FACULTY PROFILE

Name: Rajneesh Kumar

Designation: Assistant Professor

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Professional Qualification:

Qualification	Specialization	Organization/ Institute	Year
B.Tech.	Mechanical Engineering	J.S.S. Academy of Technical Education, Noida, Uttar Pradesh, India.	2011
M.Tech.	Production and Industrial Systems Engineering	Indian Institute of Technology Roorkee, Uttarakhand, India.	2013
Ph.D.	Mechanical Engineering	Indian Institute of Technology Roorkee, Uttarakhand, India.	2024

Publications:

Refereed Journals:

1. **Rajneesh Kumar** and Pradeep Kumar Jha, "Effect of electromagnetic stirring on the transient flow, solidification and inclusion movements in the continuous casting slab mold," *International Journal of Numerical Methods for Heat & Fluid Flow*, Vol 33, No. 11, 2023, pp. 3716-3733. https://doi.org/10.1108/HFF-04-2023-0220.
2. **Rajneesh Kumar**, Ambrish Maurya and Pradeep Kumar Jha, "Transient analysis of fluid flow, solidification and inclusion behavior in electromagnetically stirred bloom caster mold using bifurcated submerged entry nozzle," *Steel Research International*, Vol 94, 2023, pp. 1-14. https://doi.org/10.1002/srin.202300014.
3. **Rajneesh Kumar** and Pradeep Kumar Jha, "Effect of casting speed on solidification and inclusion motions in bloom mold caster under the influence of in-mold electromagnetic stirring," *International Journal of Numerical Methods for Heat & Fluid Flow*, Vol 33, No. 3, 2023, pp. 1022-1045. https://doi.org/10.1108/HFF-07-2022-0415.

4. Kapil Kumar Sharma, **Rajneesh Kumar** and Pradeep Kumar Jha, "Physical 2odelling and numerical investigation of fluid flow and solidification behavior in a slab caster mold using hexa-furcated nozzle," *Heat Transfer*, 2023, pp. 1-23. https://doi.org/10.1002/htj.22980.
5. **Rajneesh Kumar** and Pradeep Kumar Jha, "Numerical simulation for EMS induced solidification and inclusion behavior in bloom caster CC mold with bifurcated SEN," *Journal of Manufacturing Processes*, Vol 81, 2022, pp. 396-405. https://doi.org/10.1016/j.jmapro.2022.06.061.
6. Ambrish Maurya, **Rajneesh Kumar** and Pradeep Kumar Jha, "Simulation of electromagnetic field and its effect during electromagnetic stirring in continuous casting mold," *Journal of Manufacturing Processes*, Vol 60, 2020, pp. 596-607. https://doi.org/10.1016/j.jmapro.2020.11.003.
7. **Rajneesh Kumar** and Pradeep Kumar Jha, "Investigation on EMS Induced Solidification and Inclusion Behavior with Curved Mold in Continuous Casting Process". *Fluid Mechanics and Fluid Power (FMFP 2022)*, Vol 8. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-97-1033-1_29.

Conferences:

1. **Rajneesh Kumar** and Pradeep Kumar Jha, "Effect of in-mold electromagnetic stirring on solidification and inclusion behavior," *4th International Conference on Science and Technology of Ironmaking and Steelmaking (STIS)*, IIT Bombay, India, 2022.
2. **Rajneesh Kumar**, Ambrish Maurya, Md Irfanul Haque Siddiqui and Pradeep Kumar Jha, "Some studies in different shapes of tundish-intermixing and flow behavior," *4th International Conference on Production and Industrial Engineering*, NIT Jalandhar, India, 2016, pp. 1-8.
3. **Rajneesh Kumar**, Md Irfanul Haque Siddiqui and Pradeep Kumar Jha, "Numerical investigations on the use of flow modifiers in multi-strand continuous casting tundish using RTD curves analysis," *International Conference on Smart Technologies for Mechanical Engineering*, Delhi, 2013.

Book Chapters:

1. **Analysis of inclusion behavior in mold during continuous casting**
   Authors: **Rajneesh Kumar**, Ambrish Maurya, Pradeep Kumar Jha
   Book: Advanced Computational Methods in Mechanical and Materials Engineering, CRC Press, Taylor & Francis Group, 2021.

Patent: NA

Awards and Achievements:

- Qualified GATE two times (2011 (Rank:1225 ME) and 2013 (Rank: 4423 ME))
- Recipient of MHRD Scholarship during M. Tech. (2011-13)
- Recipient of Institute Assistantship during Ph.D. (2018-23)

Work Experience:

Teaching Experience:

04 Aug 2025 – Present	Assistant Professor, Department of Mechanical Engineering SRM Institute of Science and Technology, NCR Campus, Uttar Pradesh, India
16 Aug 2024 – 15 Jul 2025	Assistant Professor, Department of Mechanical Engineering THDC Institute of Hydropower Engineering and Technology, B.Puram, Tehri, Uttarakhand, India
24 Sep 2013 – 30 Jun 2018	Assistant Professor, Department of Mechanical Engineering SRM Institute of Science and Technology, NCR Campus, Uttar Pradesh, India

Research Experience:

22 Jan 2024 – 29 Jun 2024	Senior Research Fellow, Department of Mechanical and Industrial Engineering Indian Institute of Technology Roorkee, Uttarakhand, India

Professional Memberships:

- Associate Member (AM1635487), The Institution of Engineers (India)
- Membership Number (367781), International Association of Engineers (IAENG).