

1. **Name:** DR. BIKASH GHOSHAL
2. **Designation:** Professor and HOD, Mechanical Engineering
3. **Qualification:** B.E, Mechanical Engineering from Jalpaiguri Govt. Engg College, Jalpaiguri, W.B.
M-Tech, Design & Production Engineering from N.I.T, Durgapur
Ph.D. Engineering from Jadavpur University, kolkata
4. **Research:** Ph.D. degree details
 - (i) Ph.D. Thesis Title: Experimental investigation into electrochemical micromachining for generation of microchannels
 - (ii) Research area of Ph.D. thesis work: Electrochemical Micromachining
5. **Experience:**
 - (a) **Industrial Experience:** 13 years 1 month from formerly M.A.M.C Ltd. located at Durgapur
 - (b) **Academic experience:** 15 years
- 6 **Teaching Interest:** Advanced manufacturing processes, CAD/CAM, Metrology & Measurement, I C Engine, Refrigeration & Air Conditioning, Strength of Material
7. **Publication Details:**

International Journal Publications:

 - I. B. Ghoshal and B. Bhattacharyya, "Influence of vibration on micro-tool fabrication by electrochemical machining", **International Journal of Machine Tools & Manufacture** 64 (2013) 49-59
 - II. B. Ghoshal and B. Bhattacharyya, "Micro Electrochemical Sinking and Milling Method for Generation of Micro Features", Proceedings of the Institution of Mechanical Engineers, Part B: **Journal of Engineering Manufacture** 227 (2013): 1651-1663
 - III. B. Ghoshal and B. Bhattacharyya, "Shape control in micro borehole generation by EMM with the assistance of vibration of tool", **Precision Engineering** 38/1 (2014) 127-137
 - IV. B. Ghoshal and B. Bhattacharyya, "Generation of Microfeatures on Stainless Steel by Electrochemical Micromachining", **International Journal of Advanced Manufacturing Technology** 76 (2015) 39-50
 - V. B. Ghoshal and B. Bhattacharyya, "Investigation on profile of microchannel generated by electrochemical micromachining", **Journal of Material Processing Technology**, 222 (2015) 410-421
 - VI. B. Ghoshal and B. Bhattacharyya, "Vibration Assisted Electrochemical Micromachining of High Aspect Ratio Micro features", **Precision Engineering** 42 (2015) 231-241

- VII. B. Ghoshal and B. Bhattacharyya, “Electrochemical micromachining of microchannel using optimum scan feed rate”, **Journal of Manufacturing Processes**, 23 (2016) 258-268

International Conference Paper:

- I. B. Ghoshal and B. Bhattacharyya, “**Investigation into Electrochemical Micro-machining of Stainless steel for the Generation of Micro Holes**”, International conference on Precision, Meso, Micro and Nano Engineering held on December, 10-11, 2011 at Production Engineering department, College of Engineering, Pune, Maharashtra, India.
- II. B. Ghoshal and B. Bhattacharyya, “**Generation of Microfeatures on Stainless Steel by Electrochemical Micromachining**”, 4th International & 25th All India Manufacturing Technology Design and Research (AIMTDR-2012) Conference held on 14th to 16th December, 2012 at the Department of Production Engineering, Jadavpur University, Kolkata, India.
- III. B. Ghoshal and B. Bhattacharyya “**Investigation into Electrochemical Micromachining of stainless steel for the Generation of Microchannel**”, International conference on Precision, Meso, Micro and Nano Engineering (COPEN-8: 2013) held in the Department of Mechanical Engineering, National Institute of Technology Calicut, India, during 13 to 15th December, 2013.
- IV. B. Ghoshal and B. Bhattacharyya “**High Aspect Ratio Micro-features by Electrochemical Micromachining**” 5th International & 26th All India Manufacturing Technology Design and Research (AIMTDR-2014) Conference held on 12th to 14th December, 2014 at the Department of Mechanical Engineering, IIT Guwahati, Assam, India.

National Conferences:

- I. “**Measurement and Analysis of Surface Roughness of Stainless Steel Microchannel Generated by Electrochemical Micromachining**” National conference on Recent Trends in Applied Sciences & Humanities and Impact on Engineering Field held on 05 – 06 Nov, 2014 at Durgapur Institute of Advanced Technology & Management, Rajbandh, Durgapur-12.
- II. “**3D Surface Characterization of Stainless Steel Microchannel Generated by Electrochemical Micromachining**” 4th National Conference on **Advances in Metrology (AdMet-2015)** organized by **CSIR- Central Mechanical Engineering Research Institute**, Durgapur on 25th to 27th Feb, 2015.
- III. “**Fabrication of micro tools by ECM leading to generation of microchannels for industrial applications**” All India Seminar on Enabling Sustainable Development in Mechanical Engineering in the Context of Make in India - held on 3-5th April, 2017 at DIATM
- IV. “**Evaluation and Analysis of Non Tactile Surface Metrology of Stainless Steel Microchannel Generated by EMM**” All India Seminar on Sustainable Development in Manufacturing Process & Impact on Environment held on 3-5th May, 2018 at DIATM

8. Details of Programs Organised

Three All India Seminars were organized as convenor at DIATM:

- 1) Advancement of Design in Mechanical Engineering and Applications (ADMEA) on 22nd August 2014
- 2) Enabling Sustainable Development in Mechanical Engineering in the Context of Make in India”- held on 3-5th April, 2017
- 3) Sustainable Development in Manufacturing Process & Impact on Environment held on 3-5th May, 2018

9. Details of Important Conferences / Seminars attended

- a) 4th International & 25th All India Manufacturing Technology Design and Research (AIMTDR-2012) Conference held on 14th to 16th December, 2012 at the Department of Production Engineering, **Jadavpur University**, Kolkata, India.
- b) 5th International & 26th All India Manufacturing Technology Design and Research (AIMTDR-2014) Conference held on 12th to 14th December, 2014 at the **Department of Mechanical Engineering, IIT Guwahati, Assam, India.**
- c) 4th National Conference on Advances in Metrology (AdMet-2015) organized by **CSIR- Central Mechanical Engineering Research Institute**, Durgapur on 25th to 27th Feb, 2015.