



**JHARKHAND**  
**Rai University**  
RANCHI

**खनन**

**DEPARTMENT OF  
MINING ENGINEERING**

**KHANAN**

**Volume No.-IV Issue -II**

**In This Issue**

- Faculty Members
- Guest on Campus
- Industrial Exposure
- Student Achievement
- Success Story
- Faculty Corner

**Bi-Annual  
Magazine**

# Editorial Board

---

**Editor-in-Chief**

**Sumeet Kishore**

Assistant Professor,  
Jharkhand Rai University, Ranchi

**Associate Editors**

**Dr. Jai Prakash Meena**

Assistant Professor,  
Jharkhand Rai University, Ranchi

**Dr. Vineeta Kumari**

Assistant Professor,  
Jharkhand Rai University, Ranchi

**Designer**

**Mr. Soumik Mitra**

Creative Head,  
Jharkhand Rai University, Ranchi

# From Editor's Desk

***Every milestone achieved is  
a foundation laid for  
greater heights ahead.***

Dear Readers,

## **Greetings from the Department of Mining Engineering!**

It is with immense pride and a shared sense of accomplishment that we present the July–December 2025 edition of our departmental newsletter. This period has been more than just a sequence of academic months; it has been a testament to the resilience, intellectual curiosity, and pioneering spirit of our mining community.

As the global landscape of resource extraction shifts toward a more conscientious and technologically integrated model, our department has not merely kept pace—we have led the charge.

This issue serves as a vibrant archive of that journey.

### **Cultivating Excellence in Research and Academia**

The latter half of 2025 saw our faculty and students pushing the boundaries of what is possible in the mineral sector. Our Impactful Research section highlights breakthroughs in Green Mining and carbon-neutral extraction techniques, proving that “sustainability” is not just a buzzword here, but a rigorous scientific pursuit. From securing prestigious national grants to publishing in top-tier journals, the academic milestones recorded in these pages reflect a department that is a true hub of intellectual rigor.

### **Bridging the Gap: Industry Relevance and Hands-on Learning**

We believe that the best mining engineers are forged both in the laboratory and in the field. This semester, our Expert Talk Series brought the boardroom to the classroom, featuring insights from global industry leaders on the “Critical Minerals” boom and the rise of Mining 4.0.

Furthermore, our students have engaged in unprecedented Hands-on Learning opportunities. Whether through immersive site visits to automated mines or advanced simulations using AI-driven mine planning software, our curriculum remains fiercely relevant to the evolving demands of the global market.

### **A Culture of Collaboration and Innovation**

Beyond the technical data and research papers, this newsletter celebrates our Collaborative Spirit. The success of our recent technical symposiums and student-led hackathons underscores a vital truth: innovation thrives in an environment of shared ideas. We continue to champion an ecosystem where students, faculty, and industry partners work in tandem to solve the most pressing challenges of our time.

### **Looking Ahead**

As we close the chapter on 2025, our gaze is fixed firmly on the horizon. The road ahead requires us to be even more adaptive and visionary. We remain steadfast in our commitment to producing not just skilled engineers, but ethical leaders who will steer the mining industry toward a more sustainable and efficient future.

We hope this edition inspires you as much as the achievements within it have inspired us. Thank you for being an integral part of our journey toward excellence.



**Sumeet Kishore**  
Editor,  
Departmental Newsletter  
Department of Mining Engineering

# Faculty Members



**Prof. D. P. PANDEY**  
Head Deptt. of Mining Engineering  
Former Chief General Manager CGM, CMPDI, Ranchi



**Dr. Sumit Pandey**  
Associate Professor  
& Dean Academics



**Dr. Ved Prakash Singh**  
Associate Professor  
& Controller of Examination



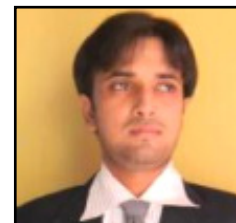
**Dr. Vineeta Kumari**  
Assistant professor,  
Deptt. of Mining Engineering



