Dr. S. N. Jaiswal

International Journal

1. **Jaiswal, S.N.**, Pandey, B.P., Mishra, N. et al., "External electric field impact on electronic properties of CO_2-adsorbed 2D $MoSe_2$ monolayer**",** ***Pramana – Journal of Physics****,* vol.97, pp. 140 (2023). **DOI:** https://doi.org/10.1007/s12043-023-02613-1 **(Impact Factor: 1.8)**

2. **Jaiswal, S.N**., Pandey, B.P., "Impact of in-plane electric field on the optical properties of CO_2 adsorbed 2D $MoSe_2$ monolayer: application as a photodetector**."** ***Journal of Computational Electronics*** (2024). **DOI:** https://doi.org/10.1007/s10825-024-02233-x **(Impact Factor: 2.2)**

3. **Jaiswal, S.N.**, Pandey, B.P., Mishra, N. et al., "Improved Gas Sensing Properties of Copper-Doped $MoSe_2$ Monolayers: A First-Principles Study on CO_2 and NO_2 Adsorption," **Physica Scripta**, 1402-4896 (2024), **DOI:** http://iopscience.iop.org/article/10.1088/1402- 4896/ad8a03 **(Impact Factor: 2.6)**

4. **Jaiswal, S.N.,** Pandey, B.P., Mishra, N. *et al.* Study of catalytic behaviour for TM (Mn, Fe, Co, Cu, Ni, Zn)-doped $MoSe_2$ monolayer using first-principles DFT approach. ***Indian Journal of Physics*** **(2026). DOI:** https://doi.org/10.1007/s12648-026-03971-3 (**(Impact Factor: 1.7)**

International Conferences/ Book Chapters

1. **Jaiswal, S.N.**, Pandey, B.P. (2026). Adsorption of CO_2 on Ta-Doped $MoSe_2$ Monolayer: A First-Principles Study. In: Kumar, D., Kumar, S. (eds) **VLSI, Microwave and Wireless Technologies. ICVMWT 2024**. Lecture Notes in Electrical Engineering, vol 1484. **Springer,** Singapore. **DOI:** https://doi.org/10.1007/978-981-95-2584-3_46

2. Gupta, S., Pandey, B.P., Kumar, D., **Jaiswal, S.N.** (2026). Analyzing Optical Characteristics of Monolayer $MoSe_2$ with Ta Doping Using DFT Method. In: Kumar, D., Kumar, S. (eds) **VLSI, Microwave and Wireless Technologies. ICVMWT 2024.** Lecture Notes in Electrical Engineering, vol 1484. **Springer,** Singapore. **DOI:** https://doi.org/10.1007/978-981-95-2584-3_68

3. G. K. Jaiswal, B. P. Pandey, R. K. Chauhan, N. Mishra, **S. N. Jaiswal** and S. Gupta, "Study and Analysis of NO2 Gas Sensing Using PdDoped WS2 Monolayer: A First-Principle Approach," *2025* ***International Conference on Electrical and Electronics Engineering (ICE3)***, Gorakhpur, India, 2025, pp. 1-6, **DOI:** doi: 10.1109/ICE367573.2025.11448810.

FDP
▪ 1-week ((02-06 JULY 2019) FDP in **IIT Kanpur** on "Introduction to Basic Electrical Engineering".
▪ One-week (03-07 JANUARY 2020) short term course on "Recent Advances in Devices, Circuits and Communication" (RADCC-2020) in **MMMUT Gorakhpur.**
▪ One-week (10-14 JUNE 2025) Faculty Development Program in NIELIT Gorakhpur on "Latest Trends in Cyber Security".

Mr. Anoop Kumar Srivastava

Publications:

1. Radio Continuum Studies of Halos of Edge on Disk Galaxies Astronomical Society of the Pacific Conference Series page 216 Vol 402 Year 2009
2. Radio Continuum Studies of Wolf-Rayet Galaxies Astronomical Society of the Pacific Conference Series page 212 Vol 402 Year 2009 (Contributed)

Mr. Pawan Kumar Sen

Publications:

1. Performance Evaluation of AC-Motor Drives Through Matrix Converter – An Indirect Space Vector Modulation Approach. (ISSN: 2231-1963, Vol. 1, Issue 3, pp.145-161, IJAET).
2. Performance Investigation of SVPWM Voltage Source Inverter Fed Induction Motor Drive under Different Loading Condition. (RAEPESM2011, 25-26 March 2011, pp. 146-149).
3. Career Frequency Selection of Three Phase Matrix Converter. (ISSN: 2231- 1963, Vol. 1, Issue 3, pp.41-54, IJAET).
4. Transient Performance Investigation of Vector Controlled Z-Source Inverter Fed Induction Motor Drive. (Sunder Deep Engineering College Ghaziabad – Conference).
5. Comparative Study of Proportional-Integral and Proportional-IntegralDerivative (PI and PID) Controllers for Z-source Inverter-fed Induction• Motor Drive. (ICPCES-conference 2012, MNIT ALLAHABD).
6. Analysis on Experimental Values of Bend Loss by OTDR. (IJETEE-ISSN: 2320-9569, VOL.-1, Issue-4, JUNE-2013).

