# CIRRICULUM VITAE



Name: Designation: Father's Name: Date of birth: Address:	Dr. ISLAM NAWAZ Professor Mr. Ziaul Haque (late) 18.11.1955
Correspondence:	Department of Mechanical Engineering, Faculty of Engineering & Technology, Jamia Millia Islamia, Jamianagar, New Delhi-110025.
Residence:	6/37 (2 <sup>nd</sup> Floor), Jangpura-B Mathura Road, New Delhi -110014.
Email Id	islamnwz@yahoo.co.in; inawaz@jmai.ac.in
Nationality:	Indian
Marital Status:	Married

#### **Qualifications:**

Exams Passed	<b>Board/University</b>	Year of passing	Division
Ph.D. (Mech.)	Jamia Millia Islamia	Awarded in 2006	
M. Tech. (Env. Sc. & Engg.)	Jamia Millia Islamia	1999	Ι
B.E. (Mech.)	Jamia Millia Islamia	1994	Ι
Dip. in Drafting & Designing (Mech.)	A. M.U. Aligarh	1984	Ι
Cert. in Draftsmanship (Mech.)	A. M.U. Aligarh	1982	Ι
P.U.C.	A. M.U. Aligarh	1974	III
High School	U.P. Board	1973	II

**Experience (Academic):** 

- 1. Professor in Mechanical Engineering Department, J. M. I., since April 2017till date.
- 2. Associate Professor in Mechanical Engineering Department, J. M. I., from April 2014 to April 2017.
- 3. Lecturer/ Assistant Professor in Mechanical Engineering Department, J.M.I., from January 2002 to April 2014.
- 4. Sr. Technical Assistant in Mechanical Engineering Department J.M.I. from Dec.1986 to Dec. 2001
- 5. Draftsman in Mechanical Engineering Department, J.M.I. from Oct. 1985 to Nov. 1986.
- Drawing Instructor in Z.H. College of Engineering & Technology, A.M.U. Aligarh from November 1984 to September 1985.
- 1. Organized "Women and Renewable Energy Development (WRED) Orientation Course in 2002, sponsored by Ministry of Non-Conventional Energy Sources, Govt. of India.
- 2. Organized "Entrepreneurship Awareness Camp" in 2003, sponsored by Ministry of Non-Conventional Energy Sources, Govt. of India.

#### **Academic Activities:**

	3.	Established "Renewable Energy Lab." in the Department of Mechanical Engineering.
	4.	Setup the new Drawing Hall with latest equipment i.e. LCD projector & Audio Video system
Research & Published Work:		Details given in Annexure-I
Administrative Responsibilities:		Details given in Annexure-II

#### **ANNEXURE-I**

### **RESEARCH AND PUBLISHED WORK**

### A. Ph.D. Topic: Effect of Use of Renewable Energy Sources to Keep Clean Environment for New Millennium.

## B. Publication: International Journals:

- I. Nawaz, R. A. Khan, M. E. Khan & G. N. Tiwari, "Optimization of Clean Environment Parameters through Renewable Energy Sources". International Journal "Ambient Energy" Ambient Press Ltd. 2003: 24(2) 67-74.
- I. Nawaz, G. N. Tiwari, "Embodied energy Analysis of Photovoltaic (PV) System based on Macro and Micro-level". International Journal "Energy Policy" Elsevier Ltd. 34 (2006) 3144-3152
- 3. I. Nawaz & G. N. Tiwari, "Comparative Analysis of Conventional and Renewable Energy Sources of a Typical Indian Village". International Journal "Ambient Energy," Ambient Press Ltd. 2007, 28 (1) 3-14.
- 4. Islam Nawaz, Kumar Ankur and Ravi Shankar Raman, "Energy Efficient Solar Refrigerator System". "VSRD International Journal of Mechanical, Automobile & Production engineering". Vol. 2 (1), 2012, 1-8.
- I. Nawaz, "Projection of Carbon Dioxide (CO<sub>2</sub>) Emissions in Coming Decades in Indian Context". Material Science Research India -An International Peer Reviewed Research Journal. Oriental Scientific Publishing Company. Vol.9 (1), 2012, 17-22.
- I. Nawaz, "Role of Coal Based Thermal Power Plants in the Degradation of Environment". Asian Academic Research Journal of Multidisciplinary. - A refereed international online publication. Asian Academic Research Associates. Vol. 1, Issue 7, March 2013, 83-93.

