

Faculty Profile

Faculty Name	Dr. Sumit Jain
Designation	Assistant Professor
Qualification	Ph.D, M.Tech, B.Tech
Email	drsumit.mech@gmail.com
Area of Interest	Friction Stir Welding/Processing, Friction Surfacing, Composite Manufacturing
Work Experience (Total)	11+ years
• Teaching	11+ years
• Research	-Nil-
• Industry	-Nil-
• Others	-Nil-
Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level	Under Graduate
Membership of Professional Bodies	-Nil-
Research Publications	10
• Research Papers UGC-CARE	00
• Research Papers SCOPUS	01
• Research Papers WoS/SCI/ABDC	09 (SCI)
• List of Publications	<ol style="list-style-type: none"> 1. Sumit Jain, R.S Mishra, Husain Mehdi, Rajat Gupta & Amit Kumar Dubey (2023): Optimization of processing variables of friction stir welded dissimilar composite joints of AA6061 and AA7075 using response surface methodology, Journal of Adhesion Science and Technology, DOI: 10.1080/01694243.2023.2243682. (SCI) 2. Sumit Jain, R.S Mishra. (2023). Parametric Optimization of FSWed Dissimilar Composite Joints of AA7075 and AA6061 Using RSM. Transactions of the Indian Institute of Metals.

<https://doi.org/10.1007/s12666-023-02996-0>. (SCI)

3. Sumit Jain, R.S Mishra (2023). Multi-response Optimization of Friction Stir Welded Reinforced Joints of Dissimilar Aluminum Alloys. Transactions of the Indian Institute of Metals. <https://doi.org/10.1007/s12666-023-03096-9>. (SCI)
4. Sumit Jain, R.S Mishra & Mehdi, H. (2023). Influence of SiC Microparticles and Multi-Pass FSW on Weld Quality of the AA6082 and AA5083 Dissimilar Joints. Silicon. <https://doi.org/10.1007/s12633-023-02455-x>. (SCI)
5. Husain Mehdi, Sumit Jain, Abdellah Nait Salah, Abhendra P Singh, and Sumit Chawla (2023). Effect of friction stir welding parameters on microstructure and mechanical properties of the dissimilar alloys of AZ91D and AA7075. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering;0(0). [doi:10.1177/09544089231195444](https://doi.org/10.1177/09544089231195444). (SCI)
6. Husain Mehdi, Sumit Jain, Velaphi Msomi, Sipokazi Mabuwa & Chandrabhanu Malla (2023). Effect of Intermetallic Compounds on Mechanical and Microstructural Properties of Dissimilar Alloys Al-7Si/AZ91D. J. of Materi Eng and Perform. <https://doi.org/10.1007/s11665-023-08302-9>. (SCI)
7. Sumit Jain, R.S Mishra. (2022). Microstructural and mechanical behavior of micro-sized SiC particles reinforced

	<p>friction stir processed/welded AA7075 and AA6061. Silicon. https://doi.org/10.1007/s12633-022-01716-5. (SCI)</p> <p>8. Sumit Jain, R.S Mishra (2022). Influence of micro-sized Al₂O₃ particles on microstructure, mechanical, and wear behavior of dissimilar composite joint of AA6061/AA7075 by friction stirprocessing/welding. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 236(16), 9047–9060. https://doi.org/10.1177/09544062221092334. (SCI)</p> <p>9. Sumit Jain, R.S Mishra (2021). Effect of Al₂O₃ nanoparticles on microstructure and mechanical properties of friction stir-welded dissimilar aluminum alloys AA7075-T6 and AA6061-T6. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 236(4), 1511–1521. https://doi.org/10.1177/09544089211065534. (SCI)</p> <p>10. Sumit Jain, Neeraj Sharma, Rajat Gupta (2018), “Dissimilar alloys(AA 6082/AA5083) joining by FSW and parametric optimization using Taguchi, grey relational and weight method” published in journal of (Engineering Solid mechanics) growing science. (SCOPUS)</p>
Book and Chapter Publications	-Nil-
<ul style="list-style-type: none"> Books Authored published by International Publishers 	-Nil-

• Books Authored published by National Publishers	-Nil-
• Publication of Chapter in Edited Books	-Nil-
• Editor of Book by International Publishers	-Nil-
• Editor of Book by National Publishers	-Nil-
• Translation Work of Book	-Nil-
• List of Book and Chapter Publications	-Nil-
Patents	-Nil-
• Published	-Nil-
• List of published patent(s)	-Nil-
• Filed	-Nil-
• List of filed patent(s)	-Nil-
PhD Guidance	-Nil-
• Degree Awarded	-Nil-
• Thesis Submitted	-Nil-
M.Tech. Guidance	-Nil-
• Degree Awarded	-Nil-
• Thesis Submitted	-Nil-
Research Project	-Nil-
• List of Research project	-Nil-
Consultancy	-Nil-
• List of Consultancy	-Nil-
Awards & Honours	-Nil-
• List of Awards & Honours	<p>Awarded:- Research Publication Award by Delhi Technological University with a total amount of Rs. 50000 for publication in a reputed SCI journal.</p> <ul style="list-style-type: none"> • Sumit Jain, R.S Mishra. (2022).

	Microstructural and mechanical behavior of micro-sized SiC particles reinforced friction stir processed/welded AA7075 and AA6061. Silicon. https://doi.org/10.1007/s12633-022-01716-5 .
Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference	04 (Paper presented in International Conference)
<ul style="list-style-type: none"> • International (Abroad) 	-Nil-
<ul style="list-style-type: none"> • International (Within Country) 	04
<ul style="list-style-type: none"> • National 	-Nil-
<ul style="list-style-type: none"> • List of published papers 	<ol style="list-style-type: none"> 1. A review of the effect of process parameters and temperature variation on FSWed dissimilar aluminium alloys AA7075 and AA6061, Presented in 5th International Conference on Emerging Trends in Mechanical Industrial Engineering 2022. 2. Joining of aluminium alloy AA6061 and magnesium alloy AZ-31 by using friction stir welding, Presented in 5th International Conference on Emerging Trends in Mechanical Industrial Engineering 2022. 3. Effect of process parameters on Friction stir processing of magnesium alloys, presented in ICAPIE-2016, held in DTU Delhi. 4. Friction stir welding/processing of Aluminium alloy 5083, Presented in ICAPIE-2016, held in DTU Delhi.

Organizing National Conference/ International Conference/ FDP/STTP	-Nil-
<ul style="list-style-type: none">List of Conference/FDP/STTP committee	-Nil-
Social Contributions and Sports	-Nil-
<ul style="list-style-type: none">List of Social Contributions and Sports	-Nil-