Mr. Shyam Bihari Lal

Publications:

1. Fatigue Analysis of Connecting Rod using ANSYS Code, S.B. Lal, A. Tevatia and S.K. Srivastava, International Journal of Mechanics and Solids, ISSN: 0973-1881, vol. 5, n 2, pp. 143-150, 2010.
2. Finite Element Fatigue Analysis of Connecting Rods of Different Cross-Sections, A. Tevatia, S.B. Lal and .K. Srivastava, International Journal of Mechanics and Solids, ISSN: 0973-1881, vol. 6, n 1, pp. 45- 53, 2011.
3. Stress analysis and optimization of connecting rod using finite element analysis, Yogesh Kumar Bharti, Vikrant Singh, Afsar Hussain, Dipanshu Singh,Shyam Bihari Lal, Satish Kumar Dwivedi, International Journal of Scient ific & Engineering Research, Volume 4, Issue 6, June-2013 1796 ISSN 2229-5518
4. Stress Analysis Of Connecting Rod Of Tractor With Weight Optimization, Yogesh Kumar Bharti Vikrant Singh, Dipanshu Singh, Afsar Hussain, Shyam Bihari Lal,Vineet Kumar Tripathi, International Journal of Engineering Research & Technology (IJERT) Vol. 2 Issue 4, April - 2013ISSN: 2278-0181
5. Stress analysis spur gear design by using ansys workbench, Pradeep Kumar Singh, Manwendra Gautam , Gangasagar and Shyam Bihari Lal, International Journal Mechanical engineering and Robotics Research Vol. 3, No. 3, July 2014 ISSN 2278 – 0149
6. Design and Analysis of the Pressure Vessel, Sandeep Gond, Akhilesh, Anoop Singh, Vinod Sharma, Shyam Bihari Lal, International Journal of Scientific & Engineering Research, Volume 5, Issue 4, April2014 ISSN 2229-5518
7. Finite Element Analysis of Disc Brake for Aluminium Alloys , Abhishek Kumar Tiwari, Akhilesh Kumar Tiwari, Pramod Yadav, Harigovind Singh Yadav, Shyam Bihari Lal, International Journal of Scientific & Engineering Research, Volume 5, Issue 4, April-2014 ISSN 2229-5518
8. FEA of the crankshafts Design by using Ansys workbench For nickel chrome steel and structural steel, Ashwani Kumar Singh, Praveen Kumar Singh, Akash KumarTripathi, Ajeet Yadav, Shyam Bihari lal, International Journal of Scientific & Engineering Research, Volume 5, Issue 4, April-2014 ISSN 2229-5518
9. Stress Analysis Spur Gear Design By Using Ansys Workbench, Pradeep Kumar Singh, Manwendra Gautam, Gangasagar, Shyam Bihari Lal, International Journal of Scientific & Engineering Research, Volume 5, Issue 4, April-2014 ISSN 2229-5518
10. Finite Element Analysis Of Disc Brake By ANSYS Workbench, Abhishek Kumar Tiwari, Akhilesh Kumar Tiwari,Pramod Yadav,Harigovind Singh Yadav, Shyam Bihari Lal, IJREAT International Journal of research in Engineering & Advanced Technology, Volume 2, Issue 2, Apr-May, 2014 ISSN: 2320 – 8791
11. Stress Analysis Of Connecting Rod Using Finite Element Method, Digvijay, Mohd.Ahmad, Ajay Mishra,Karunakar Mishra,Alok Panday, Shyam Bihari Lal, IJREAT International Journal of Research in Engineering & Advanced Technology, Volume 2, Issue 2, Apr-May, 2014 ISSN: 2320 – 8791
12. FEA of Connecting Rod of Tractor of I and Ellipsoidal section and Weight Optimization, Vineet Kumar tripathi , Shyam Bihari Lal, National Conference on Challenges of Efficient Energy Technology for Clean Energy-21st Century at Eshan College of Engineering, Farah, Mathura during 23-24, May, 2013. ISBN No is 9789382880691
13. Stress analysis and optimization of connecting rod of + and Ellipsoidal sections using finite element analysis, Vineet Kumar Tripathi, Om Prakash Sahani, Furkanullah, Gangasagar, Satish Kumar Dwivedi, Shyam Bihari Lal, National Conference on Challenges of Efficient Energy Technology for Clean Energy-21st Century at Eshan College of Engineering, Farah, Mathura during 23-24, May, 2013. ISBN No is 9789382880691
14. Spur gear design and stress analysis by using ansys workbench, Pradeep Kumar Singh, Manwendra Gautam, Gangasagar, Shyam Bihari Lal, National Conference on “Synergetic Trends in Engineering and Technology : Impact on Industry and Society (STET-2014)” during April 25-26, 2014.

