in Yuva Vani career program between 8.00 pm and 8.30 on 27.02.2020	"Opportunities in the field of Chemical Engineering"	30.01.2020	Mysore Akashwani (AIR)
Dr. M. S. Karuna	FDP on "Green Chemistry"	"Green Chemistry for Cleaner Technology"	26.02.2020	Department of Chemical Engineering, Sponsored

Faculty Profile

Dr. M.S. Karuna, Department of Chemical Engineering
Mahatma Jyotiba Phule Rohilkhand University, Bareilly-243 006 (U.P.) INDIA

				by TEQIP -3 (25th -29th February 2020)
Dr. M. S. Karuna	Broadcast by Bareilly Akashwani (AIR) in Yuva Vani career program between 9.30 pm and 9.40 pm	"Solid Waste Management and Environment"	30.05.2018	Bareilly Akashwani (AIR)
Dr. M. S. Karuna	Industry Institute Partnership Programme	Campus to Corporate	18.04.2018	Department of Chemical Engineering, Sponsored by TEQIP -2 (17th April - 20th April 2018)
Dr. M. S. Karuna	Broadcast by Bareilly Akashwani (AIR) in Yuva Vani career program between 8.00pm and 8.30 pm	Composting of Spent wash using Dry pith	30.03.2017	Department of Chemical Engineering, Sponsored by TEQIP-2 (27th -30th March 2017)
Dr. M. S. Karuna	NSS students' volunteers camp of MJP Rohilkhand University, Bareilly	"Youth leadership"	25.02.2017	MJP Rohilkhand University Campus NSS camp in Dohra village, Bareilly district
Dr. M. S. Karuna	FDP on "Municipal Solid Waste Management"	Incineration and Pyrolysis	09.12.2016	Department of Chemical Engineering, Sponsored by TEQIP-2 (07th -11th December 2016)
Dr. M. S. Karuna	FDP on "Municipal Solid Waste Management"	Ambient Air Quality Modelling	09.02.2016	Department of Chemical Engineering, Sponsored by TEQIP-2 (07th -11th December 2016)
Dr. M. S. Karuna	1st International Conference on Academic Research in Engineering, Management and Information Technology	"Environmental Management"	February 23rd, 2015	Department of Mechanical Engineering, M.J.P Rohilkhand University, Bareilly, February 20-23, 2015

(f) Seminars/Conferences/Workshops Organized

1. Dr. M.S. Karuna presented a paper titled "*title*" at the International Conference on "**Shaping the Energy Future: Challenges & Opportunities**" (SEFCO-2025), organized by CSIR - Indian Institute of Petroleum, Dehradun, Uttarakhand, India, held from April 22 to 25, 2025.
2. **"Green Chemistry"** Faculty Development Program, sponsored by TEQIP-3 Ministry of HRD, Government of India, February 25-29, 2020, M.J.P Rohilkhand University, Bareilly.
3. **"Industry-Institute Program"**, sponsored by TEQIP-3 Ministry of HRD, Government of India, April 16-18, 2018, M.J.P Rohilkhand University, Bareilly.
4. **"Water Quality Monitoring, Network Design, Sampling, Analysis & Quality Assurance"** Faculty Development Program, sponsored by TEQIP-2 Ministry of HRD, Government of India, March 27-31, 2017, M.J.P Rohilkhand University, Bareilly.
5. **"Municipal Solid Waste Management"**, Faculty Development Program, sponsored by TEQIP-2 Ministry of HRD, Government of India, December 07-11, 2016, M.J.P Rohilkhand University, Bareilly.
6. **"Ambient Air Quality and Stack Monitoring"**, Faculty Development Program, sponsored by

TEQIP-2 Ministry of HRD, Government of India, February 08-10, 2016, M.J.P Rohilkhand University, Bareilly.

