# **Curriculum Vitae**

## Mr. Pankaj Yadav

Assistant Professor, Mechanical Engineering Department, Rajkiya Engineering College, Azamgarh.

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### **Educational Qualifications:**

- PhD pursuing (Mechanical Engineering), N.I.T. Patna, January 2021- till now.
- M.Tech. (2016), Thermal Engineering, MNNIT, Allahabad.
- B.Tech. (Gold Medalist) (2013), Mechanical Engineering, M.M.M. Engineering College, Gorakhpur.

## **Professional Experience:**

- Assistant Professor (Mechanical Engineering Department), REC Azamgarh from Dec 2017 to present.
- Guest Lecturer (Mechanical Engineering Department), REC Azamgarh from July 2017- Dec 2017.
- Guest Lecturer (Mechanical Engineering Department), REC Azamgarh from July 2016- June 2017.

#### **Area of Interest:**

• Solar Energy, Renewable energy, Thermal Engineering and Refrigeration and Air-conditioning.

#### **SCI/ESCI/SCOPUS Journals Published:**

- P. Yadav and O. Prakash, "Enhanced Thermal Performance of Alkali-Treated Bamboo, Coir, and Date Palm Fiber Composites for Solar Distillation Applications," *Russ. Phys. J.*, Jun. 2024, doi: 10.1007/s11182-024-03191-4. [SCIE]
- P. Yadav, B. Singh, Subedar, S. Kumar, S. P. Singh, and S. K. Singh, "Performance Enhancement of a Hybrid Solar Still/Photovoltaic System with Mirror Reflectors, Automatic Water Cooling, and Feed Water Preheating," *Russ. Phys. J.*, Jan. 2024, doi: 10.1007/s11182-024-03089-1.[SCIE]



- S. Srivastava, V. Kumar, P. Yadav, B. Singh, S. K. Singh, and S. K. Sarangi, "Retightening of Internal Hexagonal and Conical Dental Abutment Connections: A FEA Analysis," pp. 1–8, 2024, doi: 10.23805/JO.2024.590.[SCOPUS]
- P. Yadav and O. Prakash, "Productivity Enhancement of Solar Stills: A review on Factors Affecting the Performance of Solar Still," Process Integr. Optim. Sustain., Jun. 2023, doi: 10.1007/s41660-023-00341-y. [SCOPUS/ESCI]
- P. Yadav and O. Prakash, "Analysis of the Exergy, Economic, and Environmental Impacts and Performance Enhancement of an Environmentally Friendly Solar Still with Drop-wise Feeding," Process Integr. Optim. Sustain., Apr. 2023, doi: 10.1007/s41660-023-00333-y. [SCOPUS/ESCI]
- B. Singh, P. Yadav, S. Srivastava, S.P. Singh, S.K. Singh, V. Kumar, and Amit Bhaskar, "Performance Improvement and Optimisation Using Response Surface Methodology (Central Composite Design) of Solar Photovoltaic Module with Reflector and Automatic Water Cooling," Process Integr. Optim. Sustain., vol. 7, no. 1–2, pp. 343–357, Mar. 2023, doi: 10.1007/s41660-022-00296-6. [SCOPUS/ESCI]
- P. Pal, P. Yadav, R. Dev, and D. Singh, "Performance analysis of modified basin type double slope multi–wick solar still," Desalination, vol. 422, pp. 68–82, Nov. 2017, doi: 10.1016/j.desal.2017.08.009. [SCIE]

### **Conferences:**

- Presented a paper titled "Productivity enhancement of solar stills: A Review" at Virtual Global Conference on Renewable Energy, 24-25 July 2021, NIT Patna, India
- Presented a paper titled "Performance optimization of solar photovoltaic module using response surface methodology (Box–Behnken Design)" at First International Conference on Advancement in Energy (ক্রর্जাSangam-2023) held on December 18-20, 2023 in the Department of Mechanical Engineering, Motilal Nehru National Institute of Technology Allahabad, Prayagraj, Uttar Pradesh, India.

#### **Book Chapters:**

- S. Srivastava, V. Kumar, S. K. Singh, P. Yadav, B. Singh, and A. Bhaskar, "A Review on Application of Artificial Intelligence in Mechanical Engineering," 2024, pp. 29–46. doi: 10.4018/979-8-3693-5271-7.ch002.
- P. Yadav, B. Singh, A. Bhaskar, S. Srivastava, and S. K. Singh, "Role of Artificial Intelligence in Renewable Energy Management for Sustainable Development," 2024, pp. 108–124. doi: 10.4018/979-8-3693-1062-5.ch006.
- A. Bhaskar *et al.*, "Role of Artificial Intelligence in Healthcare Management," in *Reinventing Technological Innovations with Artificial Intelligence*, BENTHAM SCIENCE PUBLISHERS, 2023, pp. 26–47. doi: 10.2174/9789815165791123010006.

#### **Patents:**

• Title of the invention: "MODIFIED VEHICLE SMOKE CLEANER", Application No.202311071781 A, Publication Date: 24/11/2023, The Patent Office Journal No. 47/2023 Dated 24/11/2023.

