

**UNITED COLLEGE OF ENGINEERING AND RESEARCH, NAINI, PRAYAGRAJ**  
**DEPARTMENT OF MECHANICAL ENGINEERING**

| S.No. | Faculty Name           | Title of Paper  | Name of Journal/Conference   | SCI/ESCI/Scopus Indexed | Year | DOI/ISSN  |
|-------|------------------------|---|--|-------------------------|------|---|
| 1     | Dr. Rakesh Kumar Yadav | Analyzing the Energy Efficiency and Sustainability Implications of IoT Tools in Smart Homes   | International Journal of Information Engineering and Electronic Business | Scopus                  | 2025 | 10.5815/ijieeb.2025.01.03   |
| 2     | Dr. Rakesh Kumar Yadav | Investigation of Stress and Wear Analysis for Aluminum-based Metal Matrix Composite Reinforced Silicon Carbide using ANSYS Software Package | Recent Patents on Mechanical Engineering                                 | Scopus                  | 2025 | 10.2174/0122127976334635240904 114812   |
| 3     | Dr. Rakesh Kumar Yadav | Mechanical and Tribological Properties of Aluminum Metal Matrix Composites—A Review   | Lecture Notes in Mechanical Engineering                                  | Scopus                  | 2025 | 10.1007/978-981-97-4947-8_13  |
| 4     | Dr. Rakesh Kumar Yadav | Ansys Analysis and Investigation of Mechanical Properties of Aluminum-based Metal Matrix Composite reinforced by Silicon Carbide            | Aip Conference Proceedings   | Scopus                  | 2025 | 10.1063/5.0242162   |
| 5     | Dr. Rakesh Kumar Yadav | Investigation of Properties of Aluminium Metal matrix composite reinforced by Aluminium Oxide using ANSYS                                   | IEEE   | Scopus                  | 2024 | 10.1109/ICCCCM61016.2024.11039947   |
| 6     | Dr. Mohan Gupta        | Improvement in luminescence of Dy <sup>3+</sup> doped ZnMoO <sub>4</sub> single ingredient white light emitting phosphor                    | Journal of Optoelectronic and Biomedical Materials                       | ESCI WOS                | 2025 | 10.15251/jobm.2025.172.41   |
| 7     | Dr. Vivek Kumar        | Optimizing Friction Stir Processing for Al-Fe Composites: Enhancing Mechanical Properties through Statistical Analysis                      | Journal of Materials Engineering and Performance, 2025                   | SCIE                    | 2025 | 10.1007/s11665-025-11486-x  |
| 8     | Dr. Dinesh Kumar       | Utilization of LPG gas in the construction of a refrigerator  | AIP Conf. Proc   | SCOPUS                  | 2025 | 10.1063/5.0240627   |
| 9     | Dr. Naveen Kumar       | Cyclic oxidation of 304L and 316L stainless steel coated and uncoated with Cr <sub>3</sub> C <sub>2</sub> –NiCr at elevated temperatures    | Materials Science-Poland   | SCIE                    | 2025 | 10.2478/msp-2025-0010   |
| 10    | Dr. Naveen Kumar       | Utilization of LPG gas in the construction of a refrigerator  | AIP Conf. Proc   | SCOPUS                  | 2025 | <a href="https://doi.org/10.1063/5.0240627">https://doi.org/10.1063/5.0240627</a> |

| S.No. | Faculty Name       | Title of Paper  | Name of Journal/Conference                             | SCI/ESCI/Scopus Indexed | Year | DOI/ISSN                                 |
|-------|--------------------|---|--|-------------------------|------|--|
| 11    | Dr. Naveen Kumar   | Evaluation of microstructural and mechanical qualities in optimised TIG-welded SDSS 2507 joints   | Materials Science-Poland                               | SCIE                    | 2024 | 10.2478/msp-2024-0051                    |
| 12    | Dr. Naveen Kumar   | Analysis of microstructure and microhardness of aluminum alloy melt for grain refinement by twin-roll casting                               | Journal of Materials Science: Materials in Engineering | ESCI/SCOPUS             | 2025 | 10.1186/s40712-025-00211-0               |
| 13    | Dr. Naveen Kumar   | An extensive analysis of GTAW process and its influence on the microstructure and mechanical properties of SDSS 2507                        | Journal of Materials Research and Technology           | SCIE                    | 2024 | 10.1016/j.jmrt.2024.11.157               |
| 14    | Dr. Naveen Kumar   | Evolution of Surface Morphology and Mechanical Characterization of GTAW Welded SDSS Thin Sheets   | Results in Surfaces and Interfaces                     | Scopus                  | 2025 | 10.1016/j.rsurfi.2024.100412             |
| 15    | Dr. Naveen Kumar   | Investigation of stress and wear analysis for Aluminum-based Metal Matrix Composite Reinforced Silicon Carbide using ANSYS software package | Recent Patents on Mechanical Engineering               | Scopus                  | 2025 | 10.2174/0122127976334635240904<br>114812 |
| 16    | Mr. Sanjay Awasthi | Zirconia based hydrophobic coatings exhibiting excellent durability for versatile use   | J. Electrochem. Sci. Eng. 00(0) (2024) 000-000         | ESCI                    | 2024 | 10.5599/jese.2259                        |
| 17    | Mr. Sanjay Awasthi | An Overview of Surface Coating Methodologies and Their Use in Technical Materials   | Journal of Polymer & Composites-STM journals           | ESCI WOS                | 2024 | ISSN :2321-2810                          |
| 18    | Mr. Sanjay Awasthi | Preparation of transparent and thermal resistant zirconia reinforced epoxy based polymer matrix composite coatings                          | Journal of Polymer & Composites - STM journals         | ESCI WOS                | 2025 | ISSN :2321-2810                          |
| 19    | Mr. Gaurav Verma   | Utilization of LPG gas in the construction of a refrigerator  | AIP Conf. Proc   | conferance, Scopus      | 2025 | 10.1063/5.0240627                        |
| 20    | Mr. Gaurav Verma   | Aluminum Based Types of Hydrophobic Coatings for Engineering Materials: A Review  | JOPC   | ESCI                    | 2024 | 10.37591/JoPC                            |