



OPJU

UNIVERSITY OF STEEL TECHNOLOGY
AND MANAGEMENT



OPJU NEWSLETTER

OP Jindal University, Raigarh

March 2023



TECHNOROLLIX 2023

A Nationwide Techno-Cultural Fest of OPJU

OP Jindal University (OPJU), Raigarh has organized the 12th edition of its National Level Annual Techno-Cultural Fest “TECHNOROLLIX 2023” along with the program “The Spirit” - Celebrity DJ Night from March 1st to 3rd, 2023. The prime objective of Tech-Fest is to bring together dynamic, innovative, and enterprising students from various Engineering, Management, and Science institutions across the country on a common platform to showcase their talent and exchange ideas.

Inaugural Ceremony



The Annual Techno-Cultural Fest started on 1st March with an Opening ceremony by the Chief Guest of the event **Mr. Diwakar Kaushik** (Executive Director, NTPC Lara, Raigarh) near Babuji Chowk, & the inaugural session was conducted on the same day at OPJU college ground, the Chief Guest and the Guest of Honor for the evening was **Mr. Sanjay Madan** (Former Regional Executive Director) NTPC Raipur and **Mr. Yogendra Sahu** (General Manager, POWER GRID, Gharghoda, Raigarh)

The valedictory ceremony was conducted on 3rd March 2023, at Open Air Theatre (OAT) and the Guest of Honor was **Mr Koshal Sharma**, Plant Head, Structural Steel Division (SSD), Punjipathra and the Chief Guest was **Mr. B.K. Singh** COO, MSP Steel and Power Ltd. Jamgaon, Raigarh.

Valedictory Ceremony



Conveners of the Event



Event 1: Aero Drone



Event 2: LAN Gaming



Event 3: Brainy Escape



Event 4: Tech Lab



Event 5: KalaKriti



Event 6: Robovation



Event 7: Yuva Sadan



Event 8: DJ Night



Event 9: Food Fiesta



Event 10: Talent Hunt



Event 11: Roadies



Event 12: Battle of Bands



Event 13: Ideathon



Event 14: Aagaz



Event 15: Start Up Business Plan



Event 16: Codigo










Event 17: Antaragni



(A) Events & Activities

1 Placement Drives conducted by CDC in the campus of OPJU :

	<p>Company Name: Flipkart Pvt. Ltd.</p> <p>Students' Background: B.Tech/MBA_2023 Batch</p>		<p>Company Name: Tata Technologies Ltd.</p> <p>Students' Background: B.Tech_EE 2023 Batch</p>
	<p>Company Name: BlueStone Jewellery & Lifestyle Pvt. Ltd.</p> <p>Students' Background: BBA/B.Com/MBA_2023 Batch</p>		<p>Company Name: Shakti Pumps India Ltd.</p> <p>Students' Background: B.Tech/Diploma/MBA_2023 Batch</p>
	<p>Company Name: Flipkart Pvt. Ltd.</p> <p>Students' Background: B.Tech/MBA_2023 Batch</p>		<p>Company Name: Innovative Clad Solutions Pvt Ltd</p> <p>Students' Background: M.Tech_Metallurgy 2023 Batch</p>
	<p>Company Name: Collegedunia Web Pvt. Ltd.</p> <p>Students' Background: MBA_2023 Batch</p>		<p>Company Name: Watergen India Pvt. Ltd.</p> <p>Students' Background: BBA/B.Com_2023 Batch</p>
	<p>Company Name: Sky Alloys and Power Pvt. Ltd.</p> <p>Students' Background: MBA_2023 Batch</p>		

2 Training Events :

Team CDC conducted various training and preparatory sessions of UG/PG students of different programs run at OP JU. This exercise is planned by identifying the industry requirements and students' interest through series of interactions. It further increased the scope for the right kind of employment in the selected industries.

Sky Alloys and Power Pvt. Ltd.

Tata Technologies Ltd.

Yangpoo Marketing Pvt. Ltd.

Collegedunia Web Pvt. Ltd.

Flipkart Pvt. Ltd.



3 Industrial Visit

Team CDC visited some industries in Odisha and Chhattisgarh as a regular practice - to meet with HR Heads, Plant Heads and their teams to understand the hiring patterns, requirements and skills that they look for while hiring GETs/MTs. OPJU Brochures for CCET programs and Executive MBA program were shared with them.



