



Department of Mechanical Engineering
School of Technology
Maulana Azad National Urdu University (Central University)
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YUSUF PARVEZ | Lecturer

CURRENT DESIGNATION/ INVOLVEMENT

Currently working as a **Lecturer** in the Department of Mechanical Engineering, Polytechnic, Maulana Azad National Urdu University (Central University), Cuttack, Odisha, India.

AREA OF SPECIALIZATION

Energy storage systems (Li-ion batteries), thermal engineering and renewable energy.

ONGOING ACADEMIC RESEARCH/PROJECTS

EV and Li-ion battery safety, early thermal-runaway detection in LIBs, and battery thermal management.
Advanced cooling of solar PV modules using PCM, TEC, and design modifications.

INNOVATION WITH FIELD OF STUDY AND COLLABORATIVE EFFORTS

Granted 2 patents, with one under examination by the Indian Patent Office, Government of India.

S. No.	Title	Status	Date of Filing	Date of Grant	Patent/Filing No.
1	Wind Energy Concentrator	Granted	27/08/2019	21/12/2021	384751
2	Magnetism Coupled Air Filtration System	Granted	22/08/2022	08/01/2024	496076
3	Nozzle Based Air Cooled PV Panel	Published	28/03/2023	-	202311022664

ACADEMIC AND ADMINISTRATIVE EXPERIENCE

▪ OVER 10 YEARS OF TEACHING EXPERIENCE

Worked as Assistant Professor and Visiting faculty in various India's premier institutions.

Engaged in teaching and academic guidance for over 10 years, and handled a wide range of Engineering subjects and laboratory courses for B.Tech and Diploma students.

▪ ADMINISTRATIVE EXPERIENCE

Roles held in the past:

Departmental In-Charge, Mechanical Engineering

Lab In-Charge, Thermal Engineering Laboratory

NAAC Coordinator for Mechanical Engineering

Lab Establishment at MANUU Polytechnic, Cuttack – ME Dept. / other common labs

Member of Disciplinary Committee

Led online learning during COVID-19, enabling smooth conduction of classes.

EDUCATIONAL QUALIFICATION	<ul style="list-style-type: none"> ▪ DOCTOR OF PHILOSOPHY (PH.D.) (PURSUING) WMG, University of Warwick, Coventry, United Kingdom ▪ MASTER OF TECHNOLOGY (M.TECH) Centre for Energy Studies, IIT Delhi, New Delhi ▪ BACHELOR OF TECHNOLOGY (B.TECH) Mechanical Engineering Department, Aligarh Muslim University, Aligarh
TEACHING PROFICIENCY	<ul style="list-style-type: none"> ▪ Thermal Engineering ▪ IC Engines ▪ Electric vehicles and Li-ion batteries ▪ Heat Transfer ▪ Refrigeration & Air Conditioning ▪ Strength of Materials
RESEARCH PUBLICATION DETAILS	<ol style="list-style-type: none"> 1. Yusuf Parvez, Nathi Ram Chauhan, and Mahima Srivastava, Vibration control and comparative analysis of passive and active suspension systems using PID controller with particle swarm optimization, Journal of The Institution of Engineers (India): Series C, 106 (1), 1–19, 2025. (Springer) 2. Yusuf Parvez, and Harsha Chaubey, Role of Renewable Energy Resources in Meeting Global Energy Demand, Concepts in Smart Societies (Chapter-8), CRC Press (1st Edition), 148-193, 2023. (Taylor & Francis) 3. Shreya Dhawan, Riya Sinha, Shambhavi Chaturvedi, Yusuf Parvez, and Abrar Ul Haq, Development and performance analysis of an automated solar-powered thermoelectric refrigeration system, Applied Solar Energy, Vol. 59, 226–238, 2023. (Springer) 4. Shreya Dhawan, Aanchal Sabharwal, Shreya Shreya, Aarushi Gupta, Yusuf Parvez, Performance analysis of a lithium-ion battery of an electric vehicle under various driving conditions, Archives of thermodynamics, Vol. 44(3), 143–160, 2023. 5. Shivangi Sachar, Yusuf Parvez, Tanya Khurana, Harsha Chaubey, Heat transfer enhancement of the air-cooled engine fins through geometrical and material analysis: A review, Materials Today: Proceedings, 2023. (Elsevier) 6. Deeksha Singh, Harsha Chaubey, Yusuf Parvez, Aditi Monga, Shruti Srivastava, Performance improvement of solar PV module through hybrid cooling system with thermoelectric coolers and phase change material, Solar Energy, 241, 538-552, 2022. (Elsevier) 7. Yusuf Parvez, Ravinder Kumar, Exergy Based Performance Improvement of Cogeneration Plant of Sugar Mills, VW Engineering International 4 (2), 59-65, 2022. 8. Samta Shastri, Yusuf Parvez, Nathi Ram Chauhan, Inverse kinematics for a 3-R robot using artificial neural network and modified particle swarm optimization, Journal of The Institution of Engineers (India): Series C 101, 355-363, 2020. (Springer) 9. Samta Shastri, Yusuf Parvez, Nathi Ram Chauhan, Wireless Power Transfer System for Scorbots Er-4u Robotic Arm, International Journal of Power and Energy Systems 40 (3), 2020. (ACTA Press) 10. Yusuf Parvez, MM Hasan, Exergy analysis and performance optimization of bagasse fired boiler, IOP Conference Series: Materials Science and Engineering 691 (1), 012089, 2019.

