Aditya Kumar Lohar

Head, Additive Manufacturing Research Group and Dy. Head, Advanced Casting Research Group, Mahatma Gandhi Avenue, Council of Scientific and Industrial Research (CSIR) - Central Mechanical Engineering Research Institute (CMERI), Durgapur, West Bengal - 713209, India, Email: <u>aklohar@cmeri.res.in</u>

Education

Postdoc. University of *Michigan*, USA on the "Investigation of processing parameters of Direct Metal Deposition (DMD) and related manufacturing problems" in 2012

PhD (Metallurgical and Materials Engineering), Indian Institute of Technology, Kharagpur, 2010 through DAAD sandwich model with TU Bergakademie Feriberg Germany *Dissertation: Processing and characterization of Al-Sc alloys and composites*

M.Tech (Mechannial Engineering), Indian Institute of Technology, Kharagpur, 1996 *Dissertation: Vertical centrifugal casting of Aluminium alloy Matrix composites.*

B.E. (Mechanical Engineering), National Institute Technology, Rourkela, 1993 *Dissertation: Design of Robotics elements.*

Position held

Jan. 96 – Mar. 96 : Project Assistant, Indian Institute of Technology, Kharagpur May 96 – Mar. 97 : Engineering Officer at TEXMACO Pvt. Ltd. Belghoria, Kolkata Mar. 97 – Mar. 01 : Junior Scientist, CSIR-CMERI Mar. 01 – Mar. 08 : Scientist, CSIR-CMERI Mar. 08 – Mar. 12 : Senior Scientist, CSIR-CMERI Mar. 12 – Mar. 17 : Principal Scientist, CSIR-CMERI Mar. 17 – Mar. 23 : Senior Principal Scientist, CSIR-CMERI Mar. 23 - till date: Chief Scientist

Award

- CSIR-Raman Research Fellowship 2004
- DAAD fellowship -2012 (German Academic Exchange Programme).

List of Publications

I. Journal

- 1. B. Mondal, S. Kundu, A. K. Lohar and B.C. Pai, Net-shaped manufacturing of intricate components of A356/SiCp composite through rapid prototyping integrated investment casting, Mat. Sci. and Engg., A498(2008)37-41
- 2. S.Sarkar, A. K. Lohar and S.C. Panigrahi, Vertical centrifugal casting of Aluminium Matrix particle reinforced composite, J. of reinforced plastic and composites, 28 (2009) 1013-1020
- 3. A. K. Lohar, B.N. Mondal, D. Rafaja, V. Klemm and S.C. Panigrahi, Microstructural investigation on ascast and annealed Al-Sc and Al-Sc-Zr alloys, Materials characterisation, 60(2009)1387-1394.
- 4. A. K. Lohar, B.N. Mondal and S.C. Panigrahi, Influence of cooling rate on the microstructure and as-cast ageing behavior of as-cast Al-Sc-Zr alloy, J. Mat. Proc. Technol., 210 (2010) pp. 2135-2141