ACC Cement, Bargarh



Aditya Birla, Hirakund



JSW-ISPL, Kharsia

4 Shri Taran Prakash Sinha, IAS, Collector Raigarh visited the Dept. of Metallurgical Engg. on March 15, 2023.

5 The Dept. of Metallurgical Engg., and ASM International Eastern India Raigarh Chapter in association with Society of Metallurgical Engineers organized its Twelfth Technical Talk on the topic *Green Steel Making: Possible Solution to Pollution* by **Dr Arghya Majumder**, Director, School of Mines & Metallurgy, Kazi Narul University, Asansol.

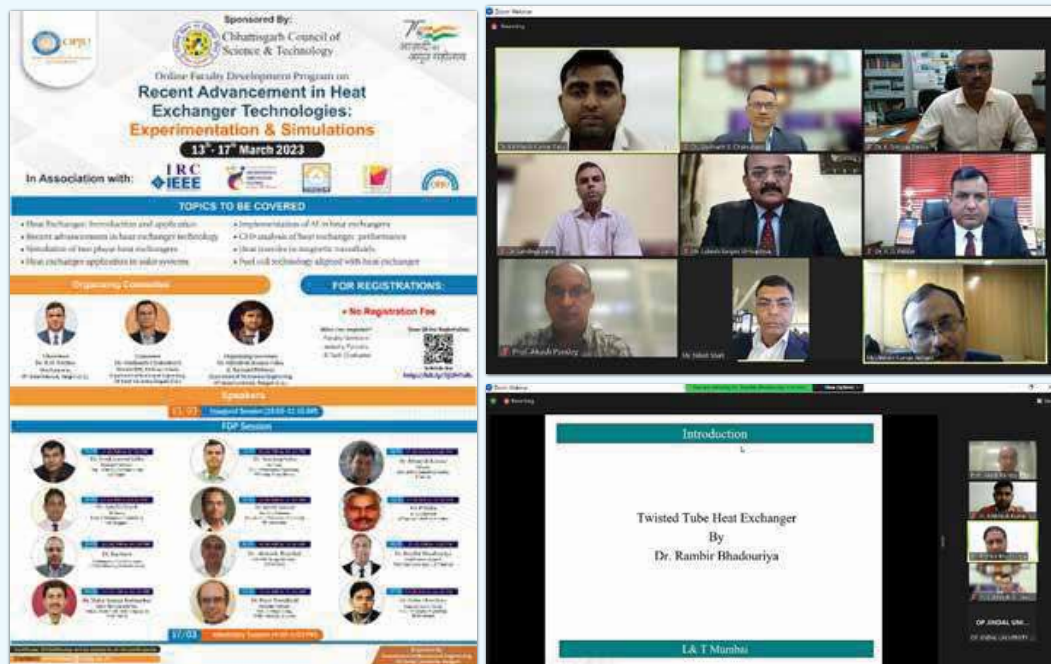


6 The Dept. of Metallurgical Engg. organized a general body meeting of Society of Metallurgical Engineering (SME) on March 27, 2023. The meeting was attended by the faculty members and the students of Metallurgical Engg. The General Body of SME appointed **Dr. S. Das** as Chairman; **Prof. Nandalal Acharjee** as Secretary; **Dr. Nidhi Khobragade** as Jt. Secretary; **Dr. Deepak Patel** and **Mr. Vedaj Patel** (6th sem) as Treasurer; **Prof. Neeraj Verma** and **Dr. Vatsala Chaturvedi** as Executive Faculty Members; **Mr. Sachin Sharma** and **Mr. Ujjawal Kesharwani** from 6th Sem and **Mr. Abhishek Yadav** and **Mr. Vishal Singh** from 4th Sem as Executive Student Members.

7 The Dept. of Mech. Engg organized a Five days training program during 17- 21 March 2023 for the Faculty and Staff on *CNC Wire Cut EDM*. The Five axis fully automatic CNC Wire Cut EDM machine is the latest addition in the Centre of Excellence in Manufacturing and Automation. It enables cutting accurately the electrically conductive materials irrespective of its hardness. The program was effective to support teaching, training, research, and industrial consultancy.