11. Hansa Gaur, Prerna Lal, Pranjali Sharma, **Yusuf Parvez**, Thermal analysis and experimental validation of pin fins with peripheral protrusions, IOP Conference Series: Materials Science and Engineering 691 (1), 012065, 2019.
12. Shruti Srivastava, Harsha Chaubey, and **Yusuf Parvez**, Performance evaluation of CI engine using diesel, diesel-biodiesel blends and diesel-kerosene blends through exergy analysis, IOP Conference Series: Mat. Science and Engineering 691 (1), 012066, 2019.
13. Rashmi Sahni, **Yusuf Parvez**, Nathi Ram Chauhan, Fabrication and Repeatability Analysis of 3 Link Robotic Arm Used for Color Inspection, International Journal of Research and Analytical Reviews 5 (3), 55-64, 2018.
14. Prachi Choudhary, Shivangi Sachar, Tanya Khurana, Urvashi Jain, **Yusuf Parvez**, Manoj Soni, Energy Analysis of a Single Cylinder 4-Stroke Diesel Engine Using Diesel and Diesel-Biodiesel Blends, International Journal of Applied Engineering Research 13 (12), 10779-10788, 2018.
15. Urvashi Jain, Tanya Khurana, Shivangi Sachar, Prachi Choudhary, **Yusuf Parvez**, Performance characteristics and energy analysis of a 4-stroke single cylinder diesel engine using diesel and diesel-kerosene blends, International Journal of Research and Analytical Reviews 5 (3), 194-203, 2018.
16. Sweta Swami, **Yusuf Parvez**, Nathi Ram Chauhan, Automated Real-time Gesture Recognition using Hand Motion Trajectory, International Journal of Engineering and Technology, Vol 9 (4), 3374-3387, 2017.

DETAILS OF
CONFERENCE/SEMINAR
/WORKSHOP/ FDP
(ATTENDED/PRESENTED)

1. 4th **International Conference** on Computational & Experimental Methods in Mechanical Engineering (**ICCEMME-2023**) hosted by Department of Mechanical Engineering, G. L. Bajaj Institute of Technology and Management, Greater Noida from February 9-11, 2023.
2. **International Conference** on "Recent Advancement in Materials, Design, and Manufacturing (**ICRAMDM-2022**)" hosted by Mechanical Engineering Section, University Polytechnic, Aligarh Muslim University, Ghaziabad on 10 December- 2022.
3. **International Conference** on "Futuristic Innovations in Technology and Engineering (**FITE 2020**)" hosted by Department of Mechanical Engineering, ABES Engineering College, Ghaziabad on 11th & 12th December- 2020.
4. 1st **National Conference** on Innovations in Mechanical and Automation Engineering, **NCIMAE-2020**, organized by Department of MAE, IGDTUW, New Delhi on 18th September, 2020.
5. 2nd **International Conference** on Computational & Experimental Methods in Mechanical Engineering (**ICCEMME-2019**) hosted by Deptt. of Mechanical Engineering, G. L. Bajaj Institute of Technology and Management, Greater Noida, May 3rd- 5th, 2019.
6. 2nd **International Conference** on Recent Developments in Science, Engineering and Technology (**REDSET 2015**) hosted by GD Goenka University, Gurgaon, Delhi/NCR, on 30th and 31st October, 2015.
7. Ten days online Faculty Induction Program (FIP) as per UGC mandate, organized by Task Group (Gurudakhsta), Maulana Azad National Urdu University, Hyderabad, between 13.11.2020 to 18.12.2020.
8. One day Workshop on Supply Chain Management organised by IMS Engineering College, Ghaziabad on 1st February, 2014.
9. Two days National Workshop on Solid Waste Management organised by IIT Delhi & DRIIV, Delhi on 30th-31st July 2021. (online)

