

## Dr. Karuna M.S



### PERSONAL DATA

1. NAME : **Dr. Karuna M.S**
2. DATE OF BIRTH : January 01, 1965.
3. PLACE OF BIRTH : Mysore,  
Karnataka State, India
  
4. OFFICAL ADDRESS : Senior Lecturer, Mechanical Engineering  
Head (In charge), Chemical Engineering  
M.J.P Rohilkhand University  
Bareilly- 243 006, Uttar Pradesh.  
Telephone(R): 0581-2521947  
E-Mail: m.karuna@mjpru.ac.in
  
5. RESIDENTIAL ADDRESS : E 16, Type 4, Professors Quarters  
M.J.P Rohilkhand University Campus  
Bareilly 243006  
Uttar Pradesh  
Telephone(R): 0581-2511947  
E-Mail: mysore\_karuna@hotmail.com  
Mobile: 93 59 50 11 12
  
5. QUALIFICATIONS : **PhD:** January 14,2019  
Department of Mechanical  
Engineering, IFTM University,  
Moradabad - 560 012, India.  
**Master of Engg. Degree:** October 25, 1995.  
(Environmental Engineering) (First  
Class), University of Mysore, Mysore,  
India.  
**Bachelor of Engineering:** April. 1991.  
(Civil Engineering) (Second Class), University  
of Mysore, Mysore 570 006, India.

## 6. PROFESSIONAL RECOGNITION

1. Chaired a session in the 1<sup>st</sup> International Conference on Academic Research in Engineering, Management and Information Technology at M.J.P Rohilkhand University, Bareilly, during February 20-23, 2015.
2. External Expert for selection of JRF for UGC sponsored projects.
3. Invited Talk, 1<sup>st</sup> International Conference on Academic Research in Engineering, Management and Information Technology at M.J.P Rohilkhand University, Bareilly, during February 20-23, 2015.

### NATIONAL, INTERNATIONAL CONFERENCES/SEMINARS ATTENDED:

1. Presented paper on ***“Role of Civil Engineers in Conservation of Soil”*** in the ***“1<sup>st</sup> National Symposium on Earthworm Ecology & Environment”***, organized by **Department of Animal Science, M.J.P Rohilkhand University, Bareilly** during **April 26-28, 2007**.
2. 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.Panth University of Agriculture & Technology, Panthnagar** during **February 12-14, 2009**.
3. 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**.
4. 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**.
5. 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**.
6. 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**.
7. 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**.
8. 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**.
9. 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**.

10. 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 5<sup>th</sup> -6<sup>th</sup>, 2013**
11. 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 5<sup>th</sup> -6<sup>th</sup>, 2013**
12. 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**.
13. 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**.
14. 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**.
15. 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**.
16. 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**.
17. 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**.
18. 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**.
19. 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**
20. 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**
21. 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**

22. 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**
23. 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**
24. 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**
25. 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,**

#### **7. PROFESSIONAL EXPERIENCE**

August 01, 2008 to till date	:	Head In Charge, Department of Chemical Engineering, M.J.P Rohilkhand University, Bareilly
November 1, 2002 - July 31, 2008	:	Head In Charge, Department of Chemical Engineering, M.J.P Rohilkhand University, Bareilly
October 01,2003 – November 30, 2006	:	Professor In Charge, Training & Placement, M.J.P Rohilkhand University, Bareilly.
June 1, 2002 – July 31, 2005	:	Proctor, Department of Mechanical Engineering, M.J.P Rohilkhand University, Bareilly.
March 01, 2006 – November 30,2006	:	Chief Employment Officer, M.J.P Rohilkhand University, Bareilly.
August 01, 1996 – January 15, 1997	:	Training Officer, Environmental Training Institute, KSPCB, Bangalore.
February 01, 1996 - July 31, 1996	:	Assistant Environmental Officer (Contractual), KSPCB, Bangalore
July 01, 1993 – May 31, 1993	:	Design Assistant, I.R.W.S&S World Bank project, SJCE, Mysore.
January 20, 1993 – June 30, 1993	:	Site Engineer, Indavar Construction Company, Mysore. Project site- Ballarpur Industries, Nanjangud.

## **8. UNIVERSITY & OTHER POSITIONS HELD**

1. Member of The Academic Council, M.J.P Rohilkhand University (2009- 2014)
2. Member of The Executive Council, M.J.P. Rohilkhand University (2010 - 2011)
3. Chairman, Board of Studies, and Board of Examiners, B.Tech Program Chemical Engineering, M.J.P Rohilkhand University, (2002-2008)
4. Coordinator, Board of Studies, and Board of Examiners, B.Tech program, Chemical Engineering, M.J.P Rohilkhand University (2008-till date)
13. Member, B.O.S of Mechanical Engineering, M.J.P Rohilkhand University (1997-2011).

