

# DR. MANIDIPTO MUKHERJEE

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**Webpage** <https://sites.google.com/site/manidiptomukherjee>

**Links** [LinkedIn](#), [ResearchGate](#), [Google Scholar](#)

## PROFESSIONAL PREFACE:

<b>Senior Scientist &amp; Vertical Head</b>	<b>Institute</b> CSIR- CMERI Durgapur, West Bengal, India
	<b>Vertical</b> Wire Arc Additive Manufacturing & 3D Printing (WAAM3DP)
	<b>Department</b> Centre for Advanced Manufacturing and Metrology
	<b>Subjects</b> Research and Development
	<b>Duration</b> May 15, 2019 – Till date
<b>Assistant Professor</b>	<b>Institute</b> AcSIR, CSIR- CMERI Durgapur, West Bengal, India
	<b>Department</b> Advanced Manufacturing Centre, DMRC
	<b>Subjects</b> Research and Development
	<b>Duration</b> June 15, 2019 – Till date
<b>Assistant Professor (Research)</b>	<b>Institute</b> SRM Institute of Science and Technology, SRM University, Kattankulathur, Chennai, Tamil Nadu, India
	<b>Department</b> Mechanical Engineering
	<b>Subjects</b> Basic Manufacturing Processes, Material Science, Welding Technology, Basic Mechanical Engineering, Non-Conventional Energy Sources
	<b>Duration</b> August 01, 2017 – May 08, 2019
<b>Assistant Professor</b>	<b>Institute</b> C.V. Raman College of Engineering, Bhubaneswar, Odisha, India
	<b>Department</b> Mechanical Engineering
	<b>Subjects</b> Basic Manufacturing Processes, Material Science, Welding Technology, Mechanical Measurement and Control, Engineering Mechanics, Non-Conventional Energy Sources
	<b>Duration</b> July 15, 2016 – July 25, 2017.
<b>Senior Research Fellow</b>	<b>Institute</b> Jadavpur University, Kolkata, West Bengal, India
	<b>Funding Agency</b> Council of Scientific and Industrial Research, New Delhi, India.
	<b>Project Title</b> Development of suitable gas metal arc welding (GMAW) procedure for high performance weld joints of modified ferritic stainless steel and low-nickel austenitic stainless steel.
	<b>Guidance</b> Prof. (Dr.) T. K. Pal, Metallurgical and Material Engg. Dept. Jadavpur University, Kolkata, India
	<b>Duration</b> April 1, 2012 – March 31, 2016
<b>Research Scientist</b>	<b>Institute</b> Jadavpur University, Kolkata, West Bengal, India
	<b>Funding Agency</b> TATA Steel, Jamshedpur, India.
	<b>Project Title</b> Development of MIG-brazing technique for automotive coated steel and hybrid joints.
	<b>Guidance</b> Prof. (Dr.) T. K. Pal, Metallurgical and Material Engg. Dept. Jadavpur University, Kolkata, India
	<b>Duration</b> August 29, 2011 – March 31, 2012

## PROFESSIONAL QUALIFICATION:

**Doctor of Philosophy Specialization in Welding Metallurgy and Joining Technology**

**(Engineering)** Jadavpur University

Kolkata, India

June 11, 2012 – November 11, 2016

**Master of Technology Specialization in Material Engineering**

Jadavpur University

Kolkata, India

CGPA-7.5

August 24, 2009 – July 20, 2011

**Bachelor of Technology Mechanical Engineering**

West Bengal University of Technology, Haldia Institute of Technology

Haldia, India

CGPA-7.1

July 14, 2005 – June 20, 2009

## DISSERTATIONS:

**Ph.D. (Engineering)** *Title* Development of Suitable Gas Metal Arc Welding Procedure for High Performance Weld Joints of Modified Ferritic and Low Nickel Austenitic Stainless Steel.

**M. Tech.** *Title* Effect of Mode of Metal Transfer on Microstructure and Mechanical Properties of Gas Metal Arc Welded Modified Ferritic Stainless Steel.

## AWARDS & ACHIEVEMENTS:

**SRMIST Research Day-2019 Gold Medal (PG-student)** Awarded by SRM Institute of Science and Technology, India, for the best presented paper in the Research day held on 28<sup>th</sup> February 2019 at T.P. Ganeshan auditorium, SRMIST, KTR, TN, India.