- I. Nawaz, M. Emran Khan and M. Rafat, "Role of Solar Photovoltaic Technology (SPVT) in Meeting the Power Demand". Journal of Environmental Science, Computer Science and Engineering & Technology-An International Peer Review E-3 Journal of Science and Technology, Scientific and Academic Publications, JECET June-August-2013; Vol. 2. No. 3, 541-550.
- 8. I. Nawaz, "Disposal and Utilization of Fly Ash to Protect the Environment". International Journal of Innovative Research in Science, Engineering and Technology. Vol. 2, Issue 10, October 2013, 5259-5266.
- I. Nawaz, M. Emran Khan and M. Rafat, "Desirable Impact on Environment of Solar Energy in Domestic Sector". Indian Journal of Applied Science. Peer Reviewed & Referred International Journal. Sara Publishing Academy Indian Journal of Applied Research. Volume 4, Issue 12, December 2014, 66-69.
- I. Nawaz, M. Emran Khan and M. Rafat, Gauging the Impact of Power Generation from Fossil Fuels on CO<sub>2</sub> Level in Atmosphere. International Journal of Science and Research (IJSR). Volume 4 Issue 3, March- 2015, 829-833.
- I. Nawaz, "Optimum Utilization of Solar Energy in Domestic Sector in India." International Journal of Scientific & Engineering Research (IJSER). Volume 6, Issue 5, May-2015, 1425-1434.
- I. Nawaz, "Stabilization/Solidification of Hazardous/Toxic Waste Using Cement and Brick Kiln Dust." International Journal of Engineering Technology, Management and Applied Sciences (IJETMAS). Volume 3, Issue 7, July-2015, 22-26.
- I. Nawaz, "Quantitative Model to Gauge the Renewable Energy Situation in Indian Energy Scenario." International Journal of Science, Engineering and Technology (IJSET). Volume 3, Issue 5, Sep.-Oct. 2015, 1130-1135.
- 14. I. Nawaz and Mohd. Zaheen Khan, "Review on Effect of Absorbing Materials Used in Solar Still to Reduce the Reflective Radiation Losses." International Journal of Innovative Science, Engineering & Technology (IJISET). Vol. 2 Issue 12, December 2015, 845-851.
- 15. Shaheen H. and Nawaz I. "Optimization and Cost Benefit analysis of a Large PV Installation in Delhi". Journal of Electrical and Electronic Systems. OMIC International: Publication benefits & Features. Vol. (5), Issue (1), January 2016.
- 16. I. Nawaz, "Rural Electrification in India: Challenges and Strategies." International Journal of Engineering Sciences & Research Technology (IJESRT). Vol. 5 Issue 1, January 2016, 337-343.