- 8** Dept. of Mech. Engg. organized a 5-Days Online FDP on *Recent Advancement in Heat Exchanger Technologies: Experimentation & Simulations* sponsored by Chhattisgarh Council of Science and Technology (CGCOST) in association with IRC IEEE, Institution Innovation Council OPJU (IIC), Chhattisgarh State Renewable Energy Development Agency (CREDA), Solar Energy Society of India (SESI) and Academic Staff College OPJU (ASC) from March 13th - 17th, 2023 in online mode. Thirteen eminent speakers from foreign universities, IITs, NITs, and reputed organizations such as Griffith University, Australia; CSIR- CMERI, Durgapur; IIT Mumbai; IIT Indore; IIIT Jabalpur; NIT Durgapur; NIT Raipur; L&T Mumbai; Tata Technologies and Thermax India, shared their valuable knowledge and expertise in the forum. The FDP was marked by an energetic and engaging knowledge-sharing experience, with 419 participants from various regions across India.



- 9** The Dept. of Mech. Engg. organized industrial visit for the 6th semester students to Jindal Power Limited, Tamnar and Dongamahua Captive Power Plant on 24th March 2023. Students got an exposure to the basic functions of thermal power plants.



- 10** Dept. of Mechanical Engg. in association with the Career Development Centre (CDC), OPJU organized a session on *How to face interview?* on 17th arch 2023 for the final-year Mechanical students. The session was quite enriching and interactive. It covered various important aspects to be known by a fresher attending a job interview and was well-received by all the students.



- 11** School of Science organized an eFDP on *Environment Management & Future Pathways (EMFP-23)* from 27-31 March 2023. There were ten eminent resource persons in the FDP attended by 214 participants.



- 12** Prof. Princy Diwan of CSE Dept. successfully conducted 1-day workshop on March 22, 2023, titled *Recent Trends in Sensors Integration and Artificial Intelligence on Robotics*, sponsored by IEEE Student Chapter



- 13** Dr. Gulshan Soni of CSE Dept. successfully conducted a webinar on *How to get a good paid technical internship in MNCs* on March 28, 2023.

- 14** The AGM of ASM Eastern Zone Chapter (Raigarh) was held on March 22, 2023 in online mode and the AGM appointed **Dr. Trinath Talapaneni** and **Dr. M Kalyan Phani** respectively as the Secretary and Treasurer from OPJU.

- 15** The Dept. of Metallurgical Engg. installed successfully the following equipment: (i) Gold Coating Unit in SEM lab. (Make: Zeiss), (ii) Slow speed diamond Cutter (Buhler make USA), (iii) Electronic Weighing Balance (Make: Mettler Toledo) and (iv) Erichsen Cupping Test unit (Make: SE-Test Lab Instruments India Pvt. Ltd).

- 16** A 1-Day workshop on *Promoting Good Health & Hygiene Practice in Everyday -Life* on 27 March was organized by Dept. of Sports for the students of B.Tech, B.Sc, BBA and B.Com at OPJU. **Dr Kali Muthu**, Factory Medical Officer, Jindal Steel Power addressed in the workshop. The aim of the workshop was to explain and demonstrate the importance of maintaining good health and hygienic practices in personal and professional life. This leads to reduced risk related to social, metal, and health issues. The indirect effect can be seen from confident personality and positive image of an individual. Dr. Muthu also educated the participants about many diseases caused due to lack of hygienic practices. He advised and encouraged all participants to do regular workout, Yoga, Meditation and have sound sleep to remain fit and fine.



(B) Placement News

- 1 **ITC** selected one of our B.Com student.
- 2 **Can -Ends** selected one our students from M.Tech and two students from MBA streams.
- 3 **My captain** selected four of our students for an online mentoring platform based in Bangalore.
- 4 **Yangpoo** selected one of our students from B.Tech_CSE.
- 5 **Aptagrim** selected one of our students from B.Tech_Metallurgy.
- 6 **Collabera** selected one of our students form B.Tech_CSE.



(C) Research and Publication

- 1 **Dr. Saroj Kumar**, Dept. of Mech. Engg. published a paper titled *Multi-Target Trajectory Planning and Control Technique for Autonomous Navigation of Multiple Robots* in ISA Transactions, Elsevier.



- 2 **Dr. Siddharth Chakrabarti**, Professor and Head, Dept. of Mech. Engg published a paper titled *Development of the Empirical Model and Optimization of Parameters for Prediction of Condenser Vacuum Pressure in Thermal Power Plant* in IEEE Xplore.



- 3 Dr. Mithilesh Sahu**, Dept. of Mech. Engg. published a paper titled *Comparison of the Effect of CeO₂ and CuO₂ Nanoparticles on Performance and Emission of a Diesel Engine Fueled with Neochloris Oleoabundans Algae Biodiesel* in Materials Today: Proceedings.