**Outstanding Reviewer- 2018** Awarded by Journal of Materials Processing Tech., Elsevier, Netherland, for outstanding contribution in reviewing made to the quality of the journal.

**ESAB India Award -2016** Awarded by IIW-India (*a member society of the International Institute of Welding*) for the best presented paper across all categories at the National Welding Seminar (*NWS 2015*) held at CIDCO Exhibition Centre, Navi Mumbai, on 9-11<sup>th</sup> December, 2015.

**D & H Secheron Award -2015** Awarded by IIW-India (*a member society of the International Institute of Welding*) for the best presented paper at the National Welding Seminar (*NWS 2014-15*) held at Rabindra Bhavan, Jamshedpur, on 22-24<sup>th</sup> January, 2015.

**I.T. Mirchandani Memorial Research Award -2014** Awarded by IIW-India (*a member society of the International Institute of Welding*) for the best research paper on Welding Metallurgy, Modelling and Extensive Testing presented at the International Congress-IIW-IC-2014 held at the Pragati Maidan, New Delhi, on 10-12<sup>th</sup> April, 2014.

**Venus Wire Award -2013** Awarded by IIW-India (*a member society of the International Institute of Welding*) for the best Technical paper on Stainless Steel Application presented at the National Welding Seminar-2013 held at Bangalore.

**Senior Research Fellowship -2012** Awarded for four year by Council of Scientific and Industrial Research (CSIR), Pusa, New Delhi, in the year 2012.

## PROJECTS:

### A. Sponsored (Grant-in-aid and Institute)

Sl. No.	Title	Funding Agency	Sanctioned amount (in Rs.)	Year	PI/CO-PI	Status
1.	Development of Aluminium-Stainless Steel transition pipe joints for cryogenic and vacuum application (Sanction letter no. 39/14/03/2018-BRNS/39003 dated 02.04.2018)	BRNS-PFRC	16,89,750	2018-2020	Co-PI	Ongoing
2.	Analysis of interface characteristics to develop dissimilar wire and arc-based additive manufacturing components for industrial applications. (Approval letter no. ECR/2018/001250 dated 26.02.2019) (GAP226812)	DST-ECR (SERB)	42,36,900	2019-2022	PI	Ongoing
3.	Facility Development for Welding and Heat Treatment (OLP228712)	CSIR-CMERI (OLP)	4,100,000	2019-2020	PI	Ongoing
4.	Feasibility study of Dieless Hydroforming Process for Variable Cross-sections Tubular Structures to explore its Capability and Limitations (OLP227412)	CSIR-CMERI (OLP)	6,65,000	2019-2020	Co-PI	Completed

### B. Technical Services (Industry)

Sl. No.	Title	Funding Agency	Sanctioned amount (in Rs.)	Year	PI/CO-PI	Status
1.	Melting of Fe-Cr dust and its characterization (03 heats) (Work order no. JBI/U-IV/FA/ST-90019/19-20 dated 01.08.2019) (TSP-1198)	M/s. Jai Balaji Industries Limited, Durgapur	1,26,800	2019-2020	PI	Completed

## PATENTS:

<b>Title</b>	A Smart Suit with Inbuilt Pesticide Sprayer for Agricultural Applications
<b>Application no.</b>	201941011731
<b>Inventors</b>	S. Ramesh, A. Pattanaik, S.B. Mishra, B.R. Moharana, <b>M. Mukherjee</b> , H.G. Prashanthakumar, N. Karthik, N. Thangadurai, and K.M. Gayathri
<b>Date of Filing</b>	26-03-2019
<b>Correspondence</b>	School of Engineering and Technology, JAIN (Deemed-to-be-University), Bangalore, Karnataka, India
<b>Title</b>	Planar Parallel Manipulator Using Shape Memory Alloy Actuator
<b>Application no.</b>	202031003989
<b>Inventors</b>	Deep Singh, Yogesh Singh and <b>Manidipto Mukherjee</b>
<b>Date of Filing</b>	29-01-2020
<b>Correspondence</b>	Ideas2IPR, B-115 Chander Nagar, Janak Puri, New Delhi-110058