- 17. I. Nawaz, "Important Role of Renewable Energy Sources in Mitigation of CO<sub>2</sub> Emissions in Indian Context." International Journal of Current Research (IJCR), Vol. 8, Issue 02, Februray-2016, 26664-26668.
- I. Nawaz, "Phenomenon of Acid Rain and its Environmental Consequences." World Journal of Engineering Research and Technology (WJERT), ISSN: 2454-695X Vol. 2, Issue 2, pp. 105-117, March-2016,
- Mohd. Zaheen Khan, Nawaz, I. and Tiwari G.N. "Effect of wind velocity on active and passive solar still". International Journal of Current Research (IJCR), ISSN: 0975-833X. Vol. 8, Issue 03, pp. 28398-28402. March-2016.
- 20. I. Nawaz, M. Emran Khan and M. Rafat. "Assessment of CO<sub>2</sub> mitigation potential through renewable energy option, in domestic sector of rural India". International Journal of Exploring Emerging Trends in Engineering (IJEETE), ISSN: 2394 -0573. Vol. 3, Issue 3, pp. 174-183. May-June, 2016.
- Mohd. Zaheen Khan and I. Nawaz. "Analysis and Modelling of Single Slope Solar Still at Different Water Depth". Journal of Energy Technologies and Policy, ISSN: 2225-0573. Vol. 6, No. 9, 2016.
- Mohd. Zaheen Khan and I. Nawaz. "To Enhance the Performance of Solar Still with Reflectors". International Journal of Advanced Research (IJAR), ISSN: 2320-5407. 5(3), 2017.
- 23. Shaheen H. and Nawaz I. "The observations of climate change and mitigation of GHG by using RES". International Journal of Science & Engineering Research (IJSER), ISSN: 2229-5518. Volume 8, Issue 7, July 2017.
- 24. Mohd. Zaheen Khan and I. Nawaz. "To Reduce the Adverse Impact of Fossil Fuels on the Environment in Indian Context". Journal of Energy Technologies and Policy, ISSN: 2225-0573. Vol. 7, No. 7, 2017.
- Etkaf Hasan Khan, Islam Nawaz and G. N. Tiwari, "Mathematical Modeling and Analysis of a SPVT Active Solar Still". IJSTE- International Journal of Science Technology & Engineering, ISSN (online): 2349-784X, Vol.5, Issue 10, April 2019.
- Mohd. Zaheen Khan, Etkaf Hasan Khan, Nitesh Agarhari, Mohd. Atif Wahid, and I. Nawaz, "Calculation for the Output of Solar Still of an Individual Hour". Advances in Materials Engineering and Manufacturing Processes, Springer Proceedings, May 2020.
- 27. Etkaf Hasan Khan, Eram Neha, Mohd. Atif Wahid, I. Nawaz and GN Tiwari, "Analysis of Performance Parameters of Active Solar Still". Proceedings of International Conference in Mechanical and Energy Technology, Smart Innovation, Systems and Technologies, Springer Proceedings, June 2020.

 Mohd. Zaheen Khan, I. Nawaz, G. N. Tiwari et al., "Effect of Top Cover Cooling on the Performance of Hemispherical Solar Still". Materials Today: Proceedings, ELSEVIER, July 2020.

## **International Conferences:**

- Calculation for the output of solar still of an individual hour, presented and published in proceeding of International Conference on Futuristic trends In Materials and Manufacturing-2019, held at Delhi Technical Campus, Greater Noida (UP), during 8<sup>th</sup> November, 2019.
- 2. Effect of condensing cover on yield of passive solar still, presented and published in proceeding of International Conference on Renewable Energy and Sustainable Climate (SOLARIS 2019). Jointly Organized by Department of Mechanical Engineering, Jamia Millia Islamia, New Delhi, Hi-Tech Institute of Engineering & Technology, Ghaziabad ((UP) and Bag Energy Research Society, Varanasi (UP), India during February 7-9, 2019.
- 3. Comparative Analysis of Passive & SPVT Active Solar Still in a Village of North India, presented and published in proceeding of International Conference on Renewable Energy and Sustainable Climate (SOLARIS 2019). Jointly Organized by Department of Mechanical Engineering, Jamia Millia Islamia, New Delhi, Hi-Tech Institute of Engineering & Technology, Ghaziabad ((UP) and Bag Energy Research Society, Varanasi (UP), India during February 7-9, 2019.
- 4. Review of advancement in Solar Still Technology, presented and published in proceeding of International Conference on Smart Technology in the field of Engineering, Science and Management (SmartTech-2018). Organized by Department of Mechanical Engineering, Delhi Technical Campus, Greater Noida, UP, India during 11-12, January 2018.
- Building Integrated Performance of Single Slope and Multiple Effects Solar Still, presented and published in proceeding of International Conference and Exhibition on Building utilities 2016.Organized by Department of Mechanical Engineering, Faculty of Engineering. & Technology, Jamia Millia Islamia, New Delhi during 1-3, December 2016.
- Technological potential for reduction of CO<sub>2</sub> emissions in domestic sector of a typical Indian village, presented and published in proceeding of International Conference on Energy Security, Global Warming and Sustainable Climate (SOLARIS 2012) held at Varanasi-UP (India) during 7-9 Feb. 2012.
- Effect of CO<sub>2</sub> Concentration at Various Atmospheric Altitudes due to Thermal Power Plants, presented and published in proceeding of 3<sup>rd</sup> International Conference on Solar Radiation and Day Lighting (SOLARIS 2007) held at IIT Delhi (India) during Feb. 7-9, 2007.