**Dr. Arindam Ghosh**  
Associate Professor,  
Deptt. of Mining Engineering



**Dr. Jai Prakash Meena**  
Assistant Professor,  
Deptt. of Mining Engineering



**Sumeet Kishore**  
Department Coordinator,  
Deptt. of Mining Engineering



**Chandan Kumar**  
Assistant professor,  
Deptt. of Mining Engineering



**Kunal Shahdeo**  
Assistant professor,  
Deptt. of Mining Engineering



**Somnath Kumar Rishi**  
Assistant professor,  
Deptt. of Mining Engineering

## Lecturers - Deptt. of Mining Engineering



**Kamakhaya Narayan**



**Sudhakar Kumar Ravi**



**Rajesh Pandey**



**Ranjeet Kumar**

# Guest on Campus

## Digging Deep into Careers: CIL Inspires the Next Generation of Mining Technocrats!

The Department of Mining Engineering at Jharkhand Rai I University hosted an inspiring and informative session for Semester I Diploma Mining students, led by Ms. Sunita Mehta, General Manager (P & A), CMPDIL, Ranchi.

The session, titled “Career Scope in Coal India Limited for Mining Technocrats,” offered students a comprehensive look into the vast and evolving career opportunities within Coal India Limited (CIL)—one of India’s largest public sector undertakings.

Ms. Mehta highlighted the increasing demand for skilled professionals not only in Mining Engineering but also in Computer Science and digital domains, reflecting CIL’s shift toward technology-driven operations and digital transformation. From on-ground mining operations to data-driven decision-making and IT-enabled systems, she showcased the diverse and dynamic roles awaiting young technocrats.



## Jharkhand Rai University Sparks Innovation Through IPR Awareness Seminar



Jharkhand Rai University hosted an engaging seminar titled “Decoding Intellectual Property Rights: A Gateway to Innovation,” aimed at sensitizing students and researchers to the importance of Intellectual Property Rights (IPR) in today’s knowledge-driven economy.

The highlight of the event was an insightful session by Mr. Lokesh Kumar Meena, Assistant Controller of Patents and Designs, Patent Office, Kolkata, who emphasized the role of IPR in fostering innovation, entrepreneurship, and national development.

The seminar marked a significant step toward nurturing a culture of innovation, creativity, and legal awareness within the academic community of Jharkhand.

## Mining the Future: Where Innovation Meets Engineering at JRU

The Department of Mining Engineering, Jharkhand Rai University hosted an expert talk titled “Innovation Transforming Mining Engineering: Future Trends & Technologies,” offering students a glimpse into the rapidly evolving world of modern mining.

Convened by Mr. Sumeet Kishore, the session featured Mr. Jagnath Sangwa, Assistant Manager, CMPDIL, who shared industry-driven insights on advanced technologies, digitalization, automation, and sustainable mining practices. The talk bridged the gap between classroom learning and real-world applications, inspiring students to explore emerging career and research opportunities in the mining sector. The interactive discussion made the session both informative and impactful, reinforcing the university’s commitment to future-ready technical education.



# Guest on Campus

## Powering the Nation from the Ground Up: Mining Engineering in the Spotlight at JRU



Jharkhand Rai University successfully organized an expert talk titled “Mining Engineering: An Emerging Booming Industry in India” at its Namkum campus, offering students valuable insights into one of the country’s fastest-growing industrial sectors.

The session featured Mr. Saikat Sadhukan, Assistant Manager, CMPDI, who highlighted current industry trends, technological advancements, and the rising demand for skilled mining professionals. He emphasized the crucial role of mining engineers in national development and sustainable resource management, inspiring students to view the sector as a promising and impactful career path.

The interactive discussion enabled students to gain clarity on career opportunities in mining engineering. The event concluded with a vote of thanks by Mr. Sumeet Kishore, who appreciated the speaker’s valuable insights and encouraged students to actively explore opportunities in this expanding industry.

## Charting Careers Beneath the Surface: Mining Opportunities Unveiled at JRU

Jharkhand Rai University organized an expert talk on “Career Prospects & Scope in the Mining Industry” at its Namkum campus, aimed at guiding students toward successful careers in the mining sector.

The session was led by Mr. Thota Anil Kumar, Assistant Manager, CMPDI, who shared practical insights into evolving industry trends, diverse professional roles, and essential skill sets required in today’s mining industry. Drawing from real-world experiences at CMPDI, he offered students a clear and relatable perspective on career growth opportunities.

