Faculty Profile

1. Name: **Dr. Chaitanya Sharma**

2. Department: Mechanical Engineering

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5. Office Address: Associate Professor,

Mechanical Engineering Department, B.I.T. Sindri, Dhanbad-828123.

6. Qualification:

S. No	Degree	Specialization	Institute
1	PhD	Manufacturing/Mechanical Engineering	IIT Roorkee
2	M. Tech.	Production/Mechanical Engineering	RGPV Bhopal
3	B. E.	Mechanical Engineering	RGPV Bhopal
4	Diploma	Mechanical Engineering	MPBTE Bhopal
5	Matric	Hindi, English, Mathematics, Science etc.	MPBSE Bhopal

7. Projects/Grants

Funding Agency	Project Name	Position	Amount in Rs
DST	FIST	Member, Project Implementation Group	90,00000

8. Area of Specialization: Solid state welding/ processing, Welding, Additive Manufacturing, Composite, Material Characterization, Fatigue, Fracture, Heat treatment, In-process/post processing treatment

9. Research Work Supervision

PhD (Guided): 01 Awarded, 04 Ongoing

S.No	Name of Student	Research Title	University/Institute	Status
1	Nasir Khan	Optimization of process parameters for improved mechanical properties FSW joints of aluminium alloys	Amity University Gwalior	Awarded
2	Abhishek Chkraborthy	Investigating the influence of Activated flux TIG Welding on microstructural and mechanical	Amity University Gwalior	Ongoing

		behaviour of aluminium/steel alloy welds		
3	Anand Baghel	Microstructure and mechanical properties of Activated TIG welded steels	Amity University Gwalior	Ongoing
4	Nishant Kumar	Some studies on Additive Manufacturing of Steel Products	Jharkhand University of Technology Ranchi	Ongoing
5	Vinod Kumar Verma	Optimization of Process Parameters for Friction Stir Spot Welding of Aluminium alloy	Chhattisgarh Swami Vivekanand Technical University (Bhilai,	Ongoing

M. Tech. (Guided): 20 Awarded, 01 Ongoing

S. No.	Name of student	Thesis Title	Year of Completion
1	Kamal Kant singh	Abrasive wear behaviour of AZ81 Magnesium alloy reinforced with B_4C	2015
2	Manoj Kumar Dayal	Mechanical & metallurgical characterizations of hybrid metal matrix composites reinforced with B_4C &SiC	2015
3	Raman Bhati	Study the effect of current on pitting corrosion and mechanical properties of TIG welded AISI 304	2016
4	Ashish Chaudhary	Effect of current on pitting corrosion and mechanical properties of TIG welded SS310	2016
5	Deekshant Varsheny	Effect of activating fluxes on macrostructure and mechanical properties of TIG welded SS 304	2016
6	Gaurav Kumar	Optimization of process parameters for resistance spot welding of SS 304	2016
7	Pradeep Kumar Shastri	Study the effect of heat input on the mechanical and metallurgical properties of TIG welded AISI 304 joints	2016
8	Pravesh Kumar	Effect of activating fluxes on weld penetration in TIG welding of SS202	2016
9	Vikram Verma	Influence of plate thickness on macro characteristics & mechanical behaviour of resistance spot weld joints	2016
10	Angad Yadav	Optimization of process parameters for mechanical properties of SS304 by TIG welding using filler wire	2017
11	Bheem S Narwariya	Dissimilar friction stir welding of precipitation hardening aluminium alloy AA2024 and AA7039	2018
12	Peeyush Prajapati	Mechanical behaviour of natural coir fiber and synthetic glass fiber hybrid composites	2018

13	Vishwadeep Sharma	Microstructural and mechanical behaviour of dissimilar friction stir weld joints of precipitation & solution hardening aluminium alloys	2018
14	Shubham Jaiswal	Friction stir spot welding of dissimilar aluminium alloys	2019
15	Reetesh Kumar	Influence of process parameters and tool geometry of the performance of friction stir spot weld joints.	2020
16	Madan Mohan Joshi	Analysis of rear twist beam axle to evaluate performance parameters for passenger vehicle through reverse engineering	2021
17	Rajendra Kumar Bhatt	CFD analysis to optimize the inlet duct of an air filter to evaluate pressure drop and uniformity index for single cylinder engine	2021
18	Prabhat Kumar	Assessment of cyclic deformation behaviour of carbon fibre reinforced aluminium laminates	2022
19	Priyanshu Kumar Singh	Mechanical Properties assessment of multipass welds of steels	2022
20	Rahul Kumar	Parametric optimization for resistance spot welding of Inconel and titanium	2022
21	Abhisek Kumar	Corrosion Behavior of Subsea Loadcell In Moored Buoy system made up of 17-4 PH stainless steel	2023
22	Manoj Kumar Mahto	Prediction of properties of friction stir welded joints of Al-Zn-Mg alloys using machine learning models	Ongoing
23	Amit Pal	Study of surface morphology and corrosion behavior of Galvaannealed coating	Ongoing