## SKILLS & ACTIVITIES:

**Skills** Gas Metal Arc Welding, Gas Tungsten Arc Welding, Manual Metal Arc Welding, Submerged Arc Welding, Friction Stir welding, Resistance Spot Welding, MIG-Brazing, TLP bonding, High Speed Imaging, Oscilloscope, Optical Microscopy, Scanning Electron Microscopy, Transmission Electron Microscopy, X-ray Diffraction, Texture-phase Mapping, EBSD Technique, Feritscope, Materials Processing, Tensile Testing, Impact Testing, Hardness Testing, High cycle Fatigue, Failure Analysis, Corrosion Analysis, Micromechanical Testing, Phase Transformations, Heat Treatment, Severe Plastic Deformation, Fractography, OriginPro, Photoshop, AutoCAD, COMSOL Multiphysics, MiniTAB.

**Languages** English; Hindi; Bengali

**Scientific Memberships** Life Member of Indian Institute of Welding (R-11868/L), Associate Member of Institute of Engineers, AMIE (AM1817550), Chartered Engineer, CEEng (India).

**Area of Interest** Major area of research interest includes Fluid Flow Behaviour, Modes of Metal Transfer, Microstructural and Mechanical Characterization of Metals and Alloys, Welding and Joining, Statistical Methodologies, High Cycle Fatigue and Fracture, Corrosion Behaviour of Metals and Alloys, Material Processing and Alloy Design.

**Journal Reviewer** Journal of Materials Processing Technology; Journal of Materials Engineering and Performance; Materials and Manufacturing Processes; Engineering Failure Analysis; Materials and Design; Journal of Nondestructive Evaluation; Materials Chemistry and Physics; The International Journal of Advanced Manufacturing Technology; Indian Journal of Engineering and Materials Sciences;

## PUBLICATIONS:

### A. International Journals:

1. S. Bhaumik, M. Mukherjee, P. Sarkar, A. Nayek, V. Paleu. "Microstructural and Wear Properties of Annealed Medium Carbon Steel Plate (EN8) Cladded with Martensitic Stainless Steel (AISI410)", *Metals*, 2020, 10, 958.
2. A. Pattanaik, M. Mukherjee and S.B. Mishra, "Influence of Curing Condition on Thermo-Mechanical Properties of Fly Ash reinforced Epoxy Composite", *Composite part B: Engineering*, 2019, 176, 107301. <https://doi.org/10.1016/j.compositesb.2019.107301>.
3. A. Pattanaik, M. Mukherjee and S.C. Mishra: "Effect of environmental aging conditions on the properties of fly ash filled epoxy composites", *Advanced Composite Materials*, 2019, 29:1, 1-30, DOI: 10.1080/09243046.2019.1610930.
4. S.K. Singh, P.K. Raushan, K. Debnath, M. Mukherjee and B.S. Mazumder: "Turbulence characteristics in boundary layers over a regular array of cubical roughness", *ISH Journal of Hydraulic Engineering*, 2018, DOI: 10.1080/09715010.2018.1559773
5. P.K. Raushan, S.K. Singh, K. Debnatha, M. Mukherjee, and B.S. Mazumder: "Distribution of turbulent energy in combined wave current flow", *Ocean Engineering*, 2018, 167, 310–316.
6. S.K. Singh, D.S.K. Reddy, M. Mukherjee, M. Manikandan, and P. Kumar: "Discussion of "Wave-current generated turbulence over hemisphere bottom roughness" by Barman et al. (2018)", *Estuarine, Coastal and Shelf Science*, 2018, 208, 49–51.