7. **“Environmental Impact Assessment”**, Faculty Development Program, sponsored by TEQIP-2 Ministry of HRD, Government of India, March 26-28, 2015, M.J.P Rohilkhand University, Bareilly.
8. **“Personality Development-Soft Skills Development for Organizational & Academic Effectiveness”** sponsored by TEQIP-3 Ministry of HRD, Government of India, November 30-December 01, 2013, M.J.P Rohilkhand University, Bareilly.
9. **“Personality Development”** Workshop, April 21-December 07, 2005, M.J.P Rohilkhand University, Bareilly.
10. **“Communication Clinic”** Written Workshop, May 17-19, 2005, M.J.P Rohilkhand University, Bareilly.

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

Year	Name of Project	Funding Agency	Amount	Duration	
				From	Till
2025	A Green Approach to Prepare Biodegradable Film from Pineapple Leaves for Food Packaging Applications	The Council of Science and Technology, Uttar Pradesh (CSTUP)	20000	13.12.2024	26.04.2025
1997	Recycling of Paper Waste in University Campus	AICTE	20 Lakh	20.11.1997	20.11.2000

(h) Administrative Positions/Assignments Held

Post	Organization	Duration	
		From	Till
Head In Charge	Department of Chemical Engineering, MJP Rohilkhand University, Bareilly	July 2008	Till Date
Head	Department of Chemical Engineering, MJP Rohilkhand University, Bareilly	November 2002	June 2008
Superintendent	B.Tech End Semester Exams Odd Semester Final Year FET MJPRU	December 2019	----- -
Member Academic Council	MJP Rohilkhand University	2009	2014
Member Academic Council	MJP Rohilkhand University	March 2010	February
Chairman	B.Tech Program of Chemical Engineering B.O.S Department of Chemical Engineering MJP Rohilkhand University Bareilly	November 2002	June 2008
Coordinator	B.Tech Program of Mechanical Engineering	July 2008	Till Date
Member	B.O.S Department of Chemical Engineering MJP Rohilkhand University Bareilly	1997	2011

Engineering Section In charge (Civil works)	MJP Rohilkhand University	31.05.2017 and renewed on 22.06.2021	Continuing
Observer	MSc Entrance Exam. MJP Rohilkhand University	22.09.2020	
Observer	MJP Rohilkhand University Degree examination, Hindu College, Moradabad	22.07.2009	
Observer	B.Tech Entrance Examination, MJP Rohilkhand University, Bareilly	1998, 1999, 2000, 2001, 2002, 2003	
Proctor	Department of Chemical Engineering, MJP Rohilkhand University Bareilly	2008	2009
Proctor	Department of Mechanical Engineering, MJP Rohilkhand University Bareilly	2002	2005
Building Committee Member	MJP Rohilkhand University Bareilly	December 1997 December 2007	April 2002 December 2013