10. Subjects Taught:

I) UG: Solid Mechanics, Strength of Materials, Manufacturing Practice, Materials Engineering, Engineering Graphics, Workshop/Manufacturing Practice

II) PG: Fatigue fracture & failure analysis, Design for manufacturing & assembly

11. Professional Experience:

I) Teaching Experience:

Sl. No	Position held	Name of Organization	Duration	
			From	To

01	Associate Professor	B.I.T. Sindri	22.02.2021	Till Date
02	Associate Professor	RJIT Tekanpur	01.11.2013	19.02.2021
03	Assistant Professor	Ideal Institute of Technology, Ghaziabad	03.10.2005	23.07.2009
04	Lecturer	SRCEM Banmore	02.08.2004	01.10.2005

II) Research Experience : **03 Years**

Sl. No	Position held	Name of Organization	Duration	
			From	To
01	Research Scholar	IIT Roorkee	24.07.2009	03.11.2012

12. Publications:

Total Citations: 1201, h-index 14, i10-index 26, Dr. Chaitanya Sharma - Google Scholar

International Journals (SCI/SCOPUS) (47)

1. Baghel, A., Sharma, C., Upadhyay, V., Singh R. Optimization of process parameters for autogenous TIG welding of austenitic stainless-steel SS-304. International Journal of Interactive Design and Manufacturing. (2023). https://doi.org/10.1007/s12008-023-01455-w
2. Baghel, A., Sharma, C., Upadhyay, V., Singh R Investigating the influence of single and multicomponent activated fluxes on macrostructure, microstructure, and hardness of ATIG welded SS304. International Journal of Interactive Design and Manufacturing. . https://doi.org/10.1007/s12008-023-01620-1
3. Anand Baghel, **Chaitanya Sharma,** Manvandra Kumar, Vikas Upadhyay. Modelling and optimization of bead geometry and hardness of bead on plate TIG welds of Stainless Steel SS202. International Journal of Interactive Design and Manufacturing. 2023. https://doi.org/10.1007/s12008-023-01439-w
4. Sumit Kumar Sharma, Abhinav Kumar Singh, Rohit Kumar Mishra, Ambarish Kumar Shukla & **Chaitanya Sharma.** Processing Techniques, Microstructural and Mechanical Properties of Additive Manufactured 316L Stainless Steel: Review. J. Journal of The Institution of Engineers (India) Series D (2023). https://doi.org/10.1007/s40033-023-00497-4
5. Anand Jha, Kirti Raj Bhatele, **Chaitanya Sharma**, Ajay Tripathi. Online Education and Its Repercussions on Engineering Students During Covid-19: A Survey. Journal of Engineering Education Transformations. Vol. 36 Issue 3, pp. 2023. https://doi.org/10.16920/jeet/2023/v36i3/23098
6. **Chaitanya Sharma,** Vijay Verma, Kodil Basanth Kumar, Sumit Kumar Sharma, Ajay Tripathi, Sanjay Kumar Singh, Pankaj Sonia. Estimation of fatigue crack growth rate in different zones of friction stir welded AA7039. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. 2022, 0 (0). https://doi.org/10.1177/095440892211112