7. T. Sarkar, **M. Mukherjee**, and T.K. Pal: “Effect of Cu addition on Microstructure and Hardness of As-Cast and Heat Treated High-Cr Cast Iron”, *Transactions of the Indian Institute of Metals*, 2018, 71(6), 1455–1461.
8. Mainak Sen, **Manidipto Mukherjee**, Santosh Kumar Singh and Tapan Kumar Pal: “Effect of Double-Pulsed Gas Metal Arc Welding (DP-GMAW) Process Variables on Microstructural Constituents and Hardness of Low Carbon Steel Weld Deposits”, *Journal of Manufacturing Processes*, 2018, 31, 424–439.
9. **Manidipto Mukherjee** and Tapan Kumar Pal: “Evaluation of microstructural and mechanical properties of Fe-16Cr-1Ni-9Mn-0.12N austenitic stainless-steel welded joints”, *Materials Characterization*, 2017, 131, 406–424.
10. Nikhil Kumar, **Manidipto Mukherjee** and Asish Bandyopadhyay: “Study on Laser Welding of Austenitic Stainless Steel by Varying Incident Angle of Pulsed Laser Beam”, *Optics and Laser Technology*, 2017, 94, 296–309.
11. Nikhil Kumar, **Manidipto Mukherjee** and Asish Bandyopadhyay: “Comparative Study of Pulsed Nd:YAG Laser Welding of AISI 304 and AISI 316 Stainless Steels”, *Optics and Laser Technology*, 2017, 88, 24-39.
12. **Manidipto Mukherjee**, Saptarshi Saha, Tapan Kumar Pal and Prasanta Kanjilal: “Influence of Modes of Metal Transfer on Grain Structure and Direction of Grain Growth in Low Nickel Austenitic Stainless-Steel Weld Metals”, *Materials Characterization*, 2015, 102, 9-18.
13. Saptarshi Saha, **Manidipto Mukherjee**, and Tapan Kumar Pal: “Microstructure, Texture and Mechanical Property Analysis of Gas Metal Arc Welded AISI 304 Austenitic Stainless Steel”, *Journal of Materials Engineering and Performance*, 2015, 24(3), 1125-1139.
14. Shilajit Das, **Manidipto Mukherjee** and Tapan Kumar Pal: “Effect of Grain Boundary Precipitation and  $\delta$ -ferrite formation on Surface Defect of Low Nickel Austenitic Stainless Steels”, *Engineering Failure Analysis*, 2015, 54(4), 90-102.
15. Mainak Sen, **Manidipto Mukherjee** and Tapan Kumar Pal: “Evaluation of Correlations between DP-GMAW Process Parameters and Bead Geometry”, *Welding Journal*, 2015, 94(8), 265s-279s.
16. Deb Kumar Adak, **Manidipto Mukherjee**, Tapan Kumar Pal: “Development of a Direct Correlation of Bead Geometry, Grain Size and HAZ Width with the GMAW Process Parameters on Bead-on-plate Welds of Mild Steel”, *Transaction of Indian Institute of Metals*, 2015, 68(5), 839-849.
17. **M. Mukherjee**, A. Dutta, T.K. Pal, P. Kanjilal and S. Sisodia: “Enhancement of Microstructural and Mechanical Properties by Pulse Mode of Metal Transfer in Welded Modified Ferritic Stainless Steel”, *ISIJ International*, 2015, 55(7), 1439-1447.
18. **M. Mukherjee**, J. Saha, P. Kanjilal, T.K. Pal and S. Sisodia: “Influence of Gas Mixtures in GMAW of Modified 409M Ferritic Stainless Steel”, *Welding Journal*, 2015, 94(4), 101s-114s.
19. Subhrajit Debnath, **Manidipto Mukherjee** and Tapan Kumar Pal: “Study on Microstructure and Mechanical Properties of Thick Low-Alloy Quench and Tempered Steel Welded Joint”, *Materials Performance and Characterization*, 2014, 3(1), 23-48.
20. **Manidipto Mukherjee** and Tapan Kumar Pal: “Effect of Modes of Metal Transfer and Microstructure on Corrosion Behaviour of Welded Modified Ferritic Stainless Steel in Acidic Environments”, *Journal of Applied Electrochemistry*, 2013, 43, 347–365.

21. **Manidipto Mukherjee** and Tapan Kumar Pal: "Role of Microstructural Constituents on Surface Crack Formation during Hot Rolling of Standard and Low Nickel Austenitic Stainless Steels", *Acta Metall. Sin. (Engl. Lett.)*, 2013, 26(2), 206-216.
22. **Manidipto Mukherjee** and Tapan Kumar Pal: "Influence of Mode of Metal Transfer on Microstructure and Mechanical Properties of Gas Metal Arc Welded Modified Ferritic Stainless Steel", *Metallurgical and Materials Transactions A*, 2012, 43A, 1791-1808.
23. **M. Mukherjee** and T. K. Pal: "Influence of Heat Input on Martensite Formation and Impact Property of Ferritic-Austenitic Dissimilar Weld Metals", *Journal of Material Science and Technology*, 2012, 28(4), 343-352.