An engaging interaction with students made the session highly impactful. The event concluded with a vote of thanks by Mr. Sumeet Kishore, who appreciated the speaker’s valuable guidance and encouraged students to explore the wide-ranging opportunities within the mining domain.



## Saving Lives, One Beat at a Time: CPR Awareness Workshop at JRU



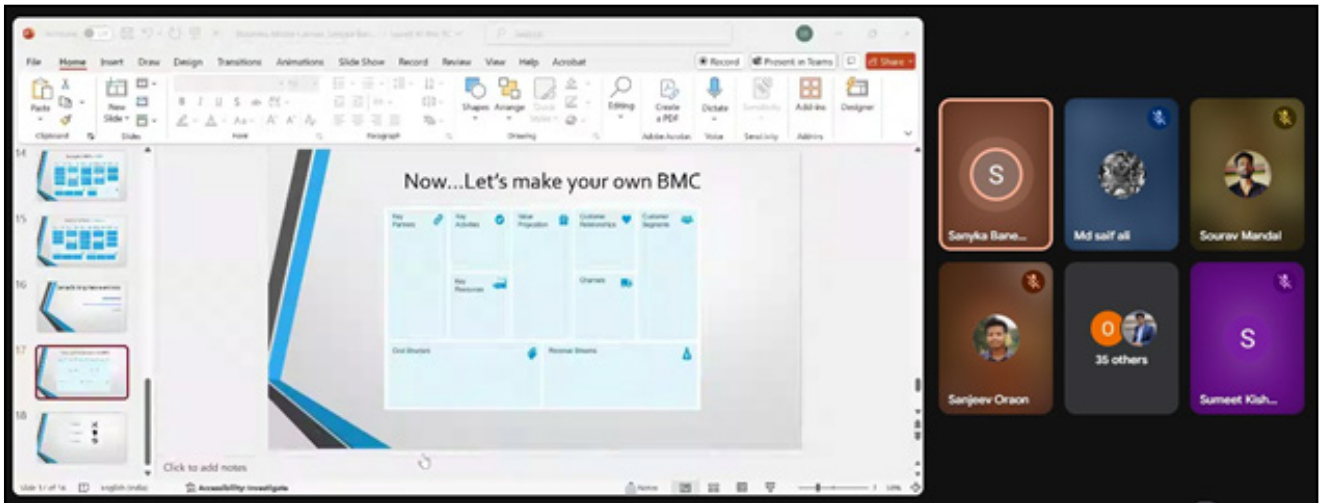
The Department of Mining Engineering, Jharkhand Rai University, in association with St. John Ambulance Hospital, organized a CPR Awareness Workshop to equip students with essential life-saving skills. The session was conducted by Mr. P. Bhaskar Rao, Training Coordinator, St. John Ambulance, Jharkhand.

The workshop highlighted the importance of timely first aid and CPR in emergencies. Mr. Rao demonstrated CPR techniques, chest compressions, and basic first-aid procedures, while participants engaged in hands-on practice under expert guidance. The session also emphasized workplace safety, accident response, and emergency preparedness, making it highly relevant for future mining professionals.

# Guest on Campus

## Turning Ideas into Impact: Innovation & Entrepreneurship Workshop at JRU

The Department of Mining Engineering, Jharkhand Rai University, hosted a workshop on “Innovation and Entrepreneurship: Transforming Ideas into Business Models”, led by Dr. Sanyka Bannerjee, Assistant Professor, IIM Sambalpur. Dr. Bannerjee guided participants through the essentials of entrepreneurship, covering idea generation, problem identification, customer validation, value propositions, and revenue models. Real-life examples and case discussions made the session highly interactive, allowing students to explore practical strategies for turning innovative ideas into viable business models.



## Alumnus Shares Insights on Opencast Coal Mine Work Culture at JRU



Jharkhand Rai University hosted an alumni talk on “Work Culture of Opencast Coal Mines”, featuring Mr. Rahul Kumar, Graduate Engineer Trainee at Triveni Sainik Pvt. Ltd. and a proud JRU alumnus.

Mr. Kumar shared his first-hand experiences in the opencast coal mining sector, highlighting teamwork, discipline, operational challenges, and strict adherence to safety protocols. The session offered students practical insights beyond the classroom, preparing them for the realities of industry work. Around 100 students actively participated, engaging in a lively Q&A session. The convener, Mr. Sumeet Kishore, thanked the speaker and encouraged students to learn from such experiences to shape successful careers in mining.