• Title of the invention: "COMPOSITE GRASS STRAW WRAPPING SHEET", Application No.202311072025 A, Publication Date: 24/11/2023, The Patent Office Journal No. 47/2023 Dated 24/11/2023

## **Subjects Taught:**

- Thermodynamics
- Refrigeration and Air conditioning
- I.C Engine
- Applied Thermodynamics
- Heat and Mass Transfer
- Renewable Energy Resources

## Seminar/FDP/Workshop/STTP/Training Attended:

- Attended FDP on "Development of Academic Leadership in Higher Education Under NEP-2020" held from October 30 to November 03, 2023, at Rajkiya Engineering College Mainpuri U.P.
- Attended Training Programme on "Technology based Entrepreneurship Development Programme on Internet of Things" held from 10th July to 04th August 2023 at G L Bajaj Institute of Technology and Management, Greater Noida, U.P.
- Attended FDP on "Innovations in Mechanical Engineering and Technology" held from 02 to 06<sup>th</sup> January 2023 at Rajkiya Engineering College Azamgarh.
- Attended "CATIA V5 Design Training" at Rajkiya Engineering College Azamgarh held from 19-24<sup>th</sup> December 2022.
- Completed industrial training in "AUTOCAD" conducted by the National Institute of Electronics and Information Technology (NIELIT,) MMM University campus, Gorakhpur U.P-273010, from 31/05/2022-28/06/2022.
- Completed "ANSYS Mechanical & CFD Training" conducted by ARK Infosolution Pvt. Ltd. from 01/06/2021-10/06/2021.
- FDP course on "Solar Energy Engineering and Technology" through SWAYAM, NPTEL from Sep-Dec, 2020.
- Attended one-week FDP on "Computational Tools and Techniques MATLAB, ANSYS" jointly organized by Government Engineering College, Karad (M.S.) and Rajkiya Engineering College Azamgarh, held from 27-01 May 2020.
- Completed a 2-week "Digital Transformation in Teaching Learning Process" course through SWAYAM, NPTEL from 16-30 March 2020.
- FDP course on "Energy Conservation and Waste Heat Recovery" through SWAYAM, NPTEL from July-Oct, 2019.
- Attended FDP on "Recent Advancement in Mechanical Engineering" at Rajkiya Engineering College Azamgarh held from 19-23 August 2019.
- Attended one week of FDP on "Application of Optimization Methods in Engineering" held from 05-09<sup>th</sup> August 2019.

- Attended STTP on "Fundamentals and Applications of Computational Fluid Dynamics (CFD)" jointly organized by Government Engineering College, Karad (M.S.) and Rajkiya Engineering College Azamgarh, held from 02-06 April 2019.
- FDP course on "IC Engines and Gas Turbines" through SWAYAM, NPTEL from Jan-Apr, 2019.
- Attended Workshop on "Active Learning, Autonomy, Academic Governance and R & D" organized by IIT Roorkee, June 18th 22nd, 2018.
- Attended FDP on "Total Quality Management" held from 4th to 8th June 2018 at Rajkiya Engineering College Azamgarh.
- Attended "Entrepreneurship Awareness Camp" from 19th -21st April 2018 at REC Azamgarh.
- Attended "A NBA workshop on Outcome Based Education" held on 16 -17<sup>th</sup> March 2018 at Rajkiya Engineering College Azamgarh.

# **Seminar/Workshop/STTP Organized:**

- Program coordinator of the one-week workshop on "30 Hours instructor-led live online hands-on based training of internet of things", at Rajkiya Engineering College Azamgarh held on 21-25 November 2023.
- One-week workshop on "Hands-on-Training on ANSYS and MATLAB" at Rajkiya Engineering College Azamgarh held on 17-21 February 2020.
- One-week FDP on "Recent Advancement in Mechanical Engineering" at Rajkiya Engineering College Azamgarh held on 19-23<sup>rd</sup> August 2019.
- Two-day seminar on "Value Based Education" at Rajkiya Engineering College Azamgarh held on 25-26 July 2019.
- Three Days "Gyan Technical Program" under Yantriki club, at Rajkiya Engineering College Azamgarh held on 05-07<sup>th</sup> October, 2018.
- One-week workshop on "Corporate Expectation and Academia" at Rajkiya Engineering College Azamgarh held on 15-19<sup>th</sup> September 2018.
- One Week "Startup Summit Program" at Rajkiya Engineering College Azamgarh held on 04-08<sup>th</sup> September 2018.
- One-week FDP on "Total Quality Management" held on 04-08<sup>th</sup> June 2018 at Rajkiya Engineering College Azamgarh.
- "Entrepreneurship Awareness Camp" from 19-21<sup>st</sup> April 2018 at Rajkiya Engineering College Azamgarh.

# **Current Administrative Responsibilities:**

• Nodal officer I/c Scholarship, R.E.C Azamgarh.

# **Past Administrative Responsibilities:**

- Deputy CARE I/c, R.E.C. Azamgarh
- Nodal I/c National Academic Depository (NAD)
- ODOP Member
- Unnat Bharat Abhiyan Member
- Institute Store Officer I/c, R.E.C Azamgarh