- Statistical Analysis to Predict the CO<sub>2</sub> Emission in 21<sup>st</sup> Century. Presented and published in proceeding of "National Foundation of Indian Engineers (NAFEN), XII International Congress and Exhibition on Research and Development" (January 15–16, 1999). New Delhi.
- 9. Innovative Anaerobic Digestion Process Techniques for Converting Waste to Energy and other Useful Products. Presented and published in proceeding of "National Foundation of Indian Engineers (NAFEN), XII International Congress and Exhibition on Research and Development" (January15-16, 1999). New Delhi.
- Software Development for Estimation of Ground Level Concentration of Pollutant. Presented and published in proceeding of "National Foundation of Indian Engineers (NAFEN), XII International Congress and Exhibition on Research and Development" (January15-16, 1999). New Delhi.
- 11. Pollution Due to Electroplating in Lock Industry. Presented and published in proceeding of "National foundation of Indian Engineers (NAFEN), XII International Congress and Exhibition on Research and Development" (January15-16, 1999). New Delhi.
- 12. Energy Demand and Environment for the Next Millennium. Presented and published in proceeding of "International Conference on Environmental Challenges for the New Millennium" (November25-27, 1999). Organized by Faculty of Engg. & Tech, Jamia Millia Islamia, New Delhi.
- 13. Application of Renewable energy (Solar Energy) to Keep Pollution Free Environment. Presented and published in proceeding of "International Conference on Environmental Challenges for the New Millennium" (November25-27, 1999). Organized by Faculty of Engg. & Tech., Jamia Millia Islamia, New Delhi.

## **National Conferences:**

- 1. Analysis of Daily Yield of SPVT Active Solar Still, presented in National Conference on Robotics and Mechatronics (NCORM 2020) held at Department of Mechanical Engineering, Jamia Millia Islamia, New Delhi during 3-4 March, 2020.
- 2. Enhancement of distilled water through the water surface perturbation, presented in National Conference on Robotics and Mechatronics (NCORM 2020) held at Department of Mechanical Engineering, Jamia Millia Islamia, New Delhi during 3-4 March, 2020.
- 3. Effect of top cover cooling on the performance of hemispherical solar still, presented and published in proceeding of National Conference on Sustainable Environment and Climate,(SOLARIS 2020) held in SRMU Barabanki, UP (India) during 07-09 Feb. 2020.

- 4. Role of renewable energy for sustainable development in Indian context, presented and published in proceeding of National Conference on Renewable Energy Sources for Sustainable Climate, (SOLARIS 2017) held at Varanasi-UP (India) during 07-09 Feb. 2017.
- 5. Use of Renewable Energy sources in India-An alternative to CO<sub>2</sub> mitigation, presented in National Conference on Renewable Energy Sources for Sustainable Climate, (SOLARIS 2017) held at Varanasi-UP (India) during 07-09 Feb. 2017.
- 6. Electricity Generation through Solar Photovoltaic (SPV) System, presented in National Conference on Renewable Energy Sources for Sustainable Climate, (SOLARIS 2017) held at Varanasi-UP (India) during 07-09 Feb. 2017.
- Acid Rain, a Typical Global Challenge to the Environment, presented and published in the National Conference on "Water Resources Management-Achievements & Challenges (WRM-AC 4014 held at Department of Civil Engineering, Jamia Millia Islamia, New Delhi, on 22<sup>nd</sup> March, 2014.