## INNOVATION EXPO 2.0 Sparks Creativity at JRU

In celebration of National Engineers Day, the Science Club and Department of Mining Engineering at Jharkhand Rai University organized INNOVATION EXPO 2.0 with the theme “Deep Tech & Engineering Excellence: Driving India’s Techade.”

The event featured a Model and Poster Exhibition, providing students a platform to showcase innovative prototypes, working models, and research posters highlighting emerging technologies, sustainable engineering solutions, and practical problem-solving approaches. Participants demonstrated creativity, technical competence, and interdisciplinary collaboration.

Convened by Dr. Jai Prakash Meena, the expo drew enthusiastic participation from students, faculty, and visitors. INNOVATION EXPO 2.0 successfully fostered a culture of innovation, research orientation, and hands-on learning, inspiring the next generation of engineers to contribute meaningfully to India’s technological growth.



# Guest on Campus

## Painting a Greener Tomorrow: JRU Students Celebrate Environment Protection with Art

The JRU Environment Club successfully organized a Poster Making Competition to celebrate World Environment Protection Day at Jharkhand Rai University. Convened by Mr. Kamakhya Narayan, the exhibition-style event saw enthusiastic participation from students across various disciplines.

The competition provided a creative platform for students to express ideas on environmental protection, sustainability, and conservation through visual art. The event encouraged creativity, critical thinking, and communication skills, while spreading awareness about eco-friendly practices.

Judged by Dr. Vineeta Kumari and Mr. Hemendra Mishra, the posters were evaluated for originality, relevance, and artistic presentation. The winners were:

- **First Prize: Prakash Kumar (B.Tech Mining)**
- **Second Prize: Munnir Ansari (Diploma)**
- **Third Prize: Ayan Sidharth (B.Sc Agriculture)**



# Industrial Exposure



**Mining Students Dig Deep into Earth Sciences at CMPDIL Ranchi**



**First-Year Mining Students Get Real-World Insight at CMPDIL Museum, Ranchi**

# Industrial Exposure



From Classroom to CNC: Diploma Mining Students Explore MSME Tool Room, Ranchi



Diploma Mining Students Dig into Geology at CMPDIL Ranchi

# Student Achievement



## Breaking Barriers, Scaling Heights: Mining Engineering Girl Makes Jharkhand Proud!

**Ms. Jiya Kumari**, B.Tech (Mining Engineering), has been selected to represent Team Jharkhand at the National Adventure Camp organized by the NSS, Dharamshala Centre, Himachal Pradesh, scheduled from 6th to 15th November 2025.


Her selection reflects her grit, courage, and determination, and stands as an inspiring example that excellence is driven by passion and perseverance beyond all barriers. The university extends its best wishes to Ms. Jiya Kumari for a successful and enriching experience at the national level.

## Young Mining Engineer to Present Ideas Before the Hon'ble Prime Minister at VBYLD 2026

**Mr. Sajal Yadav**, a B.Tech student from the Department of Mining Engineering, has been selected for the prestigious Viksit Bharat Young Leaders Dialogue (VBYLD) 2026 after successfully clearing four rigorous selection rounds. His achievement was guided and mentored by Prof. Chandan Kumar, NSS Coordinator, along with the NSS Nodal Officer.


Mr. Yadav will represent the state of Jharkhand at the Youth Festival in New Delhi on 12th January 2026, where he will present his ideas in the esteemed presence of the Hon'ble Prime Minister of India. The event is being organized by the Ministry of Youth Affairs and Sports, Government of India.





**Elite**

**NPTEL ONLINE CERTIFICATION**  
(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**INDRAJIT PRASAD SINHA**  
for successfully completing the course

**Integrated Waste Management for a Smart City**

with a consolidated score of **75 %**

Online Assignments	25/25	Proctored Exam	50.25/75
--------------------	-------	----------------	----------

Total number of candidates certified in this course: 1779


Jul-Oct 2025  
(12 week course)




**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL25CE122S1167400819

To verify the certificate 

No. of credits recommended: 3 or 4

## Mining Scholar Excels in IIT Kharagpur–NPTEL Course on Smart City Waste Management

**Indrajit Prasad Sinha** has successfully completed the prestigious “Integrated Waste Management for a Smart City” course offered by IIT Kharagpur through NPTEL, funded by the Ministry of Education, Government of India.