(i) Seminar/Conference Presentations

1. **Dr MS Karuna** delivered expert talk on **"Pollution Related Laws"** at College of Technology GBPUAT Pantnagar, Uttarakhand on 27 September 2023, Context: Celebrating India's G20 Presidency organized from Sep 25 to 09 Oct 2023 by College of Technology GBPUAT Pantnagar, Uttarakhand.
2. Participated and presented paper on **"Air Quality Index: An Assessment"** in national conference on **"Strategies for Management of Bioresources"**, organized by Department of Animal Science, MJP Rohilkhand University, Bareilly on March 26-27, 2023.
3. Participated in the two days round table national conference on **"The Indian Renaissance: AATM-NIRBHAR Bharat Transforming India's Management Landscape"** organized by Department of Business Administration and Rohilkhand Incubation Foundation, MJP Rohilkhand University, Bareilly on 26th & 27th March 2023.
4. Participated in paper presentation on **"Development of agro-waste derived activated biochar-alginate composite beads for defluorination process in batch and column system"** in the 8th International Conference on **"Advances in Chemical and Material Sciences (ACMS-2022)"** organized by Indian Institute of Chemical Engineers, at Heritage Institute of Technology (HIT), Kolkata on 14th and 16th April, 2022.
5. Participated in paper presentation on **"Various techniques for wastewater treatment: A Review"** in the 8th International Conference on **"Advances in Chemical and Material Sciences"** Page No. 08-12, organized by Indian Institute of Chemical Engineers, at Heritage Institute of Technology, Kolkata on 14th and 16th April, 2022.
6. Participated in paper presentation on **"Pressure Swing Adsorption (PSA) technology for oxygen plants and oxygen concentrators: A Review"** in the 8th International Conference on **"Advances in Chemical and Material Sciences (ACMS-2022)"** organized by Indian Institute of Chemical Engineers, at Heritage Institute of Technology (HIT), Kolkata on 14th and 16th April, 2022.
7. Participated in paper presentation on **"Synthesis and application of agro-waste derived nanocellulose/PVA hybrid hydrogel for treatment of textile dye containing wastewater: Batch and Column study"** in the 8th International Conference on **"Advances in Chemical and Material Sciences (ACMS-2022)"** organized by Indian Institute of Chemical Engineers, at Heritage Institute of Technology (HIT), Kolkata on 14th and 16th April, 2022.

8. Participated in paper presentation on **"Development of Nano composite hydrogel film using extracted nanocellulose, PVA and their applications in dye removal process"** through online mode in the 8th National Conference on **"Sustainable Trends in Energy and Environment Resources (STEER2022)"** Organized by ACE-IICHe student chapter, at Department of Chemical Engineering, SSN College of Engineering, Chennai on 11th and 12th March, 2022.
9. Participated in paper presentation on **"Green Manufacturing: Benefits, Implementation and Challenges"**. *International conference on Futuristic Advancement in Materials, Manufacturing and Thermal Sciences (ICFAMMT2022)*, January 20-22, 2022. Jointly organized by *Department of Mechanical & Aero- space Engineering, IITRAM, Ahmedabad, Gujrat, India and Space Society of Mechanical Engineers (SSME), Space Applications Centre, ISRO, Ahmedabad.*
10. Presented paper on **"Heavy Metals in Vegetables"** in the **International Conference on "Academic Research in Engineering, Management and Information Technology"**, organized by Department of Mechanical and Department of Electronics & communication, M.J.P Rohilkhand University, Bareilly during February 17-19, 2018
11. Presented paper on **"Air Pollution Equipment- a review"** in the National Conference on **"Advanced Engineering Materials"**, organized by Department of Mechanical Engineering, M.J.P Rohilkhand University Bareilly during February 24-25, 2016
12. Presented paper on **"Effluent Treatment in Pulp and Paper Industry"** in the National Conference on **"Advanced Engineering Materials"**, organized by Department of Mechanical Engineering, M.J.P Rohilkhand University, Bareilly during February 24-25, 2016
13. Presented paper on **"Study on Processing Clay Nano Composite"** in the National Conference on **"Advanced Engineering Materials"**, organized by Department of Mechanical Engineering, M.J.P Rohilkhand University, Bareilly during February 24-25, 2016
14. Presented paper on **"Advance Methods in Textile Waste Water Treatment – An Overview"** in the National Conference on **"Advanced Engineering Materials"**, organized by Department of Mechanical Engineering, M.J.P Rohilkhand University, Bareilly during February 24-25, 2016
15. Presented paper on **"Polymeric composite materials in manufacturing of light weight Helicopters"** in the *international Conference on "Academic Research in Engineering, Management and Information Technology"*, organized by Department of Mechanical and Department of Electronics & Communication, M.J.P Rohilkhand University, Bareilly during February 21-23, 2015
16. Presented paper on **"Newton-Raphson method for simulation of multiple-effect evaporator system"** in the *international Conference on "Academic Research in Engineering, Management and Information Technology"*, organized by Department of Mechanical and Department of Electronics & Communication, M.J.P Rohilkhand University, Bareilly during February 21-23, 2015
17. Presented paper on **"Self-healing in polymers and polymer composites: A review"** in the *international Conference on "Academic Research in Engineering, Management and Information Technology"*, organized by Department of Mechanical and Department of Electronics & communication. M.J.P Rohilkhand University, Bareilly during February 21-23, 2015
18. Presented paper on **"Alternative Fuel"** in the *National Conference on "Recent Engineering Trends in Energy, Environment & Ecology"*, organized by Rajshree Institute of Management & Technology, Bareilly during September 27-28, 2014
19. Presented paper on **"Computer Aided Design (CAD), Computer Aided Manufacturing (CAM) and its typical application"** in the National Conference on **"Recent Engineering Trends in Energy, Environment & Ecology"**, organized by Rajshree Institute of Management & Technology, Bareilly during September 27-28, 2014.
20. Presented paper on **"Solar Energy- The ultimate Renewable Resource"** in the *National Conference on "Recent Engineering Trends in Energy, Environment & Ecology"*, organized by Rajshree Institute of Management & Technology, Bareilly during September 27-28, 2014.