7. **Chaitanya Sharma,** Ajay Tripathi, Vijay Verma, Vikas Upadhyay. Material Flow Behaviour in Dissimilar Friction Stir Welds of AA2024 and AA5086 Aluminium alloys. Journal of Engineering Research. Special Issue, pp. 153-159, 2022**.** https://doi.org/10.36909/jer.ICAPIE.15053
8. Sumit Kumar Sharma, **Chaitanya Sharma,** Processing Techniques, Microstructural and Mechanical Properties of Wire Arc Additive Manufactured Stainless Steel: A Review. Journal of The Institution of Engineers (India) Series C, 2022, Vol. **103**, pp.1325–1339. https://doi.org/10.1007/s40032-022-00853-5
9. Nandan Nag, **Chaitanya Sharma** Singh, Ankit Singh, B. N. Roy, Sumit Kumar Sharma. Trifluorosulfonyl Imide-Based Ionic Liquid Electrolytes for Lithium-Ion Battery: A Review. Journal of The Institution of Engineers (India) Series D, 2022. https://doi.org/10.1007/s40033-022-00395-1
10. Anugrah Singh, Vikas Upadhyay, **Chaitanya Sharma.** Influence of cooling environment on microstructure and mechanical properties of AA6082-T6 and AA7050-T7 dissimilar friction stir welds. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science. 2022, Vol. 236 Issue 23, pp. 11270-11281. https://doi.org/10.1177/095440622211145
11. Raj Kumar, Vikas Upadhyay, Joy Prakash Misra **Chaitanya Sharma.** Effect of in-process cooling on microstructure and mechanical properties of dissimilar AA2014 and AA7075 friction stir welded joints. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022 ;236(20):10496-10507. doi:10.1177/09544062221103391
12. Raj Kumar, Vikas Upadhyay, Chaitanya Sharma. Modelling and optimization of process parameters for friction stir welding of dissimilar aerospace alloys AA2014 and AA7075. Engineering Review, 2022, Vol. 42, Issue 2, pp.59-78. https://doi.org/10.30765/er.1778
13. Vivek Kumar Jain, Manoj Kumar Yadav, Arshad Noor Siddiquee, Zahid A. Khan, **Chaitanya Sharma**. Synthesis of Fe–Al Intermetallic by Mechanical Alloying Process. Journal of The Institution of Engineers (India) Series D. 2022, Vol. **103**, pp. 621–628. https://doi.org/10.1007/s40033-022-00340-2
14. Vijay Verma, Aman Singh Arun Kumar Pandey, **Chaitanya Sharma,** Pankaj Sonia, and Kuldeep Kumar Saxena. Experimental investigation of tensile properties and microstructure of Al6061/Al5083 TIG welded joints. Indian Journal of Engineering Materials and Science 2022. Vol. 29, Issue 4, pp. 262-270.
15. Sumit Kumar Sharma, Parth Patel, Mukesh Chandra, Anil Rajak, **Chaitanya Sharma**. Resistance Spot Welding of Aluminium 6063 Alloy for Aerospace Application: Improvement of Microstructural and Mechanical Properties. Journal of The Institution of Engineers (India) Series D. 2022, **103**, 311–318, https://doi.org/10.1007/s40033-021-00324-8
16. Arun Kumar Sharma, Rakesh Bhandari, **Chaitanya Sharma,** Shri Krishna Dhakad, Camelia Pinca-Bretotean. Polymer matrix composites: A state of art review, Materials Today: Proceedings, 2022, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2021.12.592.

17. **Chaitanya Sharma,** Vikas Upadhyay, Vijay Verma Ajay Tripathi, Sumit Kumar Sharma. Tensile Behaviour of Friction Stir Welded Joints of Different Aluminium Alloys. Journal of Engineering Research. 2021, Special Issue, pp. 1-15. https://doi.org/10.36909/jer.ICCEMME.15693
18. **Chaitanya Sharma,** Ajay Tripathi, Vikas Upadhyay, Vijay Verma, Sumit Sharma. Friction Stir Spot Welding: Process and Weld Properties: A Review. Journal of The Institution of Engineers (India) Series D. 2021, Vol. 102, pp. 549–565. https://doi.org/10.1007/s40033-021-00276-z
19. Raj Kumar, Vikas Upadhyay, **Chaitanya Sharma.** Effect of pre-weld tempers on mechanical and microstructural behaviour of dissimilar friction stir welds of AA2014 and AA7075. Indian Journal of Engineering Materials and Science, 2021, Vol. 28, Issue 6, pp. 574-582.
20. Raj Kumar, Vikas Upadhyay, and **Chaitanya Sharma**. Microstructure and Mechanical Properties of Dissimilar Friction Stir Welds of AA2014 and AA7075. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2021. https://doi.org/10.1177/09544089211058113.
21. Nasir Khan, Sandeep Rathee, Manu Srivastava, Chaitanya Sharma. Effect of tool rotational speed on weld quality of friction stir welded AA6061 alloys. Materials Today: Proceedings, 2021, Vol. 47, Part 19, pp. 7203-7207. https://doi.org/10.1016/j.matpr.2021.07.496.
22. Arun Kumar Sharma, Rakesh Bhandari, Chaitanya Sharma, Shrikrishna Dhakad, Camelia Pinca Bretotean. A Study on Effects of Reinforcement Materials in Aluminium Based Metal Matrix Composites. International Journal of Engineering Trends and Technology, 2021, Vol. 69 Issue 9, pp. 24-28. https://doi:10.14445/22315381/IJETT-V69I9P203
23. Anand Baghel, **Chaitanya Sharma,** Sandeep Rathee, Manu Shrivastava. Activated flux TIG welding of dissimilar SS202 and SS304 alloys: Effect of oxide and chloride fluxes on microstructure and mechanical properties of joints. Materials Today: Proceedings, 2021 Vol. 47, Part 19, pp. 7189-7195. https://doi.org/10.1016/j.matpr.2021.07.199
24. Abhishek Chakraborty, **Chaitanya Sharma,** Sandeep Rathee, Manu Shrivastava. Influence of activated fluxes on weld bead hardness of MIG welded austenitic stainless steel. Materials Today: Proceedings, 2021, Vol. 47, Part 19, pp. 6884-6888. https://doi.org/10.1016/j.matpr.2021.05.168
25. Anand Baghel, **Chaitanya Sharma,** Sandeep Rathee, Manu Shrivastava. Influence of activated fluxes on microstructure and mechanical properties of MIG welded AISI1008. Materials Today: Proceedings, 2021, Vol. 47, Part 19, pp. 6947-6952. https://doi.org/10.1016/j.matpr.2021.05.210
26. Camelia Pinca-Bretotean, Rakesh Bhandari, **Chaitanya Sharma,** Shri Krishna Dhakad, Preda Cosmin, Arun Kumar Sharma, An investigation of thermal behaviour of brake disk pad assembly with Ansys, Materials Today: Proceedings 2021, Vol. 47, Part 10, pp., 2322-2328. https://doi.org/10.1016/j.matpr.2021.04.296.