The 12-week course (July–October 2025) focused on sustainable waste management strategies for smart cities, and Mr. Sinha achieved a consolidated score of 75%, reflecting his strong academic commitment and interest in sustainable urban development.

# Student Achievement

## Kicking Towards Excellence: Diploma Mining Students Participate in Sansad Khel Mahotsav Football Tournament



Seven students of Diploma in Mining Engineering proudly represented the region at the Sansad Khel Mahotsav (Parliament Sports Festival), a prestigious initiative of the Government of India aimed at promoting grassroots sports across the country.

The students participated in the Senior Football Tournament organized within the Ranchi Lok Sabha constituency, showcasing commendable sportsmanship, teamwork, and competitive spirit. The team secured a participating position at Jharkhand Rai University, marking a notable achievement and highlighting active youth involvement in national sports initiatives.

Led by Hon'ble Members of Parliament, the Sansad Khel Mahotsav serves as a valuable platform for nurturing young talent and strengthening India's sporting culture at the grassroots level.

## JRUITian Secures Prestigious Management Trainee Position at Coal India Limited

Jharkhand Rai University, Ranchi proudly congratulates **Mr. Alikatti Ravindar, B.Tech (Mining Engineering)**, Batch 2018–22, on his selection as Management Trainee at Coal India Limited (CIL)—India's largest public sector enterprise in the coal mining sector.

This remarkable achievement reflects Mr. Ravindar's academic excellence, technical competence, and dedication to professional growth. His success stands as a testament to the quality education and industry-oriented training imparted by the Department of Mining Engineering at Jharkhand Rai University.

**JHARKHAND Rai University**  
RANCHI

**Heartiest Congratulations!!**  
for selection as Management Trainee  
at **COAL INDIA LIMITED (CIL)**

**Alikatti Ravindar**  
**B.Tech**  
**Mining Engg.**  
Batch: 2018-22

[www.jru.edu.in](http://www.jru.edu.in)  
facebook.com/jharkhandraiuniversity  
twitter.com/JhRaiUniv

# 5<sup>th</sup> Convocation Ceremony



**Gyan Ranjan - B.Tech Mining Engg. (Chancellor Awardee)**



**B.Tech Mining Engg. (Awardees)**



**Diploma Mining Engg. (Awardees)**

# Faculty Corner

## Jharia's Burning Ground: When Coal Fires Refuse to Die

Beneath the streets of Jharia, a silent disaster has been burning for over a century. Underground coal seam fires, first reported in the early 1900s, continue to smolder beneath homes, roads, and mining sites, making Jharia one of the world's most striking examples of a long-term mining crisis.

These fires, fueled by exposed coal seams and abandoned mine workings, release toxic gases, weaken the ground, and render vast quantities of valuable coal unusable. For local communities, the consequences are immediate and severe—cracked houses, sinking land, polluted air, and constant uncertainty about safety and livelihoods.



Despite decades of fire-fighting efforts, complete control remains difficult. Techniques such as surface sealing, excavation, and fire isolation have shown partial success, but the scale and depth of the problem demand sustained investment and innovation. At the same time, relocation and rehabilitation programs face social challenges, as affected families struggle to balance safety with economic survival.

Jharia's coal fires are more than a regional issue—they are a reminder of the long-term costs of unplanned mining. As India looks toward a more sustainable energy future, the lessons from Jharia highlight the urgent need for responsible mining practices, strong monitoring systems, and people-centered rehabilitation strategies.

**Sumeet Kishore, Assistant Professor**



## Mining Facts That Will Make You Rethink the Industry

### Critical Minerals Are Everywhere – Even in Your Phone

Did you know that a single smartphone contains over 60 different minerals? Metals like cobalt, lithium, and rare earth elements, often mined in challenging conditions, are key to batteries, electronics, and green technologies.

### Mining Impacts Aren't Just Local

Modern mines can affect entire ecosystems. Open-pit mines, for instance, can alter river flows, reduce groundwater, and even change local climate patterns due to large-scale deforestation.

### Air Pollution Is a Hidden Danger

Mining dust and emissions from operations release fine particulate matter and toxic gases, contributing to respiratory illnesses in nearby communities. Some studies show mine-adjacent areas can have pollution levels comparable to major urban cities.

