



CV	Dr. Debalay Chakrabarti	
Designation, Institution with contact address:	Professor, Department of Metallurgical and Materials Engineering, (and The Associate Dean R&D), Indian Institute of Technology Kharagpur, 721 302 Kharagpur, West Bengal, India. Telephone No. (with STD code): +91 3222 283282; Fax No.: +91 32222 283280, +91 9733776579 (M), E-mail: debalay@metal.iitkgp.ac.in , debalay@gmail.com .	
Date of Birth	30/12/1976	
Date of joining at IIT KGP:	June 2008 as Assist. Prof., Sept 2013 as Assoc. Prof., Professor in 2018.	
Past experiences	Graduate Trainee, Electrosteel and Castings Limited (1 Y). Researcher in R&D and SS, Tata Steel Jamshedpur (1 Y). Researcher in Corus Steel RD&T, Rotherham, UK (2 Y) before leaving the job in UK and joining IIT Kharagpur in 2008 as faculty.	
Qualifications:	<ul style="list-style-type: none"> • Bachelor of Engineering (1999) in Metallurgy and Materials Engineering from Bengal Engg College (DU) Shibpur. Presently IEST Shibpur (2nd in Class), • Masters of Technology (2002) in Metallurgy and Materials Engineering, IIT Kharagpur (1st in class, Institute Silver Medal). • Ph.D. (2006) from the School of Metallurgy and Materials, University of Birmingham, UK, with the Overseas Research Scholarship from the Universities UK. 	
Research Interests	<ul style="list-style-type: none"> • Microstructure property correlation in metallic alloys, mostly Iron based systems. • Development of microstructure and texture in thermo-mechanical processing. • Fracture toughness and fracture transition behaviour in structural metals. • Different grain structures in metals and alloys and their effect on properties. • Defect initiation and its control in metals and alloys. 	
Students Guidance	<ul style="list-style-type: none"> • Ph.D.: 10 completed (4 single, 6 joint guidance), 14 ongoing. • M.S.: 3 completed. • M. Tech: 20 completed, 3 ongoing. 	
Research Publications:	<ul style="list-style-type: none"> • International Journal: 120 (111 publications after joining IIT KGP). • National Journal: 4 • h-index 32 (28 since 2018), i-10 index 68. • International Conference: 22. • National Conference / Workshop: 85. <p>(Regular reviewer for several top Peer-reviewed Journals in the field of MME. Editor of Transactions of Indian Institute of Metals (Springer Journal). Key Reader of Metallurgical and Materials Transactions A).</p>	
Sponsored projects:	<ol style="list-style-type: none"> 1) BRNS, DAE: Study on the microstructure and mechanical property of B added 9Cr-1Mo steel, 58 L, Ongoing. 2) Naval Research Board (NRB)-DRDO: Improving the impact transition behaviour of high strength naval steels by refining effective grain size of matrix microstructure. 25 L, Completed. Project on 1000MPa Naval steel for DRDO, ongoing. 39 L. 3) DST SERB: Study on the impact toughness of low-carbon steel by controlling the microstructure and crystallographic texture. 40 L, Completed. 4) DST SERB: Microstructure-Texture-Toughness relations in High Strength Automotive Steel. 28 L, Completed. (Evaluated as 'Excellent') 5) DST Fast Track: Development and effect of Bimodal grain structure in HSLA steel. 15 L, Completed. (Evaluated as 'Excellent') 	

	6) BRNS DAE: Process induced microstructural variation towards improved ductile-brittle transition temperature (DBTT) of 9Cr-1Mo steel. 21 L , Completed. 7) CSIR: Effect of ferrite grain structure on the mechanical properties of low-carbon steel, 20 L . Completed. 8) CSIR: Innovative heat treatment of cast microalloyed steels for improving the properties. 15 L . Completed.
National Mission Projects	National Mission Projects: Material Development for Advanced Ultra Supercritical Power Plants (AUSC): 9.6 Crore. (P.I.). FCGR and Fracture Testing of INCONEL and Steel.
Consultancy projects:	1) Research on the Development of High-Strength Vanadium Microalloyed Steels for Structural Purpose (funded by Vanitec Limited), USD 165,000.00, INR 1.22 crore. 2) Understanding precipitation behaviour and micro-structural evolution at different stages of processing of CRGO steel, RDCIS-SAIL, 20.39 L . Ongoing. 3) Research for studying and analysing the segregation in T-72/T-90 tank barrels, (Co.PI), Metal & Steel Factory, Ordnance Factory Board, 18 L . Ongoing. 4) Tata Steel Projects: Improving the impact toughness of high strength linepipe steel. 18 L . Ongoing. Comparison between precipitation strengthening of Nb- and V-microalloyed steels from Tata Steel. 25 L . Charpy impact testing of TMT rebar from Tata Steel. 12 L . Development of high strength automotive steel by quenching and partitioning (Q&P) treatment. Tata Steel. 8 L , (All Completed). 5) Solving the cracking problem in Silver Medallion for India Govt MINT. 5 L .
Institutional Infrastructure Development	1) Setting up high-end testing facilities of materials for biomaterials, aerospace and automotive applications (SGDRI-2015). 250 L . Completed. 2) Improving the impact toughness of low-carbon steel by controlling the crystallographic texture (SGIRG-2014). 25 L . Completed.
Departmental responsibilities	1) Member of UGPEC and Dept. UG coordinator, 2014-2019. 2) PIC, Central Time Table. Member of Curriculum Revision Committee. Member of the committee on setting up of DIY Lab. 3) In-charges of different Departmental Laboratories for last 10 years. 4) Organized International Conferences, ICAMMP, twice as Technical Coordinator (2011) and Co-Convener (2016).
Institutional responsibilities	1) Associate Dean R&D 2) Professor In-Charge, Central Time-Table 3) Co. Professor In-Charge, Do-It-Yourself Lab. 4) Rector Nominee Sports, Technology Students Gymkhana
Award	1) Metallurgist of the Year , Ferrous Category, 2020. Instituted by the Ministry of Steel, Govt. of India. Received during NMD-ATM 2019, in Trivandrum, Kerala. 2) Dr. B.R. Nijhawan Award . Best Technical Paper from CSIR-NML, 2015.
Publications:	Researchgate: https://www.researchgate.net/profile/Debalay_Chakrabarti Google scholar: https://scholar.google.co.in/citations?user=mz31gP8AAAAJ&hl=en Citation 2606, Citation Since 2018: 1903, h-index 32, i-10 index 68.

Kind Regards,

 (Dr. Debalay Chakrabarti)

01/03/2023