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:	• Bachelor of Engineering (1999) in Metallurgy and Materials Engineering from Bengal Engg College (DU) Shibpur. Presently IIEST 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	• 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	• Ph.D.: 10 completed (4 single, 6 joint guidance), 14 ongoing. • M.S.: 3 completed. • M. Tech: 20 completed, 3 ongoing.	
Research Publications:	• 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**. (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).***	
Sponsored projects:	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