21. Presented paper on ***"A Review on Renewable Energy for Reducing Air Pollution"*** in the **National Conference on "Recent Engineering Trends in Energy, Environment & Ecology"**, organized by **Rajshree Institute of Management & Technology, Bareilly** during **September 27-28, 2014**.
22. Presented paper on ***"Transition towards Green Economy-An improve Human Being and Social Equity"*** in the **National Seminar on "Climate Change, Environment and Economic Development"**, organized by **Department of Humanities, M.J.P Rohilkhand University, Bareilly** during **February 7-8, 2014**.
23. Presented poster on ***"Biodiesel from waste frying oil"*** in the **International Conference on "Recent Trends in Material Science"**, organized by **Department of Applied Physics MJP Rohilkhand University, Bareilly** during **November 21, 2013**.
24. Presented paper on ***"A review treatment technologies for petroleum refinery waste"*** in the **international conference on "Sustainable Innovative Techniques in Civil and Environmental Engineering"**, organized by **Krishi Sanskriti, New Delhi** during **June 5th-6th, 2013**
25. Presented paper on ***"A review on alternatives to conventional fuels"*** in the **international conference on "Sustainable Innovative Techniques in Civil and Environmental Engineering"**, organized by **Krishi Sanskriti, New Delhi** during **June 5th-6th, 2013**
26. Presented paper on ***"Biodiesel as a Renewable Source of Energy"*** in the **All India Seminar on "Pollution Prevention Through Development of Bio Based Material and Energy"**, organized by **Department of Chemical Engineering, Malaviya National Institute of Technology, Jaipur** during **February 22-23, 2013**
27. Presented paper on ***"Bio Ethanol as a Renewable Source of Energy"*** in the **All India Seminar on "Pollution Prevention Through Development of Bio Based Material and Energy"**, organized by **Department of Chemical Engineering, Malaviya National Institute of Technology, Jaipur** during **February 22-23, 2013**
28. Presented paper on ***"Software Applications making Chemical Engineer's Jobs Efficient and Effective"*** in the **National Seminar on "Software Applications in Engineering and Technology"**, organized by **Department of Mechanical Engineering, M.J.P Rohilkhand University, Bareilly** during **February 12, 2012**.
29. Presented paper on ***"Fuel Cell- A perfect solution to the Global warming"*** in the **National Seminar on "Advancements and Futuristic Trends in Material Science"**, organized by **Department of Applied Science, M.J.P Rohilkhand University, Bareilly** during **March 26-27, 2011**.
30. Presented paper on ***"Environmental Acts"*** in the **National Seminar on "Management of Environmental Pollution for Sustainable Energy Production"**, organized by **Department of Plant Science, M.J.P Rohilkhand University, Bareilly** during **April 10-11, 2010**.
31. Presented paper on ***"Hazardous Waste Management"*** in the **National Seminar on "Management of Environmental Pollution for Sustainable Energy Production"** organized by **Department of Plant Science, M.J.P Rohilkhand University, Bareilly** during **April 10-11, 2010**. Presented paper on ***"SHE management system -the twenty first century Environmental Management"*** in the **N: Page No. 10-12** on **"Management of Environmental Pollution for Sustainable Energy Production"**, organized by the **Department of Plant Science, M.J.P Rohilkhand University, Bareilly** during **April 10-11, 2010**.
32. Presented paper on ***"SHE management system – the twenty first century Environmental management"*** in the **national seminar on "Management of Environmental Pollution for Sustainable Energy Production"**, organized by **Department of Plant Science, M.J.P Rohilkhand University, Bareilly** during **April 10-11, 2010**.
33. Presented paper on ***"The Future Scenario of Refrigeration & Air Conditioning Industry"*** in the **"National Conference on Recent Advance in Mechanical and Production Engineering"**, organized by **Department of Mechanical Engineering, G.B. Pant University of Agriculture & Technology, Pantnagar** during **February 12-14, 2009**.