27. Arun Kumar Sharma, Rakesh Bhandari, Camelia Pinca-Bretotean**, Chaitanya Sharma**, Shri Krishna Dhakad, Ankita Mathur, A study of trends and industrial prospects of Industry 4.0, Materials Today: Proceedings, 2021, Vol. 47, Part 10, pp. 2364-2369. https://doi.org/10.1016/j.matpr.2021.04.321.
28. **Chaitanya Sharma,** Vikas Upadhyay, Microstructure and mechanical behaviour of similar and dissimilar AA2024 and AA7039 friction stir welds. Engineering Review, 2021, 41 (1), 21-33. https://doi.org/10.30765/er.1533
29. Raj Kumar, Vikas Upadhyay, **Chaitanya Sharma,** Effect of welding parameters in friction stir welding of dissimilar alloys AA2014 and AA7075, Materials Today: Proceedings, 2021, Vol. 47, Part 19, pp. 6551-6555. https://doi.org/10.1016/j.matpr.2021.01.816
30. Pankaj Vishwakarma, Vikas Upadhyay, Chaitanya Sharma, Mohd. Zaheer Khan Yusufzai, Friction stir channelling in AA6082 and AA2024 dissimilar alloys, Materials Today: Proceedings, 2021, Volume 46, Part 19, Pages 9469-9473. https://doi.org/10.1016/j.matpr.2020.03.237.
31. Vijay Verma, Ahmed Hasan Muquimuddin Sayyed, Chaitnaya Sharma & Dharmendra Kumar Shukla. Tensile and fracture properties of epoxy alumina composite: role of particle size and morphology. Journal of Polymer Research. 2020, Vol. 27, pp. 388. https://doi.org/10.1007/s10965-020-02359-z
32. Vijay Verma, **Chaitanya Sharma,** Fatigue behaviour of epoxy alumina nanocomposite – role of particle morphology. Theoretical and Applied Fracture Mechanics, 2020, Vol. 110, pp. 102807, https://doi.org/10.1016/j.tafmec.2020.102807.
33. **Chaitanya Sharma,** Vikas Upadhyay. Friction Stir Welding of Dissimilar Aluminium Alloys AA5086 and AA7039. Journal of Physics: Conf. Series, 2019, Vol. 1240, pp. 012160. https://doi.10.1088/1742-6596/1240/1/012160
34. **Chaitanya Sharma**, Vikas Upadhyay. Investigating the Effect of Friction Stir Welding on Microstructure and Corrosion Behaviour of Al-Zn-Mg Alloy. Material Science Forum, 2019, Vol. 969, pp. 517-523. https://doi.org/10.4028/www.scientific.net/MSF.969.517
35. **Chaitanya Sharma,** Vikas Upadhyay and B S Narwariya. Tensile properties of dissimilar friction stir weld joints of Al-2024 and Al-7039 alloys. Material Research Express, 2019, Vol. 6, pp. 026524 https://doi.org/10.1088/2053-1591/aaeca3
36. Peeyush Prajapati, **Chaitanya Sharma,** Rahul Shrivastav, Ravindra Singh Rana. Evaluation of mechanical proper-ties of coir and glass fiber hybrid composites. Materials Today: Proceedings, 2018, Vol. 5, pp. 19044-19050. https://doi.org/10.1016/j.matpr.2018.06.258
37. **Chaitanya Sharma,** Vikas Upadhyay, Dheerendra Kumar Dwivedi, Pradeep Kumar. Mechanical properties of friction stir welded Armor grade Al-Zn- Mg alloy joints. Transactions of Nonferrous Metals Society of China, 2017, Vol 27, Issue 4, pp. 493-506. https://doi.org/10.1016/S1003-6326(17)60056-6