10. One week FDP on “ANSYS SOFTWARE” organized by MAE Dept., Indira Gandhi Delhi Technical University for Women, Kashmere Gate (Delhi), 27th March to 31st March 2017.
11. One week AICTE recognized Short Term Course through Information and Communication Technology Mode on “Optimization using MATLAB” organized by Indira Gandhi Delhi Technical University for Women, Kashmere Gate (Delhi) in collaboration with NITTTR, Chandigarh, 24-28 October 2016.
12. One week AICTE recognized Short Term Course through Information and Communication Technology Mode on “Entrepreneurship and Business Incubation using Blue Ocean Strategies” organized by Indira Gandhi Delhi Technical University for Women, Kashmere Gate (Delhi) in collaboration with NITTTR, Chandigarh, 07-11 November 2016.
13. One week AICTE recognized Short Term Course through Information and Communication Technology Mode on “E-governance and Green Technology Entrepreneurship for Technical Institutions” organized by Indira Gandhi Delhi Technical University for Women, Kashmere Gate (Delhi) in collaboration with NITTTR, Chandigarh, 19-23 February 2018.
14. One week AICTE recognized Short Term Course through Information and Communication Technology Mode on “Embedded Systems” organized by Indira Gandhi Delhi Technical University for Women, Kashmere Gate (Delhi) in collaboration with NITTTR, Chandigarh, 19-23 March 2018.
15. One week AICTE recognized Short Term Course through Information and Communication Technology Mode on “Advances in Manufacturing” organized by Indira Gandhi Delhi Technical University for Women, Kashmere Gate (Delhi) in collaboration with NITTTR, Chandigarh, 14-18 January 2019.
16. One week AICTE recognized Short Term Course through Information and Communication Technology Mode on “Innovation and Research Areas in Science and Technology” organized by Indira Gandhi Delhi Technical University for Women, Kashmere Gate (Delhi) in collaboration with NITTTR, Chandigarh, 27-31 May 2019.
17. One Week Online Short Term Course on "Advanced Control of Standalone Energy Systems" organized by Deptt. of Electrical Engineering, NIT Srinagar, 13-17th June, 2022.
18. Two week online Faculty Development Programme, on “Renewable Energy Intervention in Industry, Commercial And Domestic Application” organized by Department of Mechanical Engineering, Rajeev Gandhi Memorial College of Engineering and Technology, Nandyal, Andhra Pradesh, 15th February to 27th February 2021.
19. Two days All India seminar on “Renewable Energy Development- challenges and the way forward” organised by The Institutions of Engineers (India), at IMS Engineering College, Ghaziabad on 8th & 9th March, 2014.
20. One week AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Avenues for Energy Conservation in Thermal Power Plants" at Anna University, from 07/02/2022 to 11/02/2022.
21. Five-days faculty development program (FDP) on “Waste to Bioenergy: A Sustainable Solution” organized by Department of Biotechnology, NIT Andhra Pradesh, from 13th to 17th September 2021.
22. One week AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Energy Engineering" at Mizoram University, from 23/08/2021 to 27/08/2021.

DETAILS OF KEYNOTE
SPEAKER/RESOURCE PERSON/
SESSION CHAIR ETC.

1. Resource Person as speaker in “Deeksharambh”, Student Induction Programme- 2022, on topic “Polytechnic Cuttack/ Academics and opportunities”, organized by Maulana Azad National Urdu University from 31st Oct. to 5th Nov. 2022.

2. Resource Person as speaker in “Deeksharambh”, Student Induction Programme-2022, on topic “Literary Activity”, organized by Maulana Azad National Urdu University from 31st Oct. to 5th Nov. 2022.
3. Resource Person as speaker in “Deeksharambh”, Student Induction Programme-2022, on topic “Introduction About Courses of Polytechnic”, organized by Maulana Azad National Urdu University from 31st Oct. to 5th Nov. 2022.
4. Resource Person as speaker in 6-Days online workshop for Aptitude & Soft Skills improvement-2022, on topic “Aptitude”, organized by Maulana Azad National Urdu University from 07-12 March 2022.
5. Resource Person as speaker in “Deeksharambh”, Student Induction Programme-2020, on topic “Health & Hygiene”, organized by Maulana Azad National Urdu University from 16 th to 17 th Nov. 2020.
6. Resource Person as speaker in “Deeksharambh”, Student Induction Programme-2020, on the topic “Thermal Power Generations”, organized by Maulana Azad National Urdu University from 07-10 Dec. 2020.
7. Resource Person as speaker in “Deeksharambh”, Student Induction Programme-2021, on topic “Creative Talent and Extracurricular activities”, organized by Maulana Azad National Urdu University from 07-08 Oct. 2021.

ACHIEVEMENTS

1. The Vallway Research Award 2022 (Award of Excellence in Research)
2. 3rd Prize in paper presentation entitled “Thermal analysis and experimental validation of pin fins with peripheral protrusions” in 2nd International Conference ICCEMME-2019.
3. 6 times GATE qualified.

DETAILS OF SUPERVISION (M.PHIL/M.TECH/P.HD.)

Supervised four M.Tech theses in the year (2017 & 2018) in IGDТУW, Delhi

PROFESSIONAL MEMBERSHIPS

- IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS)
- IEEE POWER & ENERGY SOCIETY
- ISES (INTERNATIONAL SOLAR ENERGY SOCIETY)
- THE ELECTROCHEMICAL SOCIETY

PERSONAL DETAILS

Father's Name : Late Mohammad Mustafa
Gender : Male
Marital Status : Unmarried
Nationality : Indian
Language Known : English, Hindi, Urdu

(Yusuf Parvez)