

RDC Quarterly Report

(January-March, 2024)

1. Journals / Book Chapter/Conf. Proceedings Publications

| Sr. No. | Faculty Name | School/Depa rtment | Name of Journal/Bo ok/Confere nce | Title of the Paper/Book Chapter | Month of Publication |
|------------|------------------------|-----------------------|---|---|-------------------------|
| 1 | Prof. Aakash Pandey | Mechanical | Internationa 1 Journal of Coal Preparation and Utilization | Impact of anthracite blending and SDS addition on slurry ability and stability of Indian high ash coal water slurry | January |
| 2 | Dr. Mithilesh Sahu | Mechanical | Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy | A numerical study on effect of intra and inter spaced winding configuration on performance of oil forced transformer cooling system | January |
| 3 | Dr. Mithilesh Sahu | Mechanical | Indian Journal of Engineering and Materials Sciences (IJEMS) | Implementation of Total Productive Maintenance to Improve Productivity of Rolling Mill | February |
| 4 | Dr. Saroj Kumar | Mechanical | IEEE Xplore | Implementation of Trajectory Control Algorithm in a Dynamic Environment | February |



| 5 | Dr. Mithilesh Sahu | Mechanical | Internationa I Journal of Advanced Technology and Engineering Exploration (Published by Accent Social and Welfare Society, India) | Implementation of lean manufacturing methods to improve rolling mill productivity | March |
|---|----------------------------------|------------|---|--|---------|
| 6 | Dr. Mukesh Shyamkant Desai | Mechanical | Industrial Engineering Journal | Application of Modified Single lustrial Minute Exchange of Die for the gineering Reduction of Ambulance | |
| 7 | Prof. Neeraj Kumar Verma | Metallurgy | Journal Of Materials Research and Technology | Taguchi optimized wear and self- lubricating properties of Al-alloy composite reinforced with hybrid B4C–MoS2 particulates. | January |
| 8 | Dr. M Kalyan Phani | Metallurgy | Int J Conf Proc. | Welding Processes in Advanced Manufacturing. | March |
| 9 | Dr. Sandeep Biswal | EE | INTERNAT IONAL JOURNAL OF EMERGIN G ELECTRIC POWER SYSTEMS | A Differential Amplitude Variation Based Pilot Relaying Scheme for Microgrid Integrated Distribution System | March |



| 10 | Dr. Sandeep Biswal | EE | ECTI Transaction s on Electrical Engineering , Electronics, and Communica tions | Technical Indices Evaluation of Radial Distribution Network with Optimally Allocated DGs and Capacitors | March |
|----|--|-------|--|--|---------|
| 11 | Dr. Sandeep Biswal | EE | "Energy and Environmen tal Aspects of Emerging Technologie s for Smart Grid" Springer | Directional Relaying Issues in Power Transmission Networks | January |
| 12 | Dr. R D Patidar, Dr. S D Swain, and Dr. Sandeep Biswal | | "Energy and Environmen tal Aspects of Emerging Technologie s for Smart Grid" Springer | Performance of Grid-Connected Shunt Active Filter Equipped PV System | January |
| 13 | Dr. Sandeep Biswal | EE | "Energy and Environmen tal Aspects of Emerging Technologie s for Smart Grid" Springer | Optimal Location Selection of Electric Vehicle Charging of Electrical Engineering Stations and Capacitors in Radial Distribution Networks using GJO Algorithm | January |
| 14 | Dr. Anurag Sharma | Civil | 2nd National Conference on Socio- economic Perspective | Expert-Based Techniques for Sustainable Solutions for Landslide Hazards: A Review | March |



| | | | on Sustainable Managemen t of Water (SPSMW - 2024) | | |
|----|----------------|-----|---|--|---------|
| 15 | Dr. Amit Jain | CSE | 3rd IEEE Internationa I Conference on Smart Generation Computing, Communica tion and Networking held at Bangalore on 29-31 Dec. 2023. | DeepFake Videos Detection and Classification Using Resnext and LSTM Neural Network, | January |
| 16 | Dr. Amit Jain | CSE | 3rd IEEE Internationa l Conference on Smart Generation Computing, Communica tion and Networking held at Bangalore on 29-31 Dec. 2023. | Analysis and Mitigation of DDOS Vulnerabilities in Cloud Computing | January |
| 17 | Dr. Arti Vaish | CSE | 3rd Internationa I Conference on Computatio | Quantum field current modelling in a semiconductor, 3rd International Conference on Computational Electronics for Wireless Communications, 22-23 | January |