# C. Books:

- 1. "Fundamentals of Engineering Mechanics", Cadplan Publisher and Distributor.
- 2. "Advanced Welding Technology", Scitech Publications (India) Pvt. Ltd.

# **D. Project:**

Project on Uneven span Greenhouse integrated Semitransparent Photovoltaic Thermal GiSPVT system for Agricultural Applications, sanctioned by Ministry of Science & Technology, Government of India of amount Rs.2, 60, 84, 126.

## E. PhDs Supervised:

- 1. Muhammad Zaheen Khan, 'Computational Modeling for Performance Analysis of Solar Still' (Submitted)
- 2. Etkaf Hasan Khan. 'Performance Evaluation of the Solar Photovoltaic Thermal (SPVT) Active Solar Still' (Under Progress)

#### **ANNEXURE - II**

#### ADMINISTRATIVE RESPONSIBILITIES

- I joined Jamia Millia Islamia in 1985. I performed a number of duties assigned to me, during the establishment period of the Faculty of Engineering and Technology.
- 2. I also contributed towards establishing the workshop and laboratories in the Department of Mechanical Engineering.
- 3. I was deputed to assist the Principal in the year 1990. I looked after construction activities in the Faculty of Engineering Building.
- I was also deputed to assist in the Property Office of Jamia in the year 1994.
  I, along with other functionaries, maintained the Land and Property Records.
- I was assigned the task of preparation of proposals for B. Tech. and B. E. courses for obtaining approval from "All India Council for Technical Education" (AICTE) in 1994.
- 6. I performed the duties of Assistant Proctor in 1995-1997.
- I was deputed as Assistant Superintendent Examination for conducting the Annual, Supplementary and Entrance Examinations of Jamia Schools for three years (1999-2001).
- 8. I set-up Renewable Energy (Solar Energy) lab in 2003, financed by Ministry of Non-Conventional Energy Sources, Govt. of India.
- I organized "Women and Renewable Energy Development (WRED)" Orientation Course in 2002, sponsored by Ministry of Non-Conventional Energy Sources, Govt. of India.
- 10. I organized "Entrepreneurship Awareness Camp" in 2003, sponsored by Ministry of Non-Conventional Energy Sources, Govt. of India, under the banner "Entrepreneurs are not born, they are made".
- 11. I was deputed as Assistant Superintendent for conducting Annual and Entrance Examinations of B. Tech. and B. E. courses, a number of times.
- 12. I was appointed as Tabulator for B. Tech. and M. Tech. (Mechanical) examination for three years 2006 to 2008.
- I have been compiling the attendance records of M. Tech., B. Tech. and B. E. courses since 2010.

- 14. I served as in-charge of Sessional Tests of Ph. D., M. Tech., B. Tech. and B. E. (Mechanical) since 2010.
- 15. I was superintendent in B. Tech. Entrance Test several times.
- I set-up the new Drawing Hall with latest equipment including LCD Projector and Audio Video system.
- 17. I supervise the admission process of M. Tech. and Ph.D. every year, including screening of forms and the eligibility of students.
- Screening of forms and eligibility criteria of the candidates applied for Guest Faculty and contractual faculty in the Department.
- 19. Actively involved in the process of NAAC and preparation of records for submission before the NAAC authorities in 2015.
- 20. Involved in preparation of records for presentation before NBA Committee in 2019.
- 21. Involved in a similar job for the forthcoming NAAC evaluation meeting to be held in 2020.
- 22. Served as Assistant Superintendent to conduct examinations of BA (Pvt.) and also Jamia's entrance tests held between September-November 2020, at the Centre of the Faculty of Engineering and Technology.