38. Vikas Sharma, **Chaitanya Sharma,** Vikas Upadhyay, Shailendra Singh. Enhancing mechanical properties of friction stir welded joints of Al-Si-Mg alloy through post weld heat treatments. Materials Today: Proceedings, 2017, Vol. 4, pp. 628–636. https://doi.org/10.1016/j.matpr.2017.01.066
39. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Influence of pre-weld temper conditions of base metal on microstructure and mechanical properties of friction stir weld joints of Al-Zn-Mg alloy AA7039.Journal of Material Science and Engineering A, 2015 Vol. 620, Issue 1, pp. 107–119. http://dx.doi:10.1016/j.msea.2014.09.094
40. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Influence of friction stir welding on microstructure, mechanical and corrosion behaviour of Al-Zn-Mg aluminium alloy 7039. Engineering Review, Vol. 35, Issue 3, 2015, pp.267-274. https://hrcak.srce.hr/146983
41. **Chaitanya Sharma,** Vikas Upadhyay, and A. Tripathi. Effect of Welding Processes on Tensile Behaviour of Aluminium Alloy Joints. International Journal of Mechanical and Mechatronics Engineering. 2015, Vol. 9, No. 12, pp. 2051-54. http://doi.org/10.5281/zenodo.1109491
42. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Fatigue behaviour of friction stir weld joints of Al–Zn–Mg alloy AA7039 developed using base metal in different temper condition. Materials and Design, 2014, Vol. 64, Issue 12, pp.334-344. http;//dx.doi.org/ 10.1016/j.matdes.2014.07.013
43. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Effect of post weld heat treatments on microstructure and tensile properties of friction stir welded joints of Al-Zn-Mg alloy AA7039. Materials and Design, 2013, Vol. 43, Issue 1, pp.134-143. http://dx.doi.org/10.1016/j.matdes.2012.06.018.
44. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Heterogeneity of microstructure and mechanical properties of friction stir welded joints of Al-Zn-Mg alloy AA7039. Procedia Engineering 2013, Vol. 64, pp. 1384-1394. http://dx.doi.org/10.1016/j.proeng.2013.09.220.
45. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Influence of in-process cooling on tensile behaviour of friction stir welded joints of AA7039. Journal of Material Science and Engineering A, 2012, Vol. 556, Issue 10, pp. 479–487. http://dx.doi.org/10.1016/j.msea.2012.07.016.
46. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Effect of welding parameters on micro-structure and mechanical properties of friction stir welded joints of AA7039 aluminium alloy. Materials and Design, 2012, Vol. 36, Issue 4, pp. 379-390. http://dx.doi.org/10.1016/j.matdes.2011.10.054.
47. R.K.R. Singh, **Chaitanya Sharma**, Dheerendra Kumar Dwivedi, N.K. Mehta, Pradeep Kumar. The microstructure and mechanical properties of friction stir welded Al–Zn–Mg alloy in as welded and heat-treated conditions. Materials and Design, 2011, Vol.32, Issue 2, pp. 682-687. http://dx.doi.org/10.1016/j.matdes.2010.08.001.

List of Research paper published in International/National Journal (6)