| | | | nal Electronics for Wireless Communica tions, 22-23 December 2023, NIT Jalandhar. | December 2023, NIT Jalandhar, LNNS springer. | |
|----|----------------|-----|---|--|---------|
| 18 | Dr. Arti Vaish | CSE | 3rd Internationa 1 Conference on Computatio nal Electronics for Wireless Communica tions, 22-23 December 2023, NIT Jalandhar. | A finite element technique for approximately solving for the electromagnetic field within a cavity resonator, 3rd International Conference on Computational Electronics for Wireless Communications, 22-23 December 2023, NIT Jalandhar, LNNS springer | January |
| 19 | Dr. Arti Vaish | CSE | 3rd Internationa I Conference on Computatio nal Electronics for Wireless Communica tions, 22-23 December 2023, NIT Jalandhar. | A lightweight encryption method for preserving E- Health care data privacy using dual signature on twisted Edwards Curves, Springers 5th International Conference on Computer and Communication Technologies (IC3T-2023), KITS, Warangal. | January |
| 20 | Dr. Amit Jain | CSE | ABDC Indexed Journal, Journal of | Data Mining based Framework for Organizational Financial Management | January |



| | | | Informatics Education and Research | | |
|----|--|-----|---|---|----------|
| 21 | Dr. Amit Jain | CSE | Intellectual Property India | Artificial Intelligence Based Apparatus for Home Automation Management | February |
| 22 | Dr. Umashankar Ghugar & Dr. Bhupesh Kumar Dewangan | CSE | IEEE Explore | A Compressive Study on Detection Accuracy Model for DoS Attack in SDN Using Ensemble Learning Techniques | February |
| 23 | Dr. Umashankar Ghugar | CSE | IEEE Explore | IoT-Based Smart Irrigation System for Optimal Water- Resource Utilization in Indian Agriculture | February |
| 24 | Dr. Rakesh Nayak & Dr. Umashankar Ghugar | CSE | SCOPUS | Exploring The Security Landscape: A Comprehensive Analysis Of Vulnerabilities, Challenges, And Findings In Internet Of Things (IoT) Application Layer Protocols | February |
| 25 | Dr. Narendra Kumar Dewangan | CSE | 19th Chhattisgar h Young Scientists Congress (CYSC- 2024) | Prevention of De-Identification Attack on Blockchain-based E Voting using Homomorphic Encryption | February |
| 26 | Dr. Narendra Kumar Dewangan | CSE | Taylor and Franicis | Geolocation- Based Smart Land Registry Process with Privacy Preservation Using Blockchain Technology and IPFS | March |
| 27 | Dr. Umashankar Ghugar | CSE | SCOPUS | Performance Assessment of Different Sustainable Energy Systems Using Multiple-Criteria | March |



| | | | | Decision-Making Model and Self- Organizing Maps | |
|----|-----------------------------------|-----|--|--|-------|
| 28 | Prof. Asimkiran Dandapat | CSE | SCI Indexed Journal, Springer | Design of Intrusion Detection System using GA and CNN for MQTT-based IOT Networks | March |
| 29 | Dr. Narendra Kumar Dewangan | CSE | SCOPUS | Development of a Secure and Transport Blockchain for Electricity Bill Management in Smart Cities Using Enhanced Proof of Energy Consumption | March |
| 30 | Dr. Bhupesh Kumar Dewangan | CSE | SCOPUS | Continous hand gesture segmentation and acknowledgement of hand gesture path for innovative effort interfaces | March |
| 31 | Dr. Bhupesh Kumar Dewangan | CSE | Nonlinear Studies, SCOPUS | Assessment of respiratory disorders using MFCC and LPC applied to machine learning algorithms. Nonlinear Studies, 31(1) | March |
| 32 | Dr. Bhupesh Kumar Dewangan | CSE | Internationa 1 Conference on Computer & Communica tion Technologie s | Comparative Analysis of ARIMA Time Series Model and Other Techniques for Cloud Workloads Performance Prediction. In the International Conference on Computer & Communication Technologies (pp. 343-350). Singapore: Springer Nature Singapore. | March |
| 33 | Dr. Bhupesh Kumar Dewangan | CSE | Internationa 1 Conference on Computer & Communica tion | Reinforcement Learning Approach to Solve: PBL Markov Model. In International Conference on Computer & Communication Technologies (pp. | March |



