


# Rahul Patel

Assistant Professor, KIPM-CET

Ph.D. Pursuing-NIT Patna

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 D-143, Sector-5, GIDA, Gorakhpur, Uttar Pradesh



Seeking a challenging position within an esteemed organization where I can leverage my skills and expertise to contribute to the overall success of the organization. Eager to align myself with cutting-edge technologies, and I aim to bring a resourceful, innovative, and flexible approach to drive positive outcomes.

## WORK EXPERIENCE

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JANUARY  
2017

Assistant Professor, KIPM COLLEGE OF ENGINEERING & TECHNOLOGY,  
GIDA, GORAKHPUR, UTTAR PRADESH

CURRENT

### ADMINISTRATIVE/ACADEMIC RESPONSIBILITIES AT KIPM-CET

#### Current Responsibility

- > Workshop Superintendent
- > Project Coordinator
- > Social Media Coordinator
- > In-charge CAD Lab
- > SPOC College Website
- > SPOC for Google Workspace, Microsoft, and Autodesk Licensing & Administration.

#### Previous Responsibility

- > Controller of Examination
- > Centre Superintendent of University Exam
- > Center Observer of University Exam
- > NBA Expert Committee Member of KIPM-CM
- > ME Department NBA Coordinator
- > In-charge, Innovation & Incubation Cell
- > Convenor, Institution Innovation Council
- > Innovation Ambassador
- > SPOC ERP

AUGUST  
2015

Assistant Professor, SAROJ INSTITUTE OF TECHNOLOGY & MANAGEMENT,  
LUCKNOW, UTTAR PRADESH

DECEMBER  
2016

## RECOGNITION AND ACHIEVEMENTS

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- 2025 Received Appreciation Letter for serving as the Convenor of Institution's Innovation Council (IIC 6.0) from MoE's Innovation Cell, Government of India.
- 2024 Received Appreciation Certificate for serving as the Mechanical Department NBA Coordinator following successful accreditation.
- 2023 Received Appreciation Letter for serving as the Convenor of Institution's Innovation Council (IIC 5.0) from MoE's Innovation Cell, Government of India.
- 2023 Received Appreciation Letter for coordinating of Vigyan Pradrshni-2023 organized by Regional Science & Technology Centre, Veer Bahadur Singh Planetarium Gorakhpur (Under UPCST) from 11-13 January 2023 at Champa Devi Park Gorakhpur
- 2022 Received Appreciation Letter for serving as the Convenor of Institution's Innovation Council (IIC 4.0) from MoE's Innovation Cell, Government of India.

## ACCOMPLISHMENT

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- May 2026 Served as an Observer for Even Semester Examination 2025-26 organized by AKTU, Lucknow, ensuring the integrity and smooth conduct of the examination process.
- December Successful Conducted Dr. A.P.J. Abdul Klam Technical University (AKTU) 2025-26 ODD
- 2025-Feb 2026 Semester Exam
- October 2025 Successfully organized **AICTE Sponsored** one week **ATAL FDP** on Towards Sustainability: The Role of Advanced Materials in Next-Gen Engineering from 13-18 October 2025 as Coordinator
- March 2025 Successfully Evaluated **Primarily Evaluation of School Innovation Marathon -2025**, organized by the Ministry of Education Innovation Cell Government of India.
- AUG 2024 Successfully organized **AICTE Sponsored** one week **ATAL FDP** on Advanced Functional Materials for Clean Energy from 05-10 August 2024 as Co-coordinator
- 2024 Successfully organized **Autodesk sponsored** two-day Faculty Development Program on Fusion 360 as a Convenor.
- AUG 2023 Successfully led the Mechanical Engineering Department to achieve **NBA accreditation** as the Department **NBA Coordinator**.
- 2023 Successfully Completed Science Awareness Mela cum Exhibition in Selected Districts of Eastern U.P. Sponsored Projects of Department of Science & Technology, New Delhi, (GOI) (National Council of Science & Technology Communication (NCSTC) Science and Engineering Research Board (SERB), of 22.30 Lakhs as CO-PI During 14/12/22 to 20/03/23.