Mr. Maneesh Singh

Publications:

1. **Maneesh Singh,** Prashant Saini, Divyanshi Srivastava, Srishti Mishra, Saif Nawaz Ahmad. Effect of *n*-pentanol with novel water hyacinth biodiesel-diesel ternary blends on diesel engine performance and emission characteristics. Vietnam Journal of Chemistry 2024;62(6):780-791. https://doi.org/10.1002/vjch.202300383

2. **Maneesh Singh,** Prashant Saini, Priyankesh Kumar. Production of Biodiesel from water hyacinth weed and testing of its blends on CI engine. YMER 2025;24(6):1877-1890. https://doi:10.37896/YMER24.06/G0

3. **Maneesh Singh,** Prashant Saini, Srishti Mishra. Novel study on implication of butanol oxygenated additive with water hyacinth biodiesel to investigate the performance and emission parameters. Accepted by Journal of Thermal Engineering on 20 November 2025. Manuscript ID: JTEN-2025-1037.

4. **Maneesh Singh,** Prashant Sainia, ChandrakantMishraa, Saif Nawaz Ahmada. Implication of SiO_2 nanoparticles with novel water hyacinth biodiesel-diesel blends to improve the performance and emission parameters of diesel engine. Accepted by Archives of thermodynamic on 03 December 2025. Manuscript ID: AOT-00847-2025-03.

Dr. Rajan Kumar Dubey

Publications:

1. A SIQRV Mathematical Model on Covid-19 Investigating the Combined Effect of Vaccination and Lockdown to Control the Spread of Covid-19. Rajan Kumar Dubey and Rajesh Pandey. IJFANS International Journal of Food and Nutritional Sciences. 2023 December; 12(5):2835-2850. doi: 10.48047/ijfans/v12/i1/292.
2. A SIQRV Mathematical Model on Covid-19 Investigating the Combined Effect of Vaccination and Lockdown to Control the Spread of Covid-19. Rajan Kumar Dubey and Rajesh Pandey. IJFANS International Journal of Food and Nutritional Sciences. 2023 December; 12(5):2835-2850. doi: 10.48047/ijfans/v12/i1/292.
3. Mathematical Strategies Using Differential Equations for Controlling Nipah Virus and COVID-19: A Combined Study. Rajan Kumar Dubey and Rajesh Pandey. Tuijin Jishu/Journal of Propulsion Technology. 2024 July; 45(3):250-264. doi: https://doi.org/10.52783/tjjpt.v45.i03.7106.
4. Modelling COVID-19 Dynamics with a Double Dose Vaccination Strategy in India and Its Potential Influence on the Emergence of Future Diseases. Jitendra Rajbhar, A.K. Jaiswal and Rajan Kumar Dubey. Tuijin Jishu/Journal of Propulsion Technology. 2024 July; 45(3):2089-2108. doi: https://doi.org/10.52783/tjjpt.v45.i03.7106.
5. An SIQVR Mathematical Model on COVID-19 with Virus Population in the Environment: A Case Study of India Jitendra Rajbhar, A.K. Jaiswal and Rajan Kumar Dubey. Tuijin Jishu/Journal of Propulsion Technology. 2024 April; 45(2): 6535-6547. doi: https://doi.org/10.52783/tjjpt.v45.i03.7106.
6. Impact of Micropolar Fluid Model for Blood Flow in Small Vessels. Arun kumar Pandey, Rajan Kumar Dubey and V.K.Chaubey. Impact of Micropolar Fluid Model for Blood Flow in Small Vessels. Kronika Journal. 2025 December; 25(12):377-388. doi: https://doi.org/10.5281/zenodo.18034261.
7. A mathematical model on COVID-19 studying the efficacy of testing to control the epidemic. Rajan Kumar Dubey, Rajesh Pandey and Jitendra Rajbhar Impact of Micropolar Fluid Model for Blood Flow in Small Vessels. Kronika Journal. 2025 December; 25(12):414-434. doi: https://doi.org/10.5281/zenodo.18034261.
8. The Future Scope of Artificial Intelligence: Opportunities, Challenges, and Impacts on Society Ujjawal Chaudhary and Rajan Kumar Dubey. Buddha Journal of Social Science and Technology (BJSST), Issue-1, Volume-1 (2025).