| | | | Technologie s | 333-342). Singapore: Springer Nature Singapore. | |
|----|---|-----|--|--|----------|
| 34 | Dr. Bhupesh Kumar Dewangan | CSE | Internationa 1 Conference on Computer & Communica tion Technologie s | A Lightweight Encryption Method for Preserving E-Healthcare Data Privacy Using Dual Signature on Twisted Edwards Curves. In International Conference on Computer & Communication Technologies (pp. 69-82). Singapore: Springer Nature Singapore. | March |
| 35 | Dr. R. S. Singh | SoS | Langmuir | Influence of Nano-CeO2 and Graphene Nanoplatelets on the Conductivity and Dielectric Properties of Poly(vinylidene fluoride) Nanocomposite Films | January |
| 36 | of English | | in Ink: An Anthology | Establishing Sustainable Human- Nature Interaction Today, Tomorrow and Beyond: An Ecotopian Reading of Amitav Ghosh's The Living Mountain: A Fable of Our Times | January |
| 37 | Dr. S. Jeswani SOM - Indian Journal of Manageme | | Prabhandan - Indian Journal of Managemen t | The Underlying Motivational Process Behind Faculty Members' Voice Behavior: An Experimental Design | February |
| 38 | Dr. Saurabh Gupta | SOM | The Case Journal | Millet Magic Foundation: A Social Initiative for Alleviating Poverty of the Indigenous Tribes of Mayurbhanj | February |
| 39 | Dr. Sukanta Sahoo | SOM | Book | Services Marketing in Health Care Sector – A case Approach | March |



| 40 | Dr.H.Vaishnaw | SOM | Journal of Informatics Education and Research | Key Success Factors of Technology-Driven Startups in India: An Empirical Study | February |
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| 41 | Dr.H.Vaishnaw | SOM | European Economic Letters | Employer Branding Tactics for Elevating Attractiveness in Recruitment | February |
| 42 | Dr.H.Vaishnaw | SOM | Journal of Informatics Education and Research | Exploring Student's Perception of Employability Training | January |
| 43 | Dr. Saurabh Gupta | SOM | Journal of Enterprising Communitie s: People and Places in the Global Economy | Drivers of Indigenous Entrepreneurship: An Empirical Investigation of Indian Tribal Youth | January |

2. IP Publications

| Sr. No. | IP Registration Number | Name of Faculty | School/Dep artment | File Date | National /Internat ional | Status |
|---------|------------------------------|--|-----------------------|----------------|--------------------------------|-----------|
| 1 | 379249-001 | 1. Dr RD Patidar 2. Dr G Madhusudhana Rao 3. Dr Sushree Diptimayee 4. Mr Prashanta Kumar Jena 5. Shashikanth Kaushaley 6. Mr. Rakesh Patidar 7. Mr Kapol Nashine | EE | 13/02/ 2024 | National | Published |
| 2 | 202421011347 | Dr. R.D. Patidar, Dr. S.S. Chakrabarti, Dr. Deepayan | Mech, EE, Civil | 19/02/ 2024 | National | Published |



| | | Priyadarshi, Mr. Bhakta Kumar Sethi and Dr. Satish Kanhed | | | | |
|---|--------------|---|-----|----------------|----------|-----------|
| 3 | 202421006581 | Dr. Rekha Sharma | SOM | 31/01/ 2024 | National | Published |

3. Details of Seed Money Grants:

| S. No. | Project Title | Investigators | Department | Sanctione d Date | Amount Sanctioned | Remarks |
|-----------|---|---|------------|---------------------|----------------------|---|
| 1 | Development and characterization of Cement less alkali activated Controlled Low Strength Material (CLSM) using industrial waste-A state of art of sustainable development for industrial perspectives. a. Project Summary (in 200 words only): Controlled | Dr. Mahashakti | CIVIL | 15/12/2022 | 30000/- | Awaiting Completion Report |
| 2 | Development of low- cost PV cooling technology by application of fly ash as insulating material | Dr. Kuber Nath and Dr. Siddharth Chakrabarti | Mechanical | 14/10/2022 | 25000/- | Phase – I report submitted and Phase – II work worth Rs. 10000/- is sanctioned on 22/02/2024 |
| 3 | Microstructural and tribological performance of | Dr. Nidhi and Dr. Vatsala | Metallurgy | 14/10/2022 | 30000/- | Awaiting Completion Report |



| | Cu/NbC nano composites through powder metallurgy route | | | | | |
|---|--|----------------------|------------|------------|---------|------------|
| 4 | Development of Arduino Nano based Circuit for Cassette AC | Mr. Kapol Nashine | Electrical | 20/02/2024 | 63000/- | Sanctioned |

4. RDC events:

A felicitation ceremony has been organized to honor the research contribution of Dr. S. Das, steel chair Professor and Head, Metallurgical Engineering. He has been listed in the Top 2% scientists of the world as per the latest research survey by the Standford University. The ceremony was graced by the Hon'ble Vice Chancellor of OPJU, Dr. R.D. Patidar.