## **9. RESEARCH INTERESTS**

- i. Solid Waste Management
- ii. Waste Water Treatment
- iii. Water Quality
- iv. Air Pollution

## **10. PROJECTS COORDINATED**

1. "Recycling of Waste Paper In University", sponsored by A.I.C.T.E New Delhi, for a period of 3 years (from 20.11.1997 to 20.11.2000). Amount sanctioned - Rs. 20 Lakh.
2. "Gas Evaluation through burning of Agricultural waste and their impact on Environment," Advisor this project, sponsored by world bank funded TEQIP-3, Ministry of HRD, Government of India, December 07-11, 2016, M.J.P Rohilkhand university, Bareilly.

## **11. CONFERENCES/WORKSHOPS/ FDP/TRAINING PROGRAM COORDINATED**

1. Industry-Institute Program, sponsored by TEQIP-3 Ministry of HRD, Government of India, April16-18, 2018, M.J.P Rohilkhand University, Bareilly.
2. "Water Quality Monitoring, Network Design, Sampling, Analysis & Quality Assurance" sponsored by TEQIP-2 Ministry of HRD, Government of India, March 27-31,2017, M.J.P Rohilkhand University, Bareilly.
3. "Municipal Solid Waste Management" sponsored by TEQIP-2 Ministry of HRD, Government of India, December 07-11, 2016, M.J.P Rohilkhand university, Bareilly.

4. "Ambient Air Quality and Stack Monitoring" sponsored by TEQIP-2 Ministry of HRD, Government of India, February 08-10, 2016, M.J.P Rohilkhand university, Bareilly.
5. "Environmental Impact Assessment" sponsored by TEQIP-2 Ministry of HRD, Government of India, March 26-28, 2015, M.J.P Rohilkhand university, Bareilly.
6. "Personality Development-Soft Skills Development for Organizational & Academic Effectiveness " sponsored by TEQIP-3 Ministry of HRD, Government of India, November30- December01, 2013, M.J.P Rohilkhand University, Bareilly.
7. "Personality Development" April21- December07, 2005, M.J.P Rohilkhand University, Bareilly.
8. "Communication Clinic: Written" November17- 19, 2013, M.J.P Rohilkhand University, Bareilly

## 12. MEMBERSHIPS OF PROFESSIONAL BODIES

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

## 13. TECHNICAL PUBLICATIONS

### Ph.D. PUBLICATIONS

"Trend of Air quality and its Impact on Crops/Vegetation of Bareilly", Doctoral thesis, Department of Mechanical Engineering, IFTM University, Moradabad, INDIA.

### RESEARCH PAPERS

1. **"Air Quality Index, Ventilation Coefficient and Pollution Potential Studies Over Bareilly City, Uttar Pradesh"** by Karuna M.S, Upadhyay O.P, Dinesh Kumar Saxena, Mahadev Swamy M, and Shobhan Majumder in *International journal of Current Research*, ISSN:0975-833X Vol.9, Issue, 12, pp.63243-63255, December, 2017, <http://www.journalcra.com>
2. **"Ambient Air Quality Monitoring And Prediction of Air Pollutants Using ISCST3 and CALINE4 dispersion Models for Vehicular Emissions at Bareilly, Uttar Pradesh, India"** by Karuna M.S, Upadhyay O.P, Dinesh Kumar Saxena, Mahadev Swamy M, and Shobhan Majumder in *IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT)* e-ISSN: 2319-2402,p-ISSN: 2319-2399,-833X,Volume 11,Issue 2.9,December, 2017,PP14-29 [www.iosrjournals.org](http://www.iosrjournals.org).

### JOURNALS PUBLICATIONS

1. **"Effect of Air Pollution on Environment, Vegetation & Human Health"** by Mohammad Shukrullah and M.S.Karuna, in *Journal of Civil Engineering and Environmental Technology*, p- ISSN: 2349-8404; e-ISSN:

2349-879X: Volume 4, Issue 6: October – December, 2017, pp.503-505 © Krishi Sanskriti Publications.  
<http://www.krishisanskriti.org/Publication.html>