- 4 Prof. Nandalal Acharjee**, Dept. of Metallurgical Engg. published a research article entitled *A Review of Various Ceramic Pigment Preparation and Characterization Methodologies for Applications* in Journal of Australian Ceramic Society, Springer.



- 5 Prof. Neeraj Kumar Verma**, Dept. of Metallurgical Engg. published a research article titled *Microstructural Heterogeneity and Anisotropy Control of Additive Manufactured Ti-6Al-4V Alloy for Aircraft Components* accepted in JOM, Springer.



- 6 Dr. Prasenjit Biswas and Dr. Deepak Patel** Dept. of Metallurgical Engg. published following research articles

- *Production and Characterization of Al- Cu Binary Alloy Produced by using Novel Continuous Casting Process* in International Journal of Material Research.
- *Concept Development, Design, and Validation of a Novel Continuous Casting Equipment* in World Journal of Engineering.
- *Synthesis of Al-Sn Alloys by Direct Chill Casting under the effect of Mechanical Stirring: An Experimental and Simulation Optimization Study* in International Journal of Materials Research.



- 7 Dr. M. K. Phani**, Dept. of Metallurgical Engg. published a Book Chapter entitled *Additive Manufacturing: Environmental Impact, and Future Perspective* in Springer Nature.



- 8 Dr. Bhupesh Kr. Dewangan** published a book titled *Exploring Future Opportunities of Brain-Inspired Artificial Intelligence* with IGI Global. He also published a Book Chapter along with **Prof. Princy Diwan** titled *Application of Brain Inspired Computing for Daily Assistance* with IGI Global.



- 9 Prof. Anurag Vijaywargiya and Dr. Mahesh Bhiwapurkar**, Dept. of Mech. Engg. published a paper *Effect of Lifting Weight, Height and Asymmetry on Biomechanical Loading during Manual Lifting*, in the International Journal of Occupational Safety and Health.



- 10 Dr G. Madhusudhana Rao** published a Book on *Renewable Energy Sources* with IIP Publishers in March 2023. ISBN: 978-93-5747-023-0, 2023



- 11 Dr. Himanshu Vaishnaw** published an Indian Patent titled *Smart Home Energy Management System Control through Deep Reinforcement Learning* in Intellectual Property India, Office of the Controller General of Patents, Designs & Trade Marks, Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, GoI. Application Number: 202341013222



- 12 Dr. J. P. Rath and Dr. Saurabh Gupta** published an Indian patent titled *A Method for Making Customer Purchase Decision* in Intellectual Property India, Office of the Controller General of Patents, Designs & Trade Marks, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry, Government of India. Application No.: 202321007442.



- 13 Dr. R. S. Singh**, Dept. of Physics published a research paper titled *CO₂ Capture by Metal-Decorated Silicon Carbide Nanotubes* in a SCI indexed journal: Silicon, Springer.



- 14 Prof. Manas Ranjan Mishra**, Dept. of Mathematics published a patent titled *Application of Linear Algebra and Partial Derivatives to Machine Learning and Artificial Intelligence*, Application No. 202341015521.



- 15 Dr. Anurag Sharma** published a Patent titled *Building Cooperative Construction System-based on Artificial Intelligence Technology in Building Construction Management System-Modelling*, with Application No—202331004058.



(D) Achievements

- 1 Dr. Prasenjit Biswas**, Dept. of Metallurgical Engg attended a 5-days FDP on *Recent Advancement in Heat Exchanger Technologies: Experimentation & Simulations* organized by Dept. of Mech. Engg., OP Jindal University, Raigarh and Sponsored by: Chhattisgarh Council for Science and Technology (CGCOST).



He also delivered a talk on *Material selection of Design, Material Requirement, Specification of Relevant Standards for Boiler Turbine, Generator, Components-Piping and Valves* on March 29, 2023 at Jindal Power Limited, Tamnar (CG)

- 2 Dr. M. Kalyan Phani and Mr. Sidharth Kumar Mishra**, Dept. of Metallurgical Engg., received the Best Paper Award for the topic *An Overview of In-service Defects in Rails: Causes and Remedies* in the International Conference on Sustainable Innovation in Technology, and School of Commerce and Management (ICSITSCM 2023) organized jointly by School of Engineering and Technology & School of Commerce and Management at GH Raisonni University Saikheda, MP, India.