- 5. A. K. Lohar, B.N. Mondal and S.C. Panigrahi, Effect of Mg on the microstructure and mechanical properties Al0.3Sc-0.15Zr/(TiB₂)p composite, J. Mat. Eng. and Perf., 20(2011) pp. 1575-1582
- 6. S K Samanta, B Sharma, P Das, A. K. Lohar, Development of tubular Ni wick used in LHP for space applications, Frontiers in Heat Pipes (FHP) 2 (2011)
- 7. Prosenjit Das, Sudip K. Samanta, A. K. Lohar, Himadri Chattopadhyay, Pradip Dutta, Effect of Pouring Temperature on Cooling Channel Semi Solid SlurryGeneration process, Int. J. of Mat. and Mechanics Engg., 1(2012) pp. 11-15.
- 8. S.K. Samanta, P Das, A. K. Lohar, Study of physical characteristics of nickel wicks developed by metal injection moulding, Powder Metallurgy 56 (2013), 221-230
- 9. S. Samanta, B Sharma, P Das, A. K. Lohar, Development of Tubular Ni Wick used in LHP for Space Applications, Frontiers in Heat Pipes, vol. 2, Article ID 043004, 2011.
- S.K. Samanta, P. Das, A. K. Lohar, H. Roy, S. Kumar, A. K. Chowdhury, A novel approach of manufacturing Nickel Wicks for loop heat pipes using Metal Injection Moulding (MIM), Sadhana 38 (2013) part-2, pp. 281–296
- Sourav Kr. Saha, Abhiram Hens, Additi RoyChowdhury, Aditya Kr. Lohar, N. C. Murmu and Priyabrata Banerjee, Molecular Dynamics and Density Functional Theory Study on Corrosion Inhibitory Action of Three Substituted Pyrazine Derivatives on Steel Surface, Canadian Chemical Transactions, 2(2014), pp: 489-503
- 12. Sourav Kr. Saha, Pritam Ghosh, Additi Roy Chowdhury, Pranab Samanta, N. C. Murmu, Aditya Kr. Lohar and Priyabrata Banerjee, Corrosion Control of Chrome Steel Ball in Nitric Acid Medium Using Schiff Base Ligand and Corresponding Metal Complexes: A Combined Experimental and Theoretical Study, Canadian Chemical Transactions, 2(2014), pp: 381-402
- 13. S K Mishra, H Roy, A K Lohar, S K Samanta, S Tiwari and K Dutta, A comparative assessment of crystallite size and lattice strain in differently cast A356 aluminium alloy, Materials Science and Engineering 75 (2015) (doi:10.1088/1757-899X/75/1/012001012001)
- 14. S. Thadela, B. Mandal, P. Das, H. Roy, A. K. Lohar, S. K. Samanta, Rheological behavior of semi-solid TiB2 reinforced Al composite, Trans. Nonferrous Met. Soc. China 25(2015), pp: 2827-2832
- 15. Debashis Ghosh, Manab Mallik, Nilrudra Mandal, Samik Dutta, Himadri Roy, A. K. Lohar, Effect of Experimental Variables of Abrasive Wear on 3D Surface Roughness and Wear Rate of Al–4.5 % Cu Alloy, J. Inst. Eng. India Ser. D 98(1): 27–36, 2016
- 16. A. J. Banerjee, M.K. Biswal, A. K. Lohar, H. Chattopadhyay, N. Hanumaiah, Review on experimental study of Nd: YAG laser beam welding, with a focus on aluminium metal matrix composites, International Journal of Engineering & Technology 5 (3), 92-101, 2016.
- 17. AJ Banerjee, H Roy, MK Biswal, A. K. Lohar, H Chattopadhyay, Naga Hanumaiah, Investigation on Tensile Behaviour of Laser Welded Al-Mg-Sc-Zr In Situ TiB₂ Reinforced Metal Matrix Composite Transactions of the Indian Institute of Metals 70 (8), 2071-2077, 2017
- 18. ST Islam, SK Samanta, H Roy, A. K. Lohar, S Das, A Bandyopadhyay, Rheological behavior of 316L Stainless Steel Feedstock for μ-MIM Materials Today: Proceedings 5 (2), 8152-8158, 2018
- 19. SK Gautam, N Mandal, H Roy, A. K. Lohar, SK Samanta, G Sutradhar, Optimization of processing parameters of cooling slope process for semi-solid casting of ADC 12 Al alloy Journal of the Brazilian Society of Mechanical Sciences and Engineering (2018) 40:291
- 20. SK Gautam, H Roy, A. K. Lohar, SK Samanta, G Sutradhar, Microstructure characterization and mechanical properties of semi solid ADC 12 Al alloy, International Journal of Modern Manufacturing Technologies 11 (2019), pp 36-42
- 21. P Pant, D Chatterjee, T Nandi, SK Samanta, A. K. Lohar, A Changdar, Statistical modelling and optimization of clad characteristics in laser metal deposition of austenitic stainless steel, Journal of the Brazilian Society of Mechanical Sciences and Engineering 41(2019) 283