- 2023 Successfully organized **Autodesk sponsored** a two-day Faculty Development Program on Fusion 360 from 07-08 October 2023 as a Convenor.
- 2023 Contributed as a member of the Organizing Committee for the successful execution of the International Conference on Frontiers in Desalination, Energy, Environment, and Material Science for Sustainable Development (FEEMSSD-2023).
- 2022 Successfully coordinated the National Workshop STDEWS-2022 in collaboration with KIPM-CET, InDA, AKTU Lucknow, and MMMUT Gorakhpur on 26<sup>th</sup> November 2022.
- 2022 Served as an Observer for ODD Semester Examination 2022 organized by AKTU, Lucknow, ensuring the integrity and smooth conduct of the examination process.
- 2021 Distinguished Evaluator for Toycathon-2021, appointed by the MoE's Innovation Cell and AICTE, contributing expertise to assess innovative solutions in the realm of toy design.
- JAN 2021 Served as an Observer for the Central Teacher Eligibility Test (CTET) conducted on January 31, 2021.
- DEC 2019 Served as an Observer for the Central Teacher Eligibility Test (CTET) conducted on December 08, 2019
- JUL 2019 Served as an Observer for the Central Teacher Eligibility Test (CTET) conducted on July 07, 2019.
- MAY 2019 Served as an Observer for NEET (UG) - 2019, ensuring the smooth conduct of the examination on May 05, 2019, under the auspices of the National Testing Agency (NTA).

## EDUCATION

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AICTE QIP PG CERTIFICATION (PURSUING)	<b>ARTIFICIAL INTELLIGENCE &amp; MACHINE LEARNING (JUN 2025- DEC 2025)</b> <ul style="list-style-type: none"> <li>&gt; Indian Institute of Information Technology (IIIT), Lucknow</li> <li>&gt; Sponsored by All India Council for Technical Education (AICTE), New Delhi</li> </ul>
PH.D. (PURSUING)	<b>MECHANICAL ENGINEERING (2021-)</b> <ul style="list-style-type: none"> <li>&gt; National Institute of Technology Patna (NIT Patna)</li> <li>&gt; Thermal Engineering</li> </ul>
M.TECH	<b>ENERGY TECHNOLOGY AND MANAGEMENT (2013-2015)</b> <ul style="list-style-type: none"> <li>&gt; Madan Mohan Malaviya University of Technology, Gorakhpur, U.P. (India)</li> <li>&gt; Affiliated to Uttar Pradesh Technical University, Lucknow, U.P. (India)</li> <li>&gt; Percentage: 78.35%</li> </ul>

**B.TECH** | **MECHANICAL ENGINEERING (2013-2015)**

- > Saroj Institute of Technology and Management, Lucknow, U.P. (India)
- > Affiliated to Uttar Pradesh Technical University, Lucknow, U.P. (India)
- > Percentage: 75.86%

**INTERMEDIATE**  
(+2) | **MATHEMATICS (2007-2009)**

- > Institute: M.G.B.S.V.P. Inter College, Gohila, Ambedkar Nagar
- > Board: UP Board
- > Percentage: 62.60%

**HIGH SCHOOL** | **SCIENCE (2005-2007)**

- > Institute: Dr. A. K. S. U. M. Vidyalaya, Akbarpur, Ambedkar Nagar
- > Board: UP Board
- > Percentage: 73.33 %

## **PATENT**

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- 2025 Published an Indian Design Patent titled "**Autonomous Weeding Robot with Machine Learning Capabilities**", Design Registration No. 482574-001, on 03 December 2025.

## **PUBLICATIONS**

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- 2025 Solar Water Heaters – Technology, Applications, And Future Prospects, International Journal of Progressive Research in Engineering Management and Science (IJPREMS), Volume 05, Issue 05, May 2025, e-ISSN: 2583-1062
- 2024 The Promising Applications of Artificial Intelligence in Drug Development and Discovery, International Journal of Multidisciplinary Research in Science, Engineering & Technology (IJMRSET), Volume 7, Issue 8, August 2024 ISSN: 2582-7219  
DOI: 10.15680/IJMRSET.2024.0708061
- 2024 Present Challenges and AI Implementation in Radiology, International Journal of Multidisciplinary Research in Science, Engineering & Technology (IJMRSET), Volume 7, Issue 8, August 2024 ISSN: 2582-7219 DOI: 10.15680/IJMRSET.2024.0708059