Dr. Phani also delivered a talk on *Fabrication-Metal Forming, Casting and Forging Pipe Bending and Tube Manufacturing* on March 29, 2023 at Jindal Power Limited, Tamnar (CG).

- 3 Dr. Deepankar Panda**, Dept. of Metallurgical Engg., delivered a talk on *Introduction to Metallurgy, Crystal Structure, Space Lattice, Crystal Imperfections and its Relevance in Power Industries* on March 23, 2023 at Jindal Power Limited, Tamnar (CG).



- 4 Dr. Nidhi Khobragade**, Dept. of Metallurgical Engg. delivered a talk on *Heat Treatment, Surface Hardening of Steel and Failure Mechanism Related to Power Industries* on March 24, 2023 at Jindal Power Limited, Tamnar(CG).



- 5 Prof. Neeraj Kumar Verma**, Dept. of Metallurgical Engg delivered a talk on *Failure Due to Wear of Material and Corrosion* on March 24, 2023 at Jindal Power Limited, Tamnar (CG)



- 6 Dr. Guru Prakash**, Dept. of Metallurgical Engg delivered a talk on *Defect Analysis and Life Assessment, Low Temperature Behavior, High Temperature Behavior and Defect Assessment Route* on March 24, 2023 at Jindal Power Limited, Tamnar (CG)



- 7 Dr. Satyabrata Das**, Professor & Head, Dept. of Metallurgical Engg delivered a talk on *Elastic and Plastic Deformations Strain Hardening and Fracture, Mechanical Properties of Materials and Testing of Materials* on March 31, 2023 at Jindal Power Limited, Tamnar (CG)



- 8 Mr. Manoj Kumar Mishra**, School of Management delivered a guest lecture on March 24 titled *Intellectual Property Rights: Awareness Session for Budding Managers* at Greater Noida Institute of Professional Studies.



- 9 Dr. Abhilasha Chaudhuri** of CSE Dept. successfully completed the one week online STTP on *Quantum Computing and its Applications: Modern Approaches and Practices*, organized by Department of Information Technology, National Institute of Technology Raipur from 27th February to 03rd March 2023.



- 10 OPJU students' team** comprising **Mr Kishan Patel, Mr Raju Kumar Yadav** and **Mr Rajan Kapri** participated from Centre of Excellence in Robotics in association with Det.of Mech. Engg in the national level annual Techfest event Technex'23 (84th edition of Asia's oldest Techno-Management fest) at IIT BHU, Varanasi and won First Prize among 50+ teams across the country in robotics competition. The team received a prize money of Ten thousand rupees with certificates of excellence.



- 11 Mr. Jayveer Singh** a student of 4th semester M.Tech, Dept. of Mech. Engg. successfully completed one-month (8th February – 7th March 2023) online training in *Solar PV Installer (Suryamitra)* Course. The course was organized by Eji-Learning in association with Power Sector Skills Council, Skill India and National Skill Development Corporation.



- 12** Following students of the Dept. of Mechanical Engg. achieved excellence in the categories - **Ayush Pandey** and team (8th sem) for Best Project; **Vishal Pandey** (4th sem) as Best Innovator; **Ankur Singh, Sanskar pandey** and **Shivam Tiwari** for Best Startup; **Gurjot Singh** (8th sem) & **Nikita Sahu** as Student facilitators.

- 13** Following students of the Dept. of Mechanical Engg. exhibited outstanding performance in various events of the National Level Techno-Cultural Fest, *Technorollix 2023*, organized by OPJU - **Somesh Chandra**, 1st in Aerodrone, 2nd in Robowar, and 3rd in Robosoccer; **Rohan Sharma**, 1st in Talent Hunt, 1st in Yuva Sadan, and 3rd in Food Fiesta; **Vishal Pandey**, 3rd in Robowar; **Shishir Santosh Mishra**, 3rd in Robo Race.

New Additions to OPJU-Talent Pool



Dr. Arindam Patra
Asst. Professor, SoS
MA, M.Phil, Ph.D(English)
8 Yrs, Teaching Experience



Dr. Ajay Kumar
Asst. Professor, SoM
MA, M.Phil, Ph.D



Dr. Puja Kaura
Assoc. Professor, SoM
MBA(Finance), Ph.D
14 Yrs, Teaching Experience



Ms. Suchismita Panda
Asst. Professor, SoS
MA, Ph.D(English)
5 Yrs, Teaching Experience



Mr. Gautam Kumar Gupta
Manager, Administration
MBA(Finance)
14 Yrs Work Experience

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