## B. Conferences/ Seminars:

- D. Singh, R. Choudhury, Y. Singh, and **M. Mukherjee**: "Development and Workspace Analysis of Smart Actuation based Planar Parallel Robotic Motion Stage", 3rd International Conference on Advances in Mechanical Engineering (ICAME - 2020), organized by Department of Mechanical Engineering, SRM Institute of Science and Technology, Chennai, February 24-29, 2020.
- Shatarupa Biswas, Yogesh Singh and **Manidipto Mukherjee**: "An Overview of Wire Electrical Discharge Machining (WEDM)", International Conference on Recent Developments in Mechanical Engineering (ICRAME 2020), organized by Department of Mechanical Engineering, NIT Silchar, India, February 07-09, 2020.
- Arka Ghosh, Hillol Joardar, **Manidipto Mukherjee**, Vishvesh J. Badheka, Bharat Doshi, Sushovan Basak: "Aluminium-stainless steel dissimilar joining by cold metal transfer process for cryogenic process plants", Proceedings of IIW International Congress 2020 organized by IIW, Mumbai, India, at CIDCO Exhibition Centre, February 6-8, 2020.
- Y. Singh, D. Singh, and **M. Mukherjee**: "Behaviour of NiTi based smart actuator for the development of planar parallel micro-motion stage", International Conference on Advances in Mechanical Engineering, organized by VNIT Nagpur, January 10-11, 2020.
- **Manidipto Mukherjee**, Hrishikesh Das and Sushovan Basak: "Effect of DP-GMAW and FSW process variables on AA6061 thin sheet welding", National Welding Seminar (NWS), organized by IIW-Kochi, Bolgatty Palace & Island Resort, Kochi, India, December 14-15, 2018.
- **Manidipto Mukherjee**, Vijay Kumar Pal, and Santosh Kumar Singh: "Evaluation of correlation between process parameter, bead geometry and microstructure of low nickel austenitic stainless steel weld deposits", Proceedings of 2nd International Conference on Advances in Mechanical Engineering (ICAME2018) organized by Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur, Chennai, India, March 22-24, 2018.
- Nikhil Kumar, **Manidipto Mukherjee** and Asish Bandyopadhyay: "Effect of pulsed Nd-YAG laser beam incident angle on microstructural and mechanical behaviour of welded austenitic stainless steel", Proceedings of IIW International Congress 2017 organized by IIW, Chennai, India, at Chennai Trade Center, December 7-9, 2017.
- Manabhanjan Sahoo and **Manidipto Mukherjee**: "Optimization of Process Parameters in GMAW of Low Carbon Steel to Predict Maximum Yield Strength Using Full Factorial Design ", National Welding Meet (NWM), organized by IIW-Bengaluru, at NCC, Bengaluru, India, May 12-13, 2017.
- **Manidipto Mukherjee**, Manabhanjan Sahoo and Debasis Mahapatra: "Correlation of Bead Geometry, Grain Size and Hardness with the Pulse TIG Process Parameters of Fe16Cr0.3Ni9Mn0.17N Austenitic Stainless-Steel Weld Deposits by Statistical Analysis", National Welding Meet (NWM), organized by IIW-Bengaluru, at NCC, Bengaluru, India, May 12-13, 2017.
- **Manidipto Mukherjee**, Saptarshi Saha and Tapan Kumar Pal: "Evaluation of correlation between process parameter, bead geometry & microstructure of Fe16Cr0.3Ni9Mn0.17N austenitic stainless steel



weld deposits by statistical analysis”, National Welding Seminar (NWS), organized by IIW-Kolkata, at Science city, Kolkata, India, during December 15-17, 2016.