- 22. ST Islam, SK Samanta, A. K. Lohar, A Bandyopadhyay, Rheological study of alumina feedstock for a micro-powder injection moulding application, Materials Research Express 6(2019) 026518
- 23. SK Gautam, H Roy, A. K. Lohar, SK Samanta, G Sutradhar, Effect of processing routes on structureproperty correlationship of ADC 12 Al alloy, Materials Research Express 6 (2019) 026518
- 24. Piyush Pant, Dipankar Chatterjee, S K Samanta, Titas Nandi & A. K. Lohar A bottom-up approach to experimentally investigate the deposition of austenitic stainless steel in laser direct metal deposition system, J. of the Brazilian Society of Mech. Sci. and Engg. 42 (2020) 88
- 25. SKT Islam, SK Samanta, A. K. Lohar, S Das, A Bandyopadhyay, Thermal and rheological behaviour of a wax based binder and an alumina feedstock for micro-PIM application Advances in Thermal Engineering, Manufacturing, and Production Management, https://doi.org/10.1007/978-981-16-2347-9_21 (2020), pp 245-258
- 26. Piyush Pant, Dipankar Chatterjee, Sudip Samanta, A. K. Lohar, Experimental and numerical analysis of the powder flow in a multi channel coaxial nozzle of a direct metal deposition system, J. of mfg Sci and Engg 143(2021)7
- 27. Ananda Rabi Dhar, Dhrubajyoti Gupta, Shibendu Shekhar Roy, A. K. Lohar, Nilrudra Mandal, Covariance matrix adapted grey wolf optimizer tuned eXtreme gradient boost for bi-directional modelling of direct metal deposition process, Expert Systems with Applications, 2022, Vol.199, 116971
- 28. A Singh, A Nath, SS Roy and A. K. Lohar Modeling of laser aided direct metal deposition of stainless steel using supervised deep learning algorithms Materials Today: Proceedings 62(1), 2022, pp 360-366
- 29. T Das, H Roy, A. K. Lohar, SK Samanta, Mechanical and microstructural properties of laser direct energy deposited 15–5 PH and SS 316L stainless steel Materials Today: Proceedings 66(9), 2022 pp 3809-3813
- 30. AR Dhar, D Gupta, SS Roy, A. K. Lohar, Forward and backward modeling of direct metal deposition using metaheuristic algorithms tuned artificial neural network and extreme gradient boost, Progress in Additive Manufacturing, 7, 2022, pp 627-41
- 31. SK Gautam, M Mallik, H Roy, A. K. Lohar, SK Samanta, Wear and Mechanical Properties of In Situ A356/5% TiB2 Composite Synthesis by Cooling Slope Technique, International Journal of Metalcasting, <u>https://doi.org/10.1007/s40962-022-00931-5</u> (2022) 1-13
- 32. T Das, M Mukherjee, D Chatterjee, SK Samanta, A. K. Lohar, A comparative evaluation of the microstructural characteristics of L-DED and W-DED processed 316L stainless steel, Journal of Manufacturing Science and Technology 40 (2023) pp 114-128
- 33. SK Gautam, H Roy, A. K. Lohar, SK Samanta, Studies on Mold Filling Behavior of Al–10.5 Si–1.7 Cu Al Alloy During Rheo Pressure Die Casting System, International Journal of Metalcasting, (2023) <u>https://doi.org/10.1007/s40962-023-00958-2</u>
- 34. T Das, B Chandrakanth, SK Samanta, A. K. Lohar, Study of multi-layer deposition in L-DED process for 15–5 PH stainless steel: A numerical and experimental approach. Journal of Manufacturing Processes 99(2023), 469-484
- 35. SK Gautam, H Roy, A. K. Lohar, SK Samanta, Rheological properties of ADC12 Al alloy in the semisolid state, International Journal of Cast Metals Research 36 (2023), 18-26
- 36. SK Gautam, H Roy, B Chandrakanth, A. K. Lohar, SK Samanta, Effect of Processing Parameters of Rheocast on Mechanical Properties of Al–10.5 Si–1.7 Cu Alloy, International Journal of Metalcasting, (2023) 1-13

II. National / International conference

- 1. B. Mondal, A. K. Lohar, S.K.Samanta, M.K.Jas. Study on the Development of Investment Cast Components through Rapid Prototype Soft Tooling Process, 1-3rd February 2002, Panaji, Goa, India
- B. Mondal, A. K. Lohar, S. Mula, S.C.Panigrahi: Study on Synthesis of Al/(ZrSi0₄) p Composites through Investment Casting Process. National Seminar on "Science & Technology of Advanced Engineering Materials (STAEM-2003) February 20-21, 2003 IIM, Trivandrum, India