- 2023 A Review of Pedal Operated Water Purifier, AIJR Proceedings of International Conference on Frontiers in Desalination, Energy, Environment and Material Sciences for Sustainable Development (FEEMSSD-2023) & Annual Congress of InDA (InDACON-2023) on 16-17; ISSN: 2582-3922; DOI: <https://doi.org/10.21467/proceedings.161.31>
- 2023 Design and Analysis of Solar Water Purifier, AIJR Proceedings of International Conference on Frontiers in Desalination, Energy, Environment and Material Sciences for Sustainable Development (FEEMSSD-2023) & Annual Congress of InDA (InDACON-2023) on 16-17 March 2023; ISSN: 2582-3922 DOI: <https://doi.org/10.21467/proceedings.161.28>
- 2023 Design and Analysis of Parabolic Solar Cooker, AIJR Proceedings of International Conference on Frontiers in Desalination, Energy, Environment and Material Sciences for Sustainable Development (FEEMSSD-2023) & Annual Congress of InDA on 16-17 March 2023; ISSN: 2582-3922 DOI: <https://doi.org/10.21467/proceedings.161.30>
- 2023 “A Review of Hybrid Solar –Wind Based EV Charging Station” International Conference on Frontiers in Desalination, Energy, Environment and Material Sciences for Sustainable Development (FEEMSSD-2023) & Annual Congress of InDA (InDACON-2023) on 16-17 March 2023.
- 2023 “Design and fabrication of solar operated floor cleaning machine” International Conference on Frontiers in Desalination, Energy, Environment and Material Sciences for Sustainable Development (FEEMSSD-2023) & Annual Congress of InDA (InDACON-2023) on 16-17 March 2023.
- 2021 “Research and Analysis For The Resurgence of The Solid & Composite Desiccant By Utilizing Solar Concentrator of Scheffler”, in International Journal of Multidisciplinary Engineering Science and Technology (JMEST), volume 8, issue 7, in July 2021 ISSN: 2458-9403.
- 2021 “Research and Study of an Evaporative, Desiccant Based Cooling System”, in International Journal of Advances in Engineering and Management (IJAEM), Volume 3, Issue 7 July 2021, pp: 1538-1546, ISSN: 2395-5252 DOI: 10.35629/5252-030715381546
- 2015 “Design and analysis of circulating fluidized bed biomass Gasifier”, in International Journal for scientific Research and Development, volume 3, issue 5, in July 2015 ISSN: 23210613.
- 2015 “Advances in Power Generation from Wastage by Gasification”, in 30<sup>th</sup> National Convention of Mechanical Engineers and national Seminar on Green Technology in Power Sector Organized by The Institution of Engineers (India), ISBN: 97893-83842-83-4.

## FDPs ATTENDED

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- 2025 **Successfully completed the CEEE Mentee Program** at the **Regional Centre, IIT Kanpur** (July 2025 – December 2025) in the domain of **Mechanical, Aerospace and Energy Engineering**, including **2 weeks of offline** and **3 weeks of online** hybrid training.
- 2025 5-days AICTE Training and Learning (ATAL) Academy Faculty Development Program on **Advances in Metal Additive Manufacturing: Today, Tomorrow, And Beyond** at National Institute of Technology Calicut from 27/01/2025 to 01/02/2025.
- 2025 5-days AICTE Training and Learning (ATAL) Academy Faculty Development Program on **Clean Energy and Environment Sustainability** at GOVERNMENT ENGINEERING COLLEGE PALAMU from 06/01/2025 to 11/01/2025
- 2023 5-Days Faculty Development Program on **ChatGPT & AI tools for Academician** Organized by Department of Logistics & Shipping held on 27th November to 01st December 2023 at ASET COLLEGE OF SCIENCE & TECHNOLOGY, Chennai.
- 2023 2 Days Faculty Development Program on Fusion 360 organized by Twintech Engg & Design Tech. Pvt. Ltd (An Autodesk Authorize Academic Partner(AAP), only one in eastern India) held on 07-08 October 2023 at KIPM-CET, Gorakhpur.
- 2023 5 days **Innovation, Design, and Entrepreneurship (IDE) Bootcamp** organized by AICTE and the Ministry of Education’s Innovation Cell (MIC) from June 22 to June 26, 2023.
- 2021 UHV Refresher -1 online Faculty Development Programme organized by All India Council for Technical Education (AICTE) from 23 August, 2021 to 27 August, 2021.
- 2020 10-days Faculty development Program on “Human Values in Sankhya,Yoga and Vedanta Darshan” during August 25-31, 2020 organized by Value Education Cell, AKTU, Lucknow.
- 2020 one-week online Faculty Development Programme on “Emerging Trends in Thermal, Design & Manufacturing”, organized by Mechanical Engineering Department, Madan Mohan Malaviya University of Technology, Gorakhpur during October 26-30 2020.
- 2020 5-days Faculty development Program on “Green Technology & Sustainable Engineering” during 7<sup>th</sup>-11<sup>th</sup> Sep,2020 Organized by Aligarh Muslim University, Under AICTE Training and Learning (ATAL) Academy.
- 2020 7-days Faculty development Program on “Human Values in Baudhha and Jain Darshan” during August 17-24, 2020 organized by Value Education Cell, AKTU