- **Manidipto Mukherjee**, Saptarshi Saha and Tapan Kumar Pal: “Influence of Heat Input on Microstructural and Mechanical Behaviour of Pulsed Gas Metal Arc Welded Fe<sub>16</sub>Cr<sub>0.3</sub>Ni<sub>9</sub>Mn<sub>0.17</sub>N ASS”, National Welding Seminar (NWS), organized by IIW-Kolkata, at Science city, Kolkata, India, December 15-17, 2016.
- **Manidipto Mukherjee**, Saptarshi Saha, Tapan Kumar Pal, Prasanta Kanjilal, and Sunil Sisodia: “Microstructural and Mechanical Behaviour of Fe<sub>16</sub>Cr<sub>1</sub>Ni<sub>9</sub>Mn<sub>0.12</sub>N austenitic stainless-steel welded joints”, National Welding Seminar (NWS), organized by IIW-Mumbai, at Mumbai, India, December 10-12, 2015.
- **Manidipto Mukherjee**, Saptarshi Saha, Tapan Kumar Pal, Prasanta Kanjilal, and Sunil Sisodia: “EBSD Study of Gas Metal Arc Welded Low Nickel Austenitic Stainless Steel”, National Welding Seminar (NWS), organized by IIW-Jamshedpur and Tata Steel, at Jamshedpur, India, January 22-24, 2015.
- **Manidipto Mukherjee**, Anupama Dutta, Tapan Kumar Pal, Prasanta Kanjilal, and Sunil Sisodia: “Effect of Pulse Mode of Metal Transfer on Microstructural and Mechanical Properties of Welded Modified Ferritic Stainless Steel”, National Welding Seminar (NWS), organized by IIW-Jamshedpur and Tata Steel, at Jamshedpur, India, January 22-24, 2015.
- Deb Kumar Adak, **Manidipto Mukherjee** and Tapan Kumar Pal: “Effect of GMAW Process Parameters on Bead-on-plate Weld Characteristics using Multiple Linear Regression Analysis”, 2<sup>nd</sup> International Conf. on Advances in Mechanical Engineering and its Interdisciplinary Areas (ICAMEI-2015), Organized by College of Engineering & Management, Kolaghat, West Bengal, India, January 2-4, 2015.
- Mainak Sen, **Manidipto Mukherjee** and Tapan Kumar Pal: "Prediction of Weld Bead Geometry for Double Pulse Gas Metal Arc Welding Process By Regression Analysis", Proceedings of 5<sup>th</sup> International and 26<sup>th</sup> All India Manufacturing Technology, Design and Research Conference AIMTDR 2014 hosted by IIT Guwahati, Guwahati, India, December 12-14, 2014.
- **Manidipto Mukherjee**, Joydeep Saha, Tapan Kumar Pal, Prasanta Kanjilal, and Sunil Sisodia: "Influence of Shielding Gas Mixtures on Microstructural and Mechanical Properties of Gas Metal Arc Welded Modified Ferritic Stainless Steel", NMD ATM 2014, organized by College of Engineering, Pune, India, November 12-15, 2014.
- M. Sen, **M. Mukherjee** and T. K. Pal: "Investigation for Controlled Double Pulse GMAW Through Response Surface Methodology Based Approach" International Conf. on Advancements and Futuristic Trends in Mechanical and Materials Engineering, Organized by Punjab Technical University, Punjab, October 16-18, 2014.
- **M. Mukherjee**, J. Saha, P. Kanjilal, T.K. Pal and S. Sisodia: "Influence of Shielding Gas Mixtures on Microstructural and Mechanical Properties of Ferritic-Austenitic Dissimilar Weld Joints", Proceedings of IIW International Congress 2014 on Advancement In Welding, Cutting and Surfacing Technologies for Improved Economy and Sustainable Environment hosted by IIW, New Delhi, India, April 9-11, 2014.
- Mainak Sen, **Manidipto Mukherjee** and Tapan Kumar Pal: "Evaluation and Optimization of Double Pulsed Gas Metal Arc Welding Process Parameters for the Prediction of Weld Bead Geometry using Statistical Methods", Proceedings of IIW International Congress 2014 on Advancement In Welding, Cutting And Surfacing Technologies For Improved Economy And Sustainable Environment hosted by IIW, New Delhi, India, April 9-11, 2014.
- **Manidipto Mukherjee** and Tapan Kumar Pal: “Development of Suitable Gas Metal Arc Welding Procedure for Modified Ferritic Stainless Steel”, presented in the Seminar on Processing,

Microstructure and Properties of Steel organized by TEQIP-II and Metallurgical and Material Engineering Department, Jadavpur University, Kolkata, March 25, 2014.