### Tailings Are a Growing Problem

Mining produces huge amounts of leftover material called tailings. If not stored properly, tailings can collapse or leach chemicals into rivers, causing environmental disasters that last decades.

### Technology Is Changing the Game

From AI-driven exploration to autonomous trucks, new mining technologies are making extraction more efficient and safer, reducing environmental damage and human risk—but challenges remain.

**Sudhakar Kumar Ravi, Lecturer**

# Faculty Achievement

## Dr. Sumit Kr Pandey

- Received International Research Grant from Anushandhan National Research Foundation (ANRF) for the authored paper to attend the International Conference CETA 2025 at Malaysia.
- Paper titled “Design of Controller for FTMS based on BAT Optimization” accepted for publication in, Earth and Environmental Science, IOP Publication (Scopus Indexed)
- Chaired Session at AUN/SEED-NET REGIONAL CONFERENCE TOWARDS CARBON NEUTRALITY in 7th International Conference on clean energy and technology 2025 at University of Malaya, Kuala Lumpur, Malaysia, 2025.
- Reviewer of the International Journal of Dynamics and Control (Springer) with ISSN: 2195-2698.
- Reviewer of International Journal of Systems Assurance Engineering and Management with ISSN: 0976-4348.
- Deliver a talk in Global Academia & Industry Talk at University Putra Malaysia- Applications of Soft Computing on Robust Controller in University Putra Malaysia.
- Published paper in titled “Optimal PID Controller Design for LVAD based on Linear Optimization Method” in 3rd International Conference on Mechanical Engineering, 2026 (Accepted).
- Published paper in titled “LQR-based Optimal Controller Design for LVAD”, Seventh International Conference on Research in Computational Intelligence and Communication Networks, 2025
- Published paper in titled “TLBO based PID Controller for Pediatric Ventricular Assist Devices” in 3rd International Conference on Power Electronics & Energy, India, 2025 (Accepted).
- Published paper in titled “Design of Fuzzy Logic based PID Controller for LVAD”, IEEE in 12th Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), India, 2025.
- Published paper in titled “Design of Controller for FTMS based on BAT Optimization” in 7th International Conference on Clean Energy and Technology, Kuala Lumpur, Malaysia, 2025.
- Editor of Proceedings of the “Recent Advances in Artificial Intelligence for Sustainable Development (RAISD2025)” of Advances in Intelligent Systems Research, Springer Nature, (ISBN-978-94-6463-787-8).
- Editor of the e-book of Abstracts International Conference on “Recent Advances in Artificial Intelligence for Sustainable Development (RAISD 2025)” with ISBN: 978-81-991265-7-2.
- Received Patent grant titled “Data processing device for real-time EV energy consumption forecasting” in UK Design Patent- 6473098 dated 11-12-2025.
- Received Patent titled “Computing Device for generating network security keys” in UK Design Patent -6485232 on 17-11-2025.
- Attended National Workshop on Character Building and Holistic Development of Personality on 21-23 June, 2025 organized by Shiksha Sanskriti Uthan Nayas and Jharkhand Rai University, Ranchi.

## Dr. Ved Prakash Singh

- Published a paper on title “A Critical Study of Sustainable Waste Disposal Practices in the Modern Era” in International Journal of Science and Engineering Applications in Volume 14-Issue 09, 04 – 10, 2025, ISSN:- 2319 – 7560.
- Attended 12 Days (Online) Interdisciplinary Refresher Course on Environmental Studies organized by UGC-Malaviya Mission Teacher Training Centre (UGC-MMTTC), Central University of Kerala from 06.11.2025 to 19.11.2025 and obtained Grade “A+”.
- Attended Faculty Development Program on “Intellectual Property Rights and Academic Innovation” organized by Jharkhand Rai University, Ranchi in association with Law College Durgapur held from 28 July to 1 Aug, 2025.
- Attended National Workshop on Character Building and Holistic Development of Personality on 21-23 June, 2025 organized by Shiksha Sanskriti Uthan Nayas and Jharkhand Rai University, Ranchi.
- Successfully completed the training program entitled Examination Refresher Course Organized by Council of Examiners-India on 25 and 26th September 2025.
- Attended a Short-Term Programme on Disaster Management Organized by Malaviya Mission Teacher Training Centre (MMTTC), Central University of Kerala from 11/11/2024 to 16/11/2024 and obtained Grade ‘A+’.

