

Resume

DR. ABHIJIT DATTA

Mechanical Engineer and Academic Professional



(Email: abhijit.me@kipm.edu.in, Mobile and Whatsapp no.: 7001545366).

Google Scholar Profile: <https://scholar.google.com/citations?user=t0CryP4AAAAJ&hl=en>, total citations 26.

ResearchGate Profile: https://www.researchgate.net/profile/Abhijit-Datta-6?ev=hdr_xprf, total citations 28.

Professional Profile

Result-oriented academician and Ph.D holder with 13+ years of combined teaching and industrial experience. Active researcher with multiple SCI/Scopus-indexed publications in reputed international journals, demonstrating a sustained interest in innovation and knowledge advancement. Possesses strong subject knowledge across core Mechanical Engineering disciplines, with a proven ability to communicate complex concepts effectively in both theory and practical sessions. Committed to curriculum development, academic planning and institutional growth through NAAC/NBA accreditation processes with a consistent track record of mentoring students and contributing to academic excellence.

Details of Experiences and Skills

- **Acquired total 8 years of Academic Experience** (from 2012 to 2020) at different Undergraduate and Diploma Institutions (in chronological order) in the level of Assistant Professor, Lecturer and HOD:
 - Dr. B.C. Roy Engineering College (Dr. B.C. Roy Polytechnic), Durgapur.
 - Kanad Institute of Engineering & Management, Mankar.
 - HSB Polytechnic, Siuri.
 - Santiniketan Institute of Polytechnic, Bolpur.
 - RK University - School of Engineering, Rajkot, Gujrat.
- **Obtained total 5+ years of Industrial experience** up to the level of Engineer (Production) at Gajra Differential Gears Ltd (A Gajra Group Co.), Dewas, MP working there from 2009 to 2012. Worked at Alliance-Infotech Pvt. Ltd. (Delhi) and Forbes Campbell Knitwear (Belgaum, Karnataka) for a cumulative period of two years.
- **Expanded technical skills during Ph.D as research scholar** in Friction Stir Welding, Dissimilar Metal Joining, Parametric Optimization. Acquainted in Design and Analysis of Experiments (Software: Design Experts and Minitab), Metallographic characterizations (OM, SEM and EDX), AutoCAD and Microsoft Office.

Details of Academic Qualification

Degree	Year of completion	Specialization	University/Institution	% or CGPA
Doctor of Philosophy (Ph.D)	Dec-2025	Engineering Science (Mechanical Engineering - Manufacturing)	Academy of Scientific and Innovative Research (AcSIR), Ghaziabad, U.P / CSIR – Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur	CGPA (Cumulative Grade Point Average, in Course-work) – 8.11 (on a 10-point scale)
Master of Technology (M.Tech)	2015	Mechanical Engineering (Design and Production)	Maulana Abul Kalam Azad University (MAKAUT), West Bengal / Dr. B. C. Roy Engg. College, Durgapur	DGPA (Degree Grade Point Average) – 9.45 (on a 10-point scale)
Master of Business Administration (MBA)	2006	Marketing	Karnatak University Dharwad (KUD) / KLS Institute of Management Education & Research, Belgavi	69%
Bachelor of Engineering (BE)	2004	Mechanical Engineering	Visveswaraiah Technological University (VTU), Belgavi / K.L.E. Society's College of Engineering & Technology, Belgavi	70.66%
HSC / (10+2) th	1999	Science	West Bengal Council of Higher Secondary Education / Asansol Dhadka NCLV	75.4%
SSC / 10 th	1997	Standard	West Bengal Board of Secondary Education / Asansol Ram Krishna Mission	82.5%

Research Publications

Journal papers (SCI, Scopus and Open access)

1. **Datta, A.**, Mandal, N., Mukherjee, M., Bapanapalle, C.O., Sarkar, S., Chakraborty, S.S. Parametric optimisation in friction stir butt welding of spring steel to commercially pure aluminium sheet. Journal of Materials Engineering and Performance (Springer Nature) (SCI), April 2026, <https://doi.org/10.1007/s11665-026-13853-8>.
2. **Datta, A.**, Shrivastava, A., Mandal, N., Roy, H., Chakraborty, S.S. A comparative investigation of butt friction stir welding of aluminium alloys, AA 1100 and AA 7075, with AISI 304 stainless steel. Welding in the world (Springer) (SCI), March 2023, <https://doi.org/10.1007/s40194-023-01514-6>.
3. Shrivastava, A., Changdar, A., **Datta, A.**, Dutta, S., Chakraborty, S.S. Parametric investigation and optimization in laser based directed energy deposition of tungsten carbide-cobalt. The Journal of Laser Applications (SCI), November 2023, <https://doi.org/10.2351/7.0001179>.

4. **Datta, A.**, Shrivastava, A., Chakraborty, S.S., Pal, S. K. (2022). Effect of work material combination and welding speed in dissimilar friction stir welding of aluminium to steel. Materials Today: Proceedings (Elsevier) (**SCOPUS**), September 2022, <https://doi.org/10.1016/j.matpr.2022.05.558>.
5. Aditya, S. K., **Datta, A.**, Analysis of Friction Stir Welding of Aluminum Alloys and Optimization of Welding Parameters for Maximum Tensile Strength, International Journal of Engineering Research & Application, ISSN: 2248-9622, Vol. 5, Issue 5, (Part -5) pp. 36-43, (**Open Access**), May 2015, https://www.ijera.com/papers/Vol5_issue5/Part%20-%205/H505053643.pdf.

Book Chapters

1. **Datta, A.**, Mandal, N., Chakraborty, S.S., Application of friction stir processing for generating novel engineering parts – A review, Springer nature book chapter: Advances in Materials, Manufacturing and Design, Lecture Notes in Mechanical Engineering, **January 2025**, pp. 487-500, https://doi.org/10.1007/978-981-97-6667-3_38.

Domestic Conference Papers

1. **Datta, A.**, Mandal, N., Chakraborty, S.S., Variation of friction stir processing for generating novel engineering parts – A review, INCOM24: Proceedings of the 2nd International Conference on Mechanical Engineering Jadavpur University, Kolkata, India, January 5-6, 2024, Page no 353-356, **ISBN: 978-81-954806-6-1**.
2. **Datta, A.**, Chakraborty, S.S., Mandal, N., Weld quality assessment and monitoring - a review, Thirty-five National Convention of Emerging Technologies for Sustainable Manufacturing & National Conference, The Institution of Engineers (India) (IEI), Durgapur, October 30-31, 2021, Volume page no.- 93-98, **ISBN: 978-81-952159-9-7**.
3. **Datta A.**, Chakraborty S.S., Butt friction stir welding of steel to aluminium - a review, Thirty-third National Convention of Metallurgical and Materials Engineers & National Conference, The Institution of Engineers (India) (IEI), Durgapur, Volume page no.- 93-98, January 17-18, 2020.
4. Chakraborty, S.S., **Datta, A.**, Mandal, N., Shrivastava, A., Mukherjee, M., A brief review on reported novel applications of friction stir processing, Thirty-five National Convention of Emerging Technologies for Sustainable Manufacturing & National Conference, The Institution of Engineers (India) (IEI), Durgapur, October 30-31, 2021, Volume page no.- 73-75, **ISBN: 978-81-952159-9-7**.

Languages known :- (Speak, Read and Write) Bengali, Hindi and English.

Awards & Achievements:-

1. Received **Gold Medal** for being first class first in M. Tech, 2015.
2. **Best Paper Award** – National Convention, The Institution of Engineers (India), 2021.