1. Yogesh Shivhare, Manoj Narwariya, **Chaitanya Sharma,** Vijay Verma, Arun Pandey. Effect of Coconut Husk Layer on the Behaviour of Industrial Helmet. International Journal of Engineering Research in Mechanical and Civil Engineering 2022, Vol 9, Issue 6, pp. 10.36647/IJERMCE/09.06.A002
2. **Chaitanya Sharma**, Vikas Upadhyay. Dissimilar Friction Stir Welding of Precipitation Hardening Aluminium Alloys AA2024-and AA7039. Journal of Aerospace Engineering & Technology. 2018; Vol. 8(2): pp. 45–50.
3. Angad Yadav, Dharamveer Mangal, **Chaitanya Sharma**. Optimization of process parameters for TIG welding of SS304 using filler wire. International Journal of Engineering Technology Science and Research. 2017, Vol 4, Issue 5, pp.187-198.
4. **Chaitanya Sharma**, Vikash Upadhyay, Satpal Sharma. Tensile behaviour of friction stir welded joints of aluminium alloy. International Journal of Engineering Research and Applications, 2014, Special Issue, pp.264-267, ISSN: 2248-9622.
5. **Chaitanya Sharma,** Raghvendra Kumar, Tara Dutt, Subham Kumar, Atul Shrivastava. Design and Fabrication of Environment Friendly Kart. International Journal of Engineering Research and Applications, 2014, Special Issue, pp.338-34, ISSN: 2248-9622.
6. **Chaitanya Sharma**, Dheerendra Kumar Dwivedi, Pradeep Kumar. Investigating the microstructure and mechanical properties of friction stir weld joints of solution hardening aluminium alloy AA5086. Indian Welding Journal, 2014, Vol. 47, Issue 4, pp. 65-7.

List of Research paper published/presented in International/National Conference: (11)

1. Raj Kumar Gupta, Vikas Upadhyay, **Chaitanya Sharma**. Mechanical Properties of friction stir welded aluminium-copper alloys: A review. International Conference on Advances and Soft Computing Applications in Design and Manufacturing (ASCADM-2018). National Institute of Technology, Patna. June 4-6, 2018. ISBN: 978-93-86724-81-6.
2. Vishwdeep Sharma, **Chaitanya Sharma**, Vikas Upadhyay. Microstructure evolution in dissimilar friction stir weld joints of precipitation and solution hardening aluminium alloys. International conference on ergonomic for improved productivity (HWWE-2017). Aligarh Muslim University Aligarh (UP) 8-10 December 2017.
3. Vikas Sharma, Shailendra Singh, **Chaitanya Sharma**, Vikas Upadhyay. Mechanical and microstructural characterization of friction stir welded Al-Si-Mg alloy. Proceeding of 5th international / Design and Research conference (AIMTDR 2014) on Advance Materials and Processing (ICAMP 2014), December 12-14, 2014, Indian Institute of Technology, Guwahati, India, pp. 475-1 to 475-6.

4. **Chaitanya Sharma,** Vikash Upadhyay, Satpal Sharma. Optimum welding speed for friction stir welding. IIW International Congress on Advancement in Welding, Cutting and Surfacing Technologies for Improved Economy and Sustainable Environment " 9 - 11April 2014, New Delhi, India, pp.731-736.
5. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Investigating through thickness property variation in FSW joints of Al-Zn-Mg aluminium alloy. ISTE Delhi section convention on Technological Universities and Institutions in New Knowledge Age: Future Perspective and Action Plan, 5-6 September 2013 Delhi Technological University, Delhi, India.
6. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Corrosion behaviour of friction stir weld-ed joints of Al-Zn-Mg alloy. 2nd International Conference on Manufacturing Excellence (MANFEX 2013), 30-31 May 2013, Amity School of Engineering & Technology, Amity University, Noida (U.P), India, pp. 157-161. ISBN: 978-93-83083-17-6.
7. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Mechanical and microstructural characterization of friction stir welded joints of AA7039. International Conference on Manufacturing Excellence (MANFEX 2012), Amity School of Engineering & Technology, 29-30 March 2012 Amity University, Noida (U.P), India, pp.21-25, ISBN: 978-93-81583-36-4 **(Best paper award).**
8. **Chaitanya Sharma**, Dheerendra Kumar Dwivedi, Pradeep Kumar. Friction stir welding of Al- Zn- Mg alloy AA7039. TMS 141 annual meeting, Light Metals, Aluminium Alloys: Fabrication, Characterization and Applica-tions. March 11-15, 2012, Orlando, Florida, USA, pp. 503-507. http://my.alacd.com/tms/2012/0503.pdf.
9. **Chaitanya Sharma,** Dheerendra Kumar Dwivedi, Pradeep Kumar. Mechanical properties of friction stir welded AA5086 Al alloy. Proceeding of international conference on Advance Materials and Processing (ICAMP 2011), December 19-20, 2011, R M K Engineering College Kavaraipettai, Chennai, India, pp.65-70.
10. R.K.R. Singh, **Chaitanya Sharma,** D. K. Dwivedi, Pradeep Kumar. Mechanical properties of friction stir welded commercial structural aluminium alloy. Proceedings of the 4th International Conference on Advances in Mechanical Engineering, ICAME September 23-25, 2010. S.V. National Institute of Technology, Surat – 395 007, Gujarat, India, pp.281-285.
11. Ajay Tripathi, **Chaitanya Sharma.** Solar water heating system using two fluids evacuated tubes. National Seminar on "Emerging Trends in Manufacturing & Automation Engineering", Amity School of Engineering & Technology, Amity University Gwalior (M.P.) September 29-30, 2016.