2. ***“Polymeric Composite Materials: In Manufacturing of Light Weight Helicopters”*** by Anjali, Huma Warsi Khan, M.S.Karuna, in *International Journal of Advance Research in Science and Engineering*, ISSN-2319-8354(E), IJARSE, Vol. No.4, Special Issue(01), February 2015. <http://www.ijarse.com>
3. ***“Fluid catalytic Cracking Unit: A Primary Conversion process of Petroleum refineries”*** by Huma Warsi Khan, Anjali, M.S.Karuna, in *International Journal of Advance Research in Science and Engineering*, ISSN-2319-8354(E), IJARSE, Vol. No.4, Special Issue(01), February 2015. <http://www.ijarse.com>
4. ***“Self-Healing in Polymers and Polymer Composite: A Review”*** by Parul, Aradhana, M.S.Karuna, in *International Journal of Advance Research in Science and Engineering*, ISSN-2319-8354(E), IJARSE, Vol. No.4, Special Issue(01), February 2015. <http://www.ijarse.com>
5. ***“Newton-Raphson Method for Simulation of Multiple-Effect Evaporator System”*** by Aradhana Kanchan, Parul, M.S.Karuna, in *International Journal of Advance Research in Science and Engineering*, ISSN-2319-8354(E), IJARSE, Vol. No.4, Special Issue(01), February 2015. <http://www.ijarse.com>
6. ***“A Review on Alternatives to Conventional Fuels”*** by Huma Warsi Khan, Faizan Ahmad, M.S.Karuna, Jharna Gupta and Mohd.Imran in *International Journal of Environmental Research and Development*, [IJERD} ISSN No: 2249-3131, Volume 3, Number3 2013.
7. ***“A Review of Treatment Technologies for Petroleum Refinery”*** by Faizan Ahmad, Huma Warsi Khan, M.S.Karuna, Mohd.Imran, Priya Pal in *International Journal of Environmental Research and Development*, [IJERD} ISSN No: 2249-3131, Volume 3, Number3 2013.
8. ***“Eco-friendly Residue Upgrading Technologies for Refineries”*** by Huma Warsi Khan, Moina Athar, M.S.Karuna, in *American International Journal of Research in Science, Technology, Engineering and Mathematics*, ISSN (Print):2328-3491, ISSN(Online):2328-3580, ISSN(CD-ROM): 2328-3629. Available online at <http://www.iasir.net>, 2013.

#### 14.FDP/TRAINING PROGRAM ATTENDED

1. Attended and participated in the TEQIP FDP on ***“Advance Wastewater Treatment System for Emerging Contaminant: Special Emphasis on Hospital Liquid Waste Management”*** organized by the Indian Institute of Technology, Kharagpur during November18-20, 2019 (three days).
2. Attended and participated in the TEQIP FDP on ***“System Thinking and Environmental engineering for Sustainable Decision Making”*** organized by the Indian Institute of Technology, Roorkee during June03-07, 2019 (one week).
3. Attended and participated in the training programme on ***“Academic leadership”*** organized by the Centre of Academic Leadership and Education Management, Aligarh Muslim University, Aligarh at MJP Rohilkhand University, Bareilly during April27-30, 2019 (Four days).
4. Attended and participated in the GIAN course on ***“Membrane Separation for The Desalination of Water: Process, Application & Transportation Theory”*** organized by the Indian Institute of Technology, Roorkee during October29-November02, 2018 (one week).
5. Attended and participated in the QIP course on ***“Nanotechnology: Basics and Bio-Chemical Applications”*** organized by the Department of Chemical Engineering, Indian Institute of Technology, Roorkee during May21-25, 2018 (one week).