- M. Sen, **M. Mukherjee** and T. K. Pal, "Optimization of Weld Bead Geometry in Double Pulsed Gas Metal Arc Welding using Statistical Methods" International Conf. on Advancements and Futuristic Trends in Mechanical and Materials Engineering, Organized by Punjab Technical University, Punjab, October 3-6, 2013.
- **M. Mukherjee**, P. Kanjilal and T.K. Pal, "Grain Boundary and Pitting Corrosion Behaviour of Modified Ferritic Stainless-Steel Weld metals in Acidic Environments", National Welding Seminar (NWS), in Bangalore, India, February 7-9, 2013.
- **M. Mukherjee**, P. Kanjilal and T.K. Pal, "Corrosion Behaviour of Ferritic-Austenitic Dissimilar Weld metals in Acidic Environments: Effect of Microstructural Constituents", Proceedings of 5<sup>th</sup> International Symposium for Research Scholars on Metallurgy, Materials Science & Engineering, Organised by IIT Madras, Chennai, India, December 13-15, 2012.
- **Manidipto Mukherjee** and Tapan Kumar Pal, "Gas Metal Arc Welding of Modified Ferritic Stainless Steel", Proceedings of 64<sup>th</sup> International Conference of the International Institute of Welding on Global Trends in Joining, Cutting and Surfacing Technology, Chennai, July 17-22, 2011.
- **Manidipto Mukherjee**, Sunil Sisodia and Tapan Kumar Pal, "Evaluation of microstructure and properties of Gas-Metal Arc welded Ferritic Stainless Steel under different mode of metal transfer", National Welding Seminar (NWS), Visakhapatnam, December 2010.

### *C. Books and Book Chapters*

- **M. Mukherjee**, "Wear Characteristics of LASER Cladded Surface Coating" In: J. Katiyar, P. Ramkumar, T. Rao, and J. Davim (eds) Tribology in Materials and Applications. Materials Forming, Machining and Tribology. Springer, Cham, 2020, ISBN 978-3-030-47450-8, DOI: 10.1007/978-3-030-47451-5\_10.
- D. Singh, Y. Singh, **M. Mukherjee**, "Behaviour of NiTi Based Smart Actuator for the Development of Planar Parallel Micro-Motion Stage" In: V. Kalamkar and K. Monkova (eds) Advances in Mechanical Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore, 2021, ISBN 978-981-15-3638-0, DOI: 10.1007/978-981-15-3639-7\_26.
- Shatarupa Biswas, Yogesh Singh, **Manidipto Mukherjee**, "A Study on Optimization Techniques of Electro Discharge Machining" 2020, Springer International Publishing AG.
- **Manidipto Mukherjee**, "GMA Welding of Modified Ferritic and Low Ni Austenitic Stainless Steel" 2017, ed. E. Focsa, LAMBERT Academic Publishing, Germany, ISBN: 978-3-330-03688-8.

### **INVITED TALKS:**

- Invited talk on "**Wire Arc Additive Process for Medium to Large Engineering Component Manufacturing: A Comprehensive Review**" presented in WELD 2020 at the Institute of Engineering and Management, Salt Lake, organized by the Indian Institute of Welding, Kolkata on 7<sup>th</sup> March 2020.
- Invited talk on "**Advances Manufacturing for Industry 4.0**" given on 5<sup>th</sup> March 2020 at CODISSIA, Trade Fair Complex, Coimbatore, organized by EEPC India, Coimbatore.
- Invited talk on "**Advanced Welding Processes**" given on 13<sup>th</sup> September 2019 at a one-day seminar on "Advanced Manufacturing," organized by EEPC India, Kolkata.
- Invited talk on "**Advanced Manufacturing**" delivered in a one-day Industry 4.0 seminar organized by EEPC India, Kolkata on 8<sup>th</sup> August 2019.
- Invited talk on "**Advanced Welding Technology for Industry 4.0**" delivered in TEQIP III sponsored five days national workshop on Electronic Systems for Mechanical Automation and Robotic Technology (eSMART 19), organized by NIT Silchar, Assam on 24<sup>th</sup> May 2019.



