
Curriculum Vitae

Dr. Jagjeet Singh Chatha

Designation: Assistant Professor

*Department: Mechanical Engineering,
Punjabi University, Patiala,
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Academic Qualifications

<i>Course</i>	<i>Subject/Topic</i>	<i>Session</i>	<i>University</i>
<i>Ph. D.</i>	<i>Analysis of metallurgical and mechanical properties of welded joint of dissimilar steel grades fabricated with standard and modified rotary friction welding</i>	<i>2018- 2022</i>	<i>RIMT University, Mandi Gobindghar Punjab, India</i>
<i>M. Tech.</i>	<i>Mechanical Engineering</i>	<i>2012-2014</i>	<i>Giani Zail Singh Punjab Technical University, Bathinda, Punjab, India</i>
<i>B. Tech.</i>	<i>Mechanical Engineering</i>	<i>2008 -2012</i>	<i>Punjabi University, Patiala, Punjab, India</i>

Additional Qualification

<i>Course</i>	<i>Subject/Topic</i>	<i>Session</i>	<i>University</i>
<i>MBA (CC)</i>	<i>Operation Management</i>	<i>2022-2024</i>	<i>Punjabi University, Patiala, Punjab, India</i>

Teaching Experiences

<i>Designation</i>	<i>Nature of Appointment</i>	<i>Department</i>	<i>Institute/University</i>	<i>Session</i>
<i>Assistant Professor</i>	<i>Full Time/ Permanent</i>	<i>Mechanical Engineering</i>	<i>Punjabi University, Patiala, Punjab, India</i>	<i>November 2015 to present</i>
<i>Lecturer</i>	<i>Semester Based/ Consolidated</i>	<i>Mechanical Engineering</i>	<i>MIMIT College, Malout, Punjab, India</i>	<i>July 2015 to November 2015</i>

Administrative Positions Held

<i>Position Held</i>	<i>Nature of Appointment</i>	<i>Institute/ Department</i>	<i>Level</i>	<i>Duration</i>
<i>Warden (Boys Hostel)</i>	<i>Additional Charge</i>	<i>Dean Student Welfare, Punjabi University</i>	<i>University Level</i>	<i>2017 to 2023</i>

Area of Research Interests

Welding, Materials, Corrosion, Manufacturing

Subjects Taught

Manufacturing Processes, Manufacturing Technology, Industrial Materials and Metallurgy, Industrial Quality Control, Drug Abuse and Prevention

Supervised Students

M. Tech: Guided: 06 Under Guidance: 02

Ph. D: Under Guidance: 01

Published Research Papers

1. Gaba, N., Sidhu, S. S., & Chatha, J. S. (2025). Role of porosity in 3D printed scaffolds for tissue engineering applications. *Journal of Emerging Trends in Engineering, Sciences and Technology*, 8(1), 98–105.
2. Chatha, J. S., Sidhu, S. S., & Singh, P. (2025). Optimization and characterization of friction stir welding parameters for aluminium alloys 6061 and 6081. *Journal of Sustainable Development Innovations*, 2(3), 30–35.
3. Verma, N., Sidhu, S. S., & Chatha, J. S. (2025). A review on Kaizen implementation in North Indian manufacturing industries. *Journal of Management and Engineering Sciences*, 2(2), 90–98.
4. Chatha, J. S. (2025). Strength and microstructural analysis of bi-metallic rotary friction welds between stainless steel 304 and 316. *Journal of Management and Engineering Sciences*, 2(1), 49–56.
5. Chatha, J. S. (2024). Review of friction stir welding technique. *International Research Journal of Modernization in Engineering*.
6. Chatha, J. S. (2024). A comprehensive study of friction stir processing technique. *International Journal for Multidisciplinary Research*, 6(4).
7. Verma, N., Sidhu, S. S., Chatha, J. S., & Bali, S. (2022). To study the implementation of Kaizen in Northern Indian manufacturing industries. In *Recent Advances in Mechanical Engineering* (pp. 465–474). Springer.
8. Chatha, J. S., Kohli, P. S., & Handa, A. (2021). Exploration of rotary friction welding technique. *Strojnícky časopis – Journal of Mechanical Engineering*, 71(2), 53–60.
9. Chatha, J. S., Shahi, A., & Handa, A. (2020). Stir welding parameters effect on flat plates weld joints: A review. *Materials Today: Proceedings*, 43, 158–163.
10. Chatha, J. S., Handa, A., & Bedi, T. S. (2020). Strength analysis of rotary friction welded joints of dissimilar steel grades. *Materials Today: Proceedings*, 38, 242–247.
11. Shahi, A., & Chatha, J. S. (2020). Biofuels as an alternative: A short review. *International Journal of Creative Research Thoughts*, 8(3), 2201–2203.
12. Chatha, J. S., Bedi, T. S., & Handa, A. (2019). Rotary friction welding of dissimilar materials.

International Journal of Recent Technology and Engineering, 8(4), 10361–10369.

13. Singh, B., Chatha, J. S., & Chauhan, P. (2019). Evaluation of mechanical properties of friction welded stainless steel alloy 304 and aluminium alloy 6063 joint. *SSRG International Journal of Mechanical Engineering*, 6(12), 11–14.
14. Chatha, J. S., Shahi, A., & Handa, A. (2019). Friction stir processing: A review. *International Journal of Emerging Technologies and Innovative Research*, 6(5), 1163–1166.
15. Chatha, J. S., Rai, P. S., & Kumar, R. (2016). A review on electro discharge machining processes and its effect on surface roughness of various machined components. *Materials Today: Proceedings* (MMT1001), *Manufacturing and Quality Control*.
16. Chatha, J. S., Rai, P. S., & Kumar, R. (2016). Analysis of friction stir welded joints of similar metals. *Materials Today: Proceedings* (MMT1002), *Manufacturing and Quality Control*.
17. Chatha, J. S. (2014). A review on the effects of friction welding parameters on mechanical properties of friction welded joints. *International Journal of Advance Research in Science and Engineering*, 3(1).
18. Chatha, J. S. (2014). Reviews on the effects of friction stir welding parameters on mechanical properties of dissimilar metal weld joints. *International Journal of Advance Research in Science and Engineering*, 3(1).