## Dr. Jai Prakash Meena

- Published paper titled “IOT-enabled smart mining: leveraging real-time data analytics and information systems for sustainable mineral processing” in LEX LOCALIS-JOURNAL OF LOCAL SELF-GOVERNMENT with ISSN:1581-5374 E-ISSN:1855-363X in VOL. 23, NO. S6(2025).
- Attended National Workshop on Character Building and Holistic Development of Personality on 21-23 June, 2025 organized by Shiksha Sanskriti Uthan Nayas and Jharkhand Rai University, Ranchi.
- Attended one week training on CPR by St. John Ambulance , Jharkhand State centre from 13-17 th October , 2025.

# Faculty Achievement

## Dr. Vineeta Kumari

- Published paper titled “Subarnarekha River - Lower Basin Environmental Challenges and Opportunities” in International Research Journal of Advanced Engineering and Science with ISSN (Online): 2455-9024 in Volume 1, Issue 1, pp. xx-xx, 2025.
- Published paper titled “Yogic Approach to eradicate Physical and Mental disorders (With special reference to Patanjali Yoga Darshan)” in The Asian Thinker- A Quarterly Bilingual Peer-Reviewed Journal for Social Sciences and Humanities, Year-7, Volume: IV (Special), October-December, 2025 with ISSN: 2582-1296 (Online).
- Published paper titled “Different method for removal of fluoride from contaminated ground water: an appraisal” in International Journal of science and Academic Research in volume 06, issue 11 with ISSN No. 2582-6425 on 17 November 2025.
- Published book titled “Engineering Chemistry Laboratory Manual” with ISBN NO 978-93-49860-87-2 with SPI publication in 2025.
- Attended National Workshop on Character Building and Holistic Development of Personality on 21-23 June, 2025 organized by Shiksha Sanskriti Uthan Nayas and Jharkhand Rai University, Ranchi.

## Sumeet Kishore

- Published paper on title “Optimization of coal pillar design for enhanced extraction and stability in Bord and Pillar workings: A case study from Jharia coalfield, India in International Journal of Multidisciplinary Research & Reviews with ISSN (ELECTRONIC): 2945-3135 page no. 246-252 in 30th August 2025.
- Published paper on title “Mine Closure Planning as an Engineering System: Integrating Geotechnical, Environmental, and Socio-Technical Considerations” with ISSN No: 2583-7397 published in 30-12-2025, page no 646-648 in International Journal of Contemporary Research in Multidisciplinary.
- Published paper on title “Enhancing Blasting Efficiency and Environmental Performance through Chamber Blasting in Opencast Mining” with ISSN No: 2584-184X on 30-12-2025 in Indian Journal of Modern Research and Reviews page no 100-102.
- Attended one week Faculty Development Program on “Digital Project Management Using ICT Tools” organized by Jharkhand University of Technology, Ranchi under the “Scheme of financial assistance for setting up of Electronics and ICT Academies (Phase-II)” by the Ministry of Electronics and Information Technology (MeitY), Government of India from 15th May– 20th May, 2025.
- Attended National Workshop on Character Building and Holistic Development of Personality on 21-23 June, 2025 organized by Shiksha Sanskriti Uthan Nayas and Jharkhand Rai University, Ranchi.

## Chandan Kumar

- Appointment as OBSERVER for the conduct of CBT for the Recruitment of various Post in NHPC Exam\_29th\_Oct\_2025 to be held on 29 Oct 2025.
- Published a design patent titled “MULTI PIPE WALL CLAMP” on 24 December 2025 by Patent Office, Government of India for an innovative industrial design.
- Attended one week online Faculty Development Program (FDP) on “Advances and Innovations in Civil Engineering: Towards Sustainable Solutions and Entrepreneurial Mindset through Interdisciplinary Approaches” organized by the Department of Civil Engineering, Haldia Institute of Technology, West Bengal, India, in association with IQAC, Haldia, during 08th - 15th October, 2025.
- Attended one Day online Faculty Development Program (FDP) on “Generative AI in Teaching” organized by Sanskar Educational Group in association with bookbytes on 14th October 2025.
- Attended National Workshop on Character Building and Holistic Development of Personality on 21-23 June, 2025 organized by Shiksha Sanskriti Uthan Nayas and Jharkhand Rai University, Ranchi.
- Attended one week training on CPR by St. John Ambulance, Jharkhand State centre from 13-17 th October, 2025.
- Appointment of observer for EMRS STAFF SELECTION EXAM (ESSE) to be held on 13th (Saturday), 14th (Sunday) & 21st (Sunday) December, 2025 organized by CBSE.