6. Attended and participated in the FDP on "**Entrepreneurship**" organized by the **ABSEEC Startups Lab(ASL), ABES Engineering College, Ghaziabad** in association with Department of Business Administration, **MJP Rohilkhand University, Bareilly** during **January 2-8, 2018 (one week)**.
7. Attended and participated in the QIP course on "**Green Chemistry for Cleaner Technology**" organized by the Department of Chemical Engineering, **Indian Institute of Technology, Roorkee** during **January 9-13, 2017 (one week)**.
8. Attended and participated in the Professional Development Programme on "**Leakages and Water Proofing Treatment in Buildings**" conducted by, **Engineering Staff College of India, Hyderabad** during **August 22-26, 2016 (one week)**.
9. Attended and participated in the Executive Education Programme on "**Decision Making for Managerial Effectiveness**" conducted by, **Indian Institute of Management, Bangalore** during **August 18-20, 2016 (three days)**.
10. Attended and participated in the Executive Education Programme on "**Leading with Joy: Leveraging the Mind to Achieve Greater Impact**" conducted by, **Indian Institute of Management, Bangalore** during **January 14-16, 2016 (three days)**.
11. Attended and participated in the Executive Education Programme on "**Inner Transformation for Outer Advancement**" conducted by, **Indian Institute of Management, Bangalore** during **November 16-18, 2015 (three days)**.
12. Attended and participated in the Industry – Academia workshop on "**A-Z of Natural Gas and LNG**" organized by the **Petroleum Federation of India and Lovraj Kumar Memorial Trust(LKMT), Delhi** in association with **Petronet LNG Ltd. at LNG Terminal, Dahej, Gujarat**, during **October 08-09, 2015 (three days)**.
13. Attended and participated in the TEQIP FDP on "**System Thinking and Environmental Engineering for Sustainable Decision Making**" organized by the **Indian Institute of Technology, Roorkee** during **June 03-07, 2019 (one week)**.
14. Attended and participated in the Faculty Development Course on "**Frontier Areas of Research in Mechanical Engineering**" organized by the Department of Mechanical Engineering, **Mahatma Jyotiba Phule Rohilkhand University, Bareilly** during **March 25-29, 2014 (one week)**.
15. Attended and participated in the Faculty Development Course on "**MATLAB and Simulink Programming**" organized by the Department of CS & IT, **Mahatma Jyotiba Phule Rohilkhand University, Bareilly** during **February 4-8, 2014 (one week)**.
16. Attended and participated in the short-term course on "**Pravartana 2013: Workshop on Applied Mechanics**" organized by the TEQIP: Knowledge Incubation Centre, **Indian Institute of Technology, Kanpur** during **October 4-7, 2013 (one week)**.
17. Attended and participated in the workshop on "**Industry -Academia Interaction for Strengthening Technical Education**" organized by the **PHD Chamber of Commerce and Industry, Lucknow and Harcourt Butler Technological Institute, Kanpur**, during **August 30, 2013 (one day)**.
18. Attended and participated in the Industry-Academia Workshop on "**Refinery Process Technology: Advance through Research & Development**" organized by the **Petroleum Federation of India and Lovraj Kumar Memorial Trust, New Delhi**, during **July 30, 2013 (one Day)**.
19. Attended and participated in the UGC sponsored course on "**Research Methodology**" organized by the U.G.C. Coaching Scheme, **Mahatma Jyotiba Phule Rohilkhand University, Bareilly** during **February 7-16, 2013 (two weeks)**.



20. Attended and participated in the short-term course on ***“Recent Advances in Pollution Prevention Technologies in Process Industries”*** organized by the Department of Chemical Engineering, **Malviya National Institute of Technology, Jaipur** during **October 22-26, 2012 (one week)**.
21. Attended and participated in the QIP course on ***“Environment Health and Safety Management”*** organized by the Department of Chemical Engineering, **Indian Institute of Technology, Roorkee** during **October 25-29, 2010 (one week)**.
22. Attended and participated in the Short-term Course on ***“Natural Gas Processing and Natural Gas/LPG Pipeline Transportation”*** organized **Petroleum Federation of India, GAIL(India) Ltd and the Lovraj Kumar Memorial Trust (LKMT), Noida**, during **June 29-July 1, 2009 (three days)**.
23. Attended and participated in the training programme on ***“Environment, Health and Safety Management in Process Industries”*** organized by the department of Chemical Engineering, **Indian Institute of Technology, Roorkee** during **October 20-22, 2008 (three days)**.
24. Attended and participated in the staff development programme on ***“CAD & FEM”*** organized by the Department of Mechanical Engineering, **Motilal Nehru National Institute of Technology, Allahabad** during **July 21<sup>st</sup>- August 2<sup>nd</sup>, 2008 (two week)**.
25. Attended and participated in the training programme on ***“Municipal Solid Waste- Planning, Collection, Handling and Disposal”*** organized by the Department of Chemical Engineering, **Indian Institute of Technology, Roorkee** during **December 4-8, 2007 (one week)**.
26. Attended and participated in the QIP course on ***“Hazardous waste Management”*** organized by the Department of Chemical Engineering, **Indian Institute of Technology, Roorkee** during **December 4-8, 2007 (one week)**.
27. Attended and participated in the short-term course on ***“Improving Industry-Institute Interaction”*** conducted by the EDIC Department, **National Institute of Technical Teachers’ Training and Research (NITTTR) , Chandigarh** during **January 25-27, 2005 (three days)**.
28. Attended and participated in the training programme on ***“Blue Print For Success”*** organized by the Qualified Learning System Co.Inc(USA), New Delhi during August 24-26, 2006 (Three days).
29. Attended and participated in the workshop on ***“Industry -Institute Partnership”*** organized by the **Shri Ram Murti Smarak College of Engineering & Technology, during December 09, 2005 (One Day)**.
30. Attended and participated in the UGC sponsored Orientation Course on ***“Value Education”*** organized by **UGC-Academic Staff College, Jawaharlal Nehru Technological University, Hyderabad**, during **July 23-August 20, 2003 (one month)**.

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