Department of Metallurgical Engineering Quarterly Report (July to September - 2023)

1. Students' Placement

- (i) B. Tech (Metallurgical and Materials Engineering 2019-2023) students Ms. Sonam Singh and Ms. Sneha Singh got placed in Metalman Auto.
- (ii) B. Tech (Metallurgical and Materials Engineering 2019-2023) students Mr. Anshul Yadav, Mr. Gautam, Mr. Aniket Patel, Mr. Shubham Ku. Addi, Mr. Rishav Mahato and Mr. Anishay Ku. Sinha got placed in Sunflag Steels.
- (iii) B. Tech (Metallurgical and Materials Engineering 2019-2023) students Mr. Deendayal Upadhayay, Mr. Akash Biswas and Mr. Pintu Gorai got placed in MSP Steel.
- (iv)B. Tech (Metallurgical and Materials Engineering 2019-2023) students Ms. Goldi Kumari, Mr. Tejesh Kumar Sahu and Mr. Rohit Kumar Yadav got placed in JSW Steel Limited.
- (v) B. Tech (Metallurgical and Materials Engineering 2019-2023) students Mr. Vishal Pathade, Mr. Nikhil Chandrakar, Mr. Gitesh Gupta, Mr. Brujesh Boudh and Mr. Siddha Dinesh got placed in Jindal Saw Gulf, Abu Dhabi.
- (vi)B. Tech (Metallurgical and Materials Engineering 2019-2023) students Mr. Priyanshu Patel, Mr. Abhinav Kumar Sinha, Mr. Adit Kumar Dubey and Mr. Subham Sahu got placed in JSP Limited.
- (vii) **Diploma (Metallurgical Engineering 2023)** student **Mr. Daneshwar Chandra** got placed in **Indo Chains Pvt. Ltd.**
- (viii) **Diploma (Metallurgical Engineering 2023)** student **Mr. Raunak Tripathi** got placed in **JSW Steel Limited.**
- (ix)M. Tech (Material Science and Technology 2021-2023) student Mr. Jammeera Bhasha got placed in SLR Metallics.

2. Publications in SCI Journals

(i) Neeraj Kumar, Ashutosh Sharma, M. K. Manoj, Byungmin Ahn, Taguchi optimization of tribological properties and corrosion behavior of self-lubricating Al-Mg-Si/MoS₂ composite processed by powder metallurgy, Journal of Materials Research and Technology 26 (2023) 1185-1197.

- (ii) Md Izhar Hussain, M. Kalyan Phani, P Mallikharjuna Rao, A. Majumder, B N Roy, Application of Taguchi Method for Experimental Design of Dephosphorization process of steel through Induction furnace route, Eur. Chem. Bull. 2023,12(10), 13030-13035.
- (iii) Akeshwar Singh Yadav, Nitin Kumar, Gaurav Mahendru, Guru Prakash, S. K Nath, Erosive Wear of Low Temperature Nitrided 13/4 MSS for Hydro-turbine Application Conference proceedings on Advances in Materials Processing: Challenges and Opportunities, published by Springer-Nature.
- (iv) Patent: Neeraj Kumar Verma, Ashutosh Sharma, Sangram Keshari Das, Mrinmoy Misra granted a UK Patent on "Electrochemical Cell for Corrosion Testing" with file no. 6303713.

3. Faculties Achievements

- (i) **Dr. M. Kalyan Phani**, Associate Professor in the department of Metallurgical Engineering has been nominated and selected as Editorial Board Member of Vect Mag Virtual Conferences.
- (ii) **Dr. S. Das**, Steel Chair Professor and HOD and **Dr. M. Kalyan Phani**, Associate Professor in the department of Metallurgical Engineering were invited as Jury for the **Innovation Week with a theme of Energy Efficiency** held during August 1 5, 2023 at JSP Raigarh.

4. Students Achievements

- (i) Ms. Sharddha (B.Tech 7th Sem) get paid Long Term Internship of Rs. 22,500/- month in **Tekor** Minerals Private Limited.
- (ii) **Mr. Sambit Tripathy** (M.Tech) selected for Ph.D Program in Indian Institute of Technology (IIT) Ropar in the Department of Metallurgical and Materials Engineering.
- (iii) B.Tech 3rd sem students participated in **Design and Prototype Modelling** competition organized by Department of Electrical Engineering held on September 25, 2023 on the occasion of Engineer's Day.

5. Conferences Attended

(i) Mr. Varun Kumar Kurapati, Ph.D Scholar and Mr. Vishal Singh, B.Tech student of Department of Metallurgical Engineering participated and successfully completed 5-days online Skill Development Program on Advanced Manufacturing and Materials Processing from September 25 – 29, 2023 organized by Annant Gyan Knowledge and Skills Pvt Ltd.

6. Knowledge Imparted

- (i) Dr. M. Kalyan Phani, Associate Professor in the department of Metallurgical Engineering delivered an expert talk on Green Steel: Race Towards Achieving Net Zero, by M. Kalyan Phani, S. Das and R.D. Patidar in the Innovation Week at JSP, Raigarh on August 07, 2023.
- (ii) **Prof. Nandalal Acharjee**, Sr. Assistant Professor in the department of Metallurgical Engineering delivered for two half-day sessions for the students of M. Des. (Lifestyle Accessory Design) of NID, Gandhinagar on the topic: Materials, Methods & Techniques.

7. Events and Activities

- (i) **B.Tech 5**th **sem** students completed one month **Industrial Training** from July 01 31, 2023 in various organizations like JSP Raigarh, JSP Barbil, Jayaswal Neco, Volvo Eicher, SAIL Bokaro etc.
- (ii) **Department of Metallurgical Engineering** conducted **BOS meeting** on July 20, 2023 for Diploma, B.Tech, M.Tech & Ph. D academic session 2023 2027.
- (iii) Department of Metallurgical Engineering and CDC together conducted Pre-placement Training program for Jindal Saw Gulf, Abu Dhabi on August 11-17, 2023 and Jindal Steel & Powder on August 20, 2023 for B.Tech students. Dr. S. Das, Dr. Guru Prakash, Dr. Trinath Talapaneni & Mr. Soumitra Tiwari were the key resource persons of the training program.
- (iv) **B.Tech 3**rd **and 5**th **semester** students celebrated **Teachers Day** in the Department of Metallurgical Engineering on September 05, 2023.

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