34. Presented paper on "**Role of Civil Engineering Conservation of Soil**" in the "**1st National Symposium on Earthworm Ecology & Environment**", organized by **Department of Animal Science, M.J.P Rohilkhand University, Bareilly** during **April 26-28, 2007**.

(j) Membership of Academic/Professional Bodies

1. Indian Society for Technical Education (ISTE)
2. Environmental Audit

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

1. External expert for selection of Scientific Assistant, Technical Assistant, Field man posts of Uttar Pradesh Pollution Control Board under national air monitoring program. (2009 & 2010)

(l) International Academic Exposure

-----NIL-----	-----NIL-----	-----NIL-----	-----NIL-----
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(m) Any Other Details

Patent: 03

1. **Dr. M.S. Karuna** et al., "Estimation of catchment-scale soil moisture from topography". (INDIA, Published/Granted) Patent Application No. 202321039430 A. The Patent Office Journal No. 34/2023 Dated 25/08/2023 Page No. 153
2. **Dr. M.S. Karuna** et al., "Neural Network for ECG Anomaly Detection in IoT Environment," (INDIA, Published/Granted on 30/12/2022) Patent Application No. 202241072720.
3. **Dr. M.S. Karuna** et al., "Membrane bioreactor for Wastewater treatment," (UK, Published/Granted on 07/05/2025) Patent Design No.6437631.

Papers Published in NON-UGC Care Listed /Indexed/ Peer Reviewed Journals

1. **Karuna MS**, Ghosh R, Rawat A, Saini A (2025) Eco-friendly Enhancement of ordinary Portland Cement Concrete's Tensile and Compressive Strengths using Methyl cellulose from Coconut Coir and Groundnut Shells. Research Discourse (ISSN 2277-2014), **March 2025**
2. **Dr. M.S. Karuna** et al Air Quality Index, Ventilation Coefficient And Pollution Potential Studies Over Bareilly City, Uttar Pradesh, International Journal of Current Research, DOI: 10.13140/RG.2.2.33949.82404, Online ISSN: 0975-833X, **January 2018, Citation-04**
3. **Dr. M.S. Karuna** et al Ambient Air Quality Monitoring and Prediction of Air Pollutants Using ISCST3 And CALINE4 Dispersion Models For Vehicular Emissions At Bareilly, Uttar Pradesh, India, IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT), e-ISSN: 2319-2402, p- ISSN: 2319-2399, **December 2017**
4. **Dr. M.S. Karuna** et al Seasonal Variations of Lead Accumulation in the Spinacea Oleracea Linn. During 2014-2017, Design Engineering, ISSN: 0011-9342, | Year 2021 Issue: 7 |Pages:15655-15666, October2021. Page No. 11-12
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