## Mr. Somnath Kumar Rishi

- Published paper titled “A Comprehensive Investigation of the Quality of Coal at Selected Mines in Jharkhand” in July 2025 in INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY(IJIRT) in Volume 12, Issue 2 with ISSN: 2349-6002.
- Attended one week training on CPR by St. John Ambulance, Jharkhand State centre from 13-17 th October, 2025.

# Faculty Achievement

---

- Attended National Workshop on Character Building and Holistic Development of Personality on 21-23 June, 2025 organized by Shiksha Sanskriti Uthan Nayas and Jharkhand Rai University, Ranchi.
- Attended Five Days National Level FDP on “Research Paper Writing and Publishing in SCI/Scopus Indexed Journals” Organized by Learnix Thrive from 26th November to 30th November, 2025.

## **Sudhakar Kumar Ravi**

- Attended 7 Days NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by MMTTC, Jamia Millia Islamia, Central University, New Delhi from 9th July to 17th July, 2025.
- Participated in seminar on “Recent Applications of Artificial Intelligence” organized by IETE in association with Jharkhand Rai University, Ranchi on 4th July 2025.
- Attended one week training on CPR by St. John Ambulance, Jharkhand State centre from 13-17 th October, 2025.
- Attended National Workshop on Character Building and Holistic Development of Personality on 21-23 June, 2025 organized by Shiksha Sanskriti Uthan Nayas and Jharkhand Rai University, Ranchi.

## **Kamakhya Narayan**

- Attended NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by MMTTC, Jamia Millia Islamia, Central University, New Delhi from 9th July to 17th July, 2025.
- Attended one week training on CPR by St. John Ambulance, Jharkhand State centre from 13-17 th October , 2025.
- Attended National Workshop on Character Building and Holistic Development of Personality on 21-23 June, 2025 organized by Shiksha Sanskriti Uthan Nayas and Jharkhand Rai University, Ranchi.

## **Om Prakash Satyam**

- Attended a Short-Term Programme on Disaster Management Organized by Malaviya Mission Teacher Training Centre (MMTTC), Central University of Kerala from 11/11/2024 to 16/11/2024 and obtained Grade ‘A+’.
- Got appreciation certificate from NPTEL on course Integrated Waste Management for a smart city from July 2025- Dec 2025 by IIT madras.
- Got appreciation certificate from NPTEL on course Business to Business management from July 2025- Dec 2025 by IIT madras.
- Attended National Workshop on Character Building and Holistic Development of Personality on 21-23 June, 2025 organized by Shiksha Sanskriti Uthan Nayas and Jharkhand Rai University, Ranchi.

## **Kunal shahdeo**

- Published paper on title “Design and Analysis of Composite Box Beam for Structural Applications” with ISSN No: 2584-184X on 30-12-2025 in Indian Journal of Modern Research and Reviews.

DEPARTMENT OF  
**MINING  
ENGINEERING**



### **Vision of Department**

To maintain the standard of mining education and commitment to produce quality human resource in the diverse field of mining, excavation engineering and other interdisciplinary areas and continuously striving to be recognized a centre for excellence for education, research and service to the mining and allied industry.

### **Mission of Department**

- To graduate well-educated mining engineers with sound technical knowledge and with ethical values who could excel in Mining Sector.
- To strive for excellence in academics, research and technology and contribute to the development of region and the nation in the area of mining engineering through continuous upgradation of facilities.
- To create human resource for developing and adopting appropriate technology in mining towards sustainable development and safe extraction of mineral resources.



**JHARKHAND**  
**Rai University**  
RANCHI

[www.jru.edu.in](http://www.jru.edu.in)

Jharkhand Rai University, Raja Ulatu, Namkum

Ranchi - 834010 | contact : 9693296660