- 2018 8-days Faculty development Program on “Universal Human Values and Professional Ethics” Level-1 organized by TEQIP-III at KIPM-CET, Gorakhpur from 14<sup>th</sup> - 21<sup>st</sup> June 2018.
- 2018 Faculty development Program on “Universal Human Values and Professional Ethics” Level-1 organized by TEQIP-III at ITM, Gorakhpur from 10<sup>th</sup> -17<sup>th</sup> Jan 2018.

## WORKSHOP / SHORT TERM COURSE ATTENDED

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- 2022 one-week online workshop on “Cyber Security and information Assurance” 27<sup>th</sup>- 31<sup>st</sup> January 2022 organized by Rajkiya Engineering College, Sonbhadra.
- 2022 IPR awareness/training program under the special mission called “National Intellectual Property Awareness Mission (NIPAM)” at KIPM College of Engineering & Technology, GIDA Gorakhpur on 31/05/2022.
- 2022 Workshop on “Introduction to the Goods and Service Tax(GST) for New Entrepreneurs and Entrepreneurship Journey and Advancement in Technology during my Startup Journey” on 27<sup>th</sup> Jun 2022 Virtually organized by Sagar Institute of Research & Technology- Excellence, Bhopal sponsored by MoE’s Innovation Cell (MIC), AICTE.
- 2020 Webinar on “Indian Knowledge System” during 9-13, June 2020 organized by All India Council for Technical Education (AICTE).
- 2020 Webinar on “Virtual Lab” by Mr. Manish Nagoshe on April 30, 2020 through Virtual Lab Cell (VLC), AKTU, Lucknow.
- 2020 National Seminar (web) on Ancient Indian Education System organised by NITTTR Kolkata on 11<sup>th</sup> and 12<sup>th</sup> November 2020.
- 2020 webinar on “Methodology to write Research Publication for high quality peer Reviewed Journal” organized by R&D Cell ITS engineering college, Noida on 19<sup>th</sup> Nov, 2020.
- 2020 National Online Workshop on "NBA Accreditation – Assurance of Quality in Technical Education" on 11<sup>th</sup> June, 2020 organized by the State Project Implementation Unit-UP, Dr APJ Abdul Kalam Technical University, Lucknow & The Institution of Engineers (India).
- 2020 Online National Workshop on “Outcome Based Education (OBE)” organized on 11<sup>th</sup> June 2020 organized by the State Project Implementation Unit-UP, Dr APJ Abdul Kalam Technical University, Lucknow & The Institution of Engineers (India).

- 2018 National Conference on “Universal Human Values in Higher Education Developing Holistic Perspective” Organized by TEQIP-III at IET, Lucknow from 6<sup>th</sup> to 8<sup>th</sup> July 2018.
- 2017 Short term course on “Emerging Trends in thermal Engineering (ETITE-2017)” from 27<sup>th</sup>Feb to 3<sup>rd</sup>March 2017 organized by Mechanical Engineering Department, MMMUT, Gorakhpur.
- 2017 Short term course on “Emerging Trends in Material Science (STCETMS-2017)” from 23<sup>rd</sup>-29<sup>th</sup>March 2017 organized by Department of applied science, MMMUT, Gorakhpur.
- 2017 Hands on training Cum-Workshop on “Soft Computing skills for Scientists and engineers (SCSSE-2017)” 17<sup>th</sup>- 19<sup>th</sup> March 2017 organized by Department of applied science, MMMUT, Gorakhpur.