Book Chapters

1. Parth Patel, **Chaitanya Sharma**, Mukesh Chandra, Anil K. Rajak, Sumit K. Sharma. Microstructural and Mechanical Properties Characterization of Resistance Spot Welded Aluminium alloy AA6063. In: Dikshit,

M.K., Soni, A., Davim, J.P. (eds) Advances in Manufacturing Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore. 2023, pp 195-206. https//doi.org/10.1007/978-981-19-4208-2_14

2. Madan Mohan Joshi, Anand Baghel, **Chaitanya Sharma.** Analysis of Rear Twist Beam Axle to Evaluate Performance parameters for passenger vehicle through Reverse Engineering. In: Singh R.P., Tyagi M., Walia R.S., Davim J.P.(eds) Advances in Modelling and Optimization of Manufacturing and Industrial Systems. Lecture Notes in Mechanical Engineering. Springer. Springer, Singapore 2023. https://doi.org/10.1007/978-981-19-6107-6_40
3. Vijay Verma, Arun Kumar Pandey, Chaitanya Sharma. Fatigue Behaviour of Particulate Reinforced Polymer Composite - A review in Advanced Materials and Manufacturing Processes CRC press 2021, pp 155-172. https://doi.org/10.1201/9781003093213.
4. Sharma V., Sharma, Upadhyay V. (2021) Microstructure evolution in dissimilar friction stir weld joints of precipitation and solution hardening aluminium alloys. In Mohammad Muzammil et al. (Eds): Ergonomics for Improved Productivity. Lecture Notes in Mechanical Engineering. pp 533-538. Springer, Singapore. https://doi.org/10.1007/978-981-15-9053-5, 497623_1_60
5. Shubham Jaiswal, Vijay Verma, Chaitanya Sharma (2021) Dissimilar Friction Stir Spot Welding of AA2014 and AA7075 Aluminum Alloys. In: Muzammil M., Chandra A., Kankar P.K., Kumar H. (eds) Recent Advances in Mechanical Engineering. Lecture Notes in Mechanical Engineering. Pp. 567-573. Springer, Singapore. https://doi.org/10.1007/978-981-15-8704-7_69
6. Vikas Upadhyay, **Chaitanya Sharma**. Fabrication of Metal Matrix Composites by Friction Stir Processing. In: Sidhu S., Bains P., Zitoune R., Yazdani M. (eds) Futuristic Composites. Materials Horizons: From Nature to Nanomaterials. Springer, Singapore, 2018, pp. 245-257, ISBN: 978-981-13-2417-8 https://doi.org/10.1007/978-981-13-2417-8_12.
7. **Chaitanya Sharma**, Dheerendra Kumar Dwivedi, Pradeep Kumar. Friction stir welding of Al- Zn- Mg alloy AA7039. Light Metals, Aluminium Alloys: Fabrication, Characterization and Applications. C.E. Suarez (Ed.). pp. 503-507. https://doi.org/10.1002/9781118359259.ch85.

12. Patents (Filed / Granted) : NA

S. No	Name of the Inventor	Title of the Invention	Application / Patent No. (As applicable)	Year	Status (Filed / Granted)

13. Conference/ Workshop/Seminar/ Organized:

Sl. No	Title of Seminar / Conferences / Short – term Courses	Name of Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses	No. of Participants
01	E-FDP on Advances in Manufacturing	Dr. Chaitanya Sharma Dr. Pankaj Kumar & Dr. C Kumar	TEQIP III	15-19th June, 2021	250
02	E-FDP on Advancement in Manufacturing and Thermal Engineering	Dr. Chaitanya Sharma Dr. Ajay Tripathi	TEQIP III	1-5th December 2020	120
03	E-FDP on Application of Thermal Engineering in Manufacturing Industry	Dr. Chaitanya Sharma Dr. Ajay Tripathi	TEQIP III	21-25th December 2020	150
04	Workshop on Creo Element and Ansys (FEA	Dr. Chaitanya Sharma		13 - 17th September 2017	30
05	FDP Welding Technologies in Automotive Industry	Dr. Chaitanya Sharma		23-27th November 2015	60
06	Tailor made training program on Pro-E	Dr. Chaitanya Sharma	BSF, MOD India	27 January – 21st February 2015	30