- Technical talk on “**Development of Surface Composite Materials by Friction Stir Processing (FSP) Technique**” organized by Composite Research Group, SRM University, Chennai on 4<sup>th</sup> December 2017.
- Technical talk on “**Fundamental of MMAW, MIG and TIG Welding Processes**” at C.V. Raman College of Engineering, Bhubaneswar on 17<sup>th</sup> May 2017.

## SHORT TERM COURSES & WORKSHOPS:

- **One-day workshop** on “Current Trends in Material Joining Processes” organized by Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur, Chennai, India, on October 10, 2018.
- 6 days’ **Workshop** on “Tribology of Materials and Manufacturing (TMM - 2018)” organised by Tribology and Surface Interaction Research Laboratory, Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur, Chennai, India, during June 11-16, 2018.
- **GIAN course** on “Welding Metallurgy and Weldability of Non-Ferrous Alloys” organized by IIT Madras, Chennai, Tamil Nadu, India, during December 11-15, 2017.
- **Faculty Development Programme** on “Advances in Welding Technology” organized by Department of Mechanical Engineering, C.V. Raman College of Engineering, Bhubaneswar, during May 01-06, 2017.
- **National Workshop** on “Advances in Joining Processes” organized by Jadavpur University, Kolkata and Technical Education Quality Improvement Programme (TEQIP-II), during September 22-23, 2016.
- **International Workshop** on “Pipe Welding in Power, Oil and Gas Industries” organized by **Welding Technology Centre (WTC)**, Metallurgical and Material Engineering Department, Jadavpur University and Technical Education Quality Improvement Programme (TEQIP-II) in association with IAWTR, during February 20-21, 2014.
- **Welding and Weldability of steels** organized by the **Indian Institute of Welding (IIW)**, Kolkata Branch for the Annual Seminar Weld-2013 at Indian Institute of Chemical Engineers, Dr. H.L. Roy Building, Jadavpur University.
- **International Workshop** on “High Performance Steels” organised by Indian Institute of Engineering Science and Technology formerly known as Bengal Engineering & Science University (BESU), Shibpur, Howrah, West Bengal, during November 21-22, 2012.
- **Gas Metal Arc Welding of Ferrite Stainless Steel** organized by the **Indian Institute of Welding (IIW)**, Jamshedpur, January 2011.

## PhD GUIDANCE:

Sl. No.	Name	Title	Status
1.	Mr. Amrit Raj Paul	Analysis of interface characteristics to develop dissimilar wire and arc-based additive manufacturing components for industrial applications	Ongoing (Reg. 2020)
2.	Ms. Diya Mukherjee	Development of aluminium based superalloy for high temperature applications.	Ongoing (Reg. 2020)
3.	Mr. Md. Mossaraf Hossain	Design and Development of Non-ferrous Layered Structure using Wire Arc Based Additive Manufacturing (WAAM) Process for Industrial Application	Ongoing (Reg. 2020)
4.	Mr. Senkathir S.	Development of suitable friction welding procedure for high-performance weld joints of dissimilar metal reinforced polymer composites	Ongoing (Reg. 2019)
5.	Ms. Shatarupa Biswas	Development of WEDM parametric correlation model and process optimization for different alloys.	Ongoing (Reg. 2018)

## M. TECH. PROJETS:

- **Mr. Deep Singh** - Design of 3-DOF planar robotic manipulator using shape memory alloy spring as actuators for micro-motion stage, 2018-2019. (SRMIST Gold medal in Research day 2019 for the best paper)

# DR. MANIDIPTO MUKHERJEE

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- **Mr. M. Ajay Rahul** - Development of Mg composites compatible for temporary implant through friction stir processing, 2018-2019.

## PERSONAL INFORMATIONS:

**Father's name** Mr. Sambhu Nath Mukherjee  
**Mother's name** Mrs. Mira Mukherjee  
**Date of Birth** 15<sup>th</sup> October, 1986  
**Gender** Male  
**Marital status** Married  
**Spouse name** Mrs. Sushmita Sen (Mukherjee)  
**Hobbies** Photography, Driving, Trekking

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## DECLARATION

I hereby declare that the above-mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above-mentioned.

**Place:** - Durgapur

**Date:** - 04.07.2020



**Signature**