## PROJECTS

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### **Thermodynamic Study and analysis on existing Biomass Gasifier for improving the quality of producer gas.**

August 2014-May 2015

The utilization of biomass as a renewable energy source has gained significant attention due to its potential to mitigate environmental concerns and provide sustainable energy solutions. However, the quality of producer gas produced by biomass gasifiers often falls short of meeting desired standards, limiting its widespread adoption. This study investigates various parameters influencing the thermodynamic performance of biomass gasifiers, including temperature, pressure, feedstock composition, and gasification techniques. Through rigorous analysis and simulation, potential improvements to the gasification process are identified, with a focus on enhancing the calorific value, reducing tar content, and optimizing gas yield. Additionally, the study explores innovative strategies such as thermal integration and reactor design modifications to achieve enhanced gas quality. The findings of this study offer valuable insights into the optimization of existing biomass gasification technologies, providing a roadmap for improving the efficiency and sustainability of producer gas production. Implementation of the proposed enhancements has the potential to facilitate broader adoption of biomass gasification as a viable energy solution, contributing to the transition towards a greener and more sustainable energy landscape.

### **Automatic track Inspection Device**

August 2012 – April-2013

Automatic Track Inspection Device (ATID) designed for efficient and precise assessment of railway track conditions. Railway infrastructure maintenance is crucial for ensuring safe and reliable transportation systems. The ATID employs advanced sensor technology and automated data analysis algorithms to detect defects, such as cracks, wear, and misalignments, along the track. This device streamlines inspection processes, reducing manual labor and enhancing inspection accuracy. Real-time data collection allows for proactive maintenance scheduling, minimizing downtime and improving overall

railway safety. The ATID represents a significant advancement in railway track inspection technology, offering a cost-effective solution for maintaining optimal track conditions.

## INTERNSHIP

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one-month Industrial Summer Training program at the National Thermal Power Corporation (NTPC), Tanda, from June 15 to July 14, 2012. During this period, I gained valuable hands-on experience and insights into the operations and processes involved in power generation at a leading thermal power plant.

### SUBJECT OF INTEREST

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1. Thermodynamics
2. Internal Combustion Engines
3. Digital and Social Media Marketing
4. Fundamentals of Mechanical Engineering

### SKILLS

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1. Application Packages: MS Office.
2. Design Software: AutoCAD, Fusion 360.
3. Comfortable working on Internet Applications.

## Student Guided at UG & PG Level

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- > **Diploma (Polytechnic):** Guided **20 students** in major projects.
- > **UG (B.Tech.):** Guided more than **50 Undergraduate (B.Tech.) students** in major and minor projects in the areas of Mechanical Engineering, Renewable Energy, Thermal Engineering and Design.
- > **PG (M.Tech.):** Guided **2 students** in dissertation research and thesis work.

## MEMBERSHIP

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- 2023 Lifetime Member of Education Research and Development Association (ERDA).
- 2022 Member of International Association of Engineers (IAENG).

## REVIEWER EXPERIENCE

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**Reviewer**, International Conference on **Sustainable Engineering & AI Solutions (ICSEAIS-2026)**, organized by **Bansal Institute of Engineering and Technology, Lucknow, India, 24–25 April 2026.**

## PERSONAL INFORMATION

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**Father's Name:** Mr. D. K. Verma  
**Date of Birth:** 02-Jun-1993  
**Permanent Address:** 202 Shekhpura, Katariya Yakubpur, Akbarpur, Ambedkar Nagar, Uttar Pradesh 224122

## REFERENCES

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**Prof. Omprakash**

Professor, National Institute of Technology, Patna

Email: [om.prakash@nitp.ac.in](mailto:om.prakash@nitp.ac.in)

**Dr. Naresh Kumar**

Assistant Professor, National Institute of Technology, Patna

Email: [naresh@nitp.ac.in](mailto:naresh@nitp.ac.in)

## DECLARATION

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I hereby declare that the above-mentioned information is correct to the best of my knowledge, and I promise to abide by all the norms laid down by your esteemed organization.

**Date:** 04/07/2026

**Rahul Patel**