14. Short term/ Symposium/ Workshop/Seminar/ Attended

Sl. No	Training Name	Name of Institute	Period	Duration
01	Product and Process Innovation: Concept, Protection and Commercialization	IIT Roorkee	21-25th June 2021	One (01) Week
02	Mechanical Engineering-Emerging Technologies	BIT Sindri	24.-29th May 2021	One (01) Week

03	***Recent Advances in Material Characterization***	NITTTR Chandigarh	23 - 28th May 2020	One (01) Week
04	***Advances in Automobile Engineering***	RJIT Tekanpur	11 - 15th February 2020	One (01) Week
05	***Simulation & Modelling Techniques and Their Application in Science and Engineering***	Electronics & ICT academy, IIT Roorkee	06- 10th January 2020	One (01) Week
06	***Soft Computing Techniques using MATLAB through ICT***	NITTTR Chandigarh	05 - 09th March 2018	One (01) Week
07	***Application of CAD/CAM"***	NITTTR Bhopal	12 - 23rd January 2015	Two (02) Week
08	***Alternative Sources of Energy***	IIT Delhi	10 - 25th July 2008	One (02) Week
09	***Modern Manufacturing Trends***	CITM Faridabad	23 - 27th June 2008	One (01) Week

15. Administrative Position Held :

Sl. No	**Position Held**	**From (date/month/year)**
01.	Administrative Officer	2021-23
02.	Coordinator ATAL FDP	2021
03.	Workshop superintendent	2021
04	Superintendent Hostel-17	2021
05	Member Departmental Research Committee	2022
06	In charge Material Characterization Lab	2023
07	Member FIST DST Project implementation Group	2021

16. Award / Recognition Bestowed on Faculty (State / National / International) :

- Best paper award for "**Influence of activated flux under MIG welding on macro structural and mechanical property of AISI 1018"** by Amity University, Noida (U.P), India, October 2020.
- Member of Board of Studies for Amity School of Engineering and Technology (ASET), Amity University Madhya Pradesh, Gwalior from academic year 2017-18 to 2019-20.

- Member of advisory board of 2nd "***International Conference on Recent Advances In Mechanical Engineering",*** Delhi Technological University, Delhi Bawana Road, Delhi-110 042 (India), 18-19 September 2020.
- Received Certificate of Appreciation for "**Best Student Feedback"** from Chief Administrator RJIT, Tekanpur.
- Award for "**Best academic results**" for *Metal Cutting and Machines Tools* of Rajiv Gandhi Prodyogiki Vishwavidhyalaya Bhopal by SRIJAN Bhopal for 2018-19 academic session.
- Award for "**Best academic results**" for *Metal Cutting and CNC Machines* of Rajiv Gandhi Prodyogiki Vishwavidhyalaya Bhopal by SRIJAN Bhopal for 2016-17 academic session.
- Member of advisory board of National Conference on ***Innovation in Futuristic Materials & Manufacturing Techniques,*** Manipal University, Jaipur (Rajasthan)(India), 26-27th December 2014.
- Best paper award for "***Mechanical and microstructural characterization of friction stir welded joints ofAA7039"*** by Amity University, Noida (U.P), India March 2012.

17. Members of Professional Bodies

- The Institute of Engineers, Kolkata, Life Member
- Indian Institute of Welding, Kolkata, Life Member
- Indian Society of Technical Education, Delhi, Life Member
- Society of Automotive Engineers, India, Member

18. Reviewer

- Journal of Manufacturing Process, Elsevier Netherland
- International Journal of Fatigue, Elsevier Netherland
- Materials and Design, Elsevier, Elsevier Netherland
- Materials Characterization, Elsevier Netherland
- Corrosion Science, Elsevier Netherland
- Journal of Manufacturing Process, Elsevier Netherland
- Vacuum, Elsevier, Elsevier Netherland
- Material Today Communication, Elsevier Netherland
- Material Today Proceedings, Elsevier Netherland
- Journal of Particulate Science and Technology, Taylor & Francis
- Journal of Materials Engineering and Performance, ASM International
- Journal of Central South University, Central South University, China

- Journal of Process Mechanical Engineering, SAGE Publication
- Engineering Review, Crotia
- Materials Research Express, IOP Publishing Ltd, UK
- Journal of Surface Science & Technology, published by ISSST, Kolkata
- Indian Journal of Engineering Material and Science, NISSCAR Delhi India

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