- 3. B. Mondal , A. K. Lohar, D. Paswan, S.Mula: Study on development of near net shape manufacturing of Al / (ZrSi0₄) p Composites through Investment Casting Process, Proceedings of the 9th Japan-India Joint Seminar on Manufacturing Science of advanced Composites ACM-9, 16-21 February,2004, Machida, Tokyo, Japan
- 4. A. K. Lohar, S.K.Das, S. Mula, D. Chakraborty, B.N. Mondal: Technological aspect of particulate reinforced Investment Cast metal matrix composite production, National Conference on Investment Casting(NCIC-2003), September 22-23, 2003 at CMERI Durgapur, India
- 5. S. Kundu, B.R.K. Venkatapthi, A. K. Lohar and B Mondal, Development of improved primary coating layer ceramic shell mould of investment casting, National Symposium on Investment Casting (NSIC-2006) during January 6-7, 2006 at Howrah, India
- 6. A. K. Lohar. B.Mondal and S.C.Panigrahi, Scandium & Zirconium additions to the Aluminium Alloys, National Symposium on Investment Casting (NSIC-2006) during January 6-7, 2006 at Howrah, India
- 7. S.N. Shome, **A. K. Lohar**, Automation in Investment Casting CMERI, Durgapur, published in the proceedings of National Conference on Investment Casting-2006, Hyderabad, pp. 178-187, India
- 8. B Mondal, S Kundu, A. **K. Lohar** and B C Pai, Net shaped intricate components manufacturing of A356/SiCp composite through RP-Integrated Investment casting, ICRACM-2007 during 20-23rd Feb., 2007 at Delhi, India
- 9. A. K. Lohar, Casting Design and consideration, Workshop cum Training programme on Investment Casting, September 14-19, 2006 at CMERI Durgapur, India
- L. Gopinath, A. K. Lohar, B.N. Mondal, Method to Increase Number of Grids by a Line Function, Proceedings of the National Conference on Trends and Advances in Computer Aided Design and Engineering (TACADE-2007), February 16-17, 2007 at Nadia, India
- 11. A. K. Lohar, An investigation of the effect of scandium on Aluminium alloy; for the production of heat resistant cast component, Proceedings of International Conference on Advanced Manufacturing Technology(ICAMT-2007) during 29-30th November, 2007, CMERI Durgapur, pp 512-18, India
- A. K. Lohar., J.Dutta Majumder, B. N. Mondal and S. C. Panigrahi, Effect of Sc and Zr addition on the corrosion behavior of Al-Mg alloys and Al-Mg alloys reinforced with (TiB₂)_p. NMD-ATM-2009 at Kolkata during 14-17th November 2009, India
- S.K. Samanta, P.Das, A. K. Lohar, S.Kumar, D.P. Chattopadhyay, A.K. Chowdhury, Manufacturing of nickel wick for loop heat pipe through MIM route, 18-21ist May, 2011, 2011 International conference on powder metallurgy & particulate material (PowderMet 2011), Sanfrancisco, USA, SN2011-01-005
- 14. S.K. Samanta, P.Das, A. K. Lohar, A.K.Chowdhury, Metal Injection Moulding-A new P/M route for development of nickel wicks used in LHPs, 3-5 th February, 2011, The PM-11 International conference and exibition, Pune
- 15. A. K. Lohar, S.K. Samanta, P. Das, BRK Venkatapathi and S.C. Panigrahi, The effect of cooling slope temperature and length on the microstructure and mechanical properties of A356 aluminium, International Conference on Advances in Materials and Materials Processing (ICAMMP 2011) during 9-11 December, 2011 at IIT Kharagpur
- 16. Sudip K. Samanta, Prosenjit Das, A. K. Lohar, Bharat B. Sharma, Himadri Chattopadhyay, Pradip Dutta, Formation of semi solid slurry using cooling slope for rheo-pressure die casting, accepted for the presentation in the Proceedings of the 21st National & 10TH ISHMT-ASME Heat and Mass Transfer Conference, December 27-30, 2011 at IIT Madras, India
- 17. S. K. Samanta, Prosenjit Das, A. K. Lohar, Development of tubular Ni wick used in LHP for space applications, 10th International Heat Pipe Symposium (10th IHPS), Taipei, Taiwan, Nov. 6-9, 2011.
- Prosenjit Das, S. K. Samanta, A. K. Lohar, P. Dutta, "Microstructural investigations of Rheocast A356 Al alloy billets" National seminar on Microstructure across length scales and material properties (MICROSTRUCTURE-2011), IIT Roorkee, India, 4-5 November, 2011.

- 19. Himadri Chattopadhyay, Pradip Dutta, Sudip K. Samanta, Prosenjit Das, A. K. Lohar, " Semi-solid Forming and the Indian Scenario", 60th Indian Foundry Congress & 2nd Asian Foundry Forum an annual event of IIF (IFEX 2012), India, March 2-4, 2012
- A.J. Banerjee, M.K. Biswal, A.K. Das, H. Chattopahyaya, A.K. Lohar, Parameter Optimisation of Nd:YAG Laser Welding for Aluminium with SiC MMC, 23rd International Conference on Processing and Fabrication of Advanced Materials (PFAM-XXIII), December 5 to December 7, 2014, Indian Institute of Technology, Roorkee, India
- 21. A. K. Lohar, S. K. Samanta, H. Roy, Barnali Maji, A. K. Choudhury, H. Chattopadhyay, S. Kumar, A. Maiti, T. Ray, P. Das, Pradip Dutta, Development of Rheo-Pressure Die Casting, Workshop on Rheo-Pressure Die Casting Technology (RPDC-2014), 25th February 2014
- 22. A.K. Lohar, Sate of the art of Additive Manufacturing, Seminar on Advancement of Additive and Allied Manufacturing Technology held in Institute of engineers, Durgapur during December 1-2, 2014
- 23. Ved Prakash and A. K. Lohar, Rapid Prototyping Integrated Investment Casting : Case Study, National Conference on Emerging Technologies in Foundry and Forge (NCETEF-2016) during November 25-26, 2016 at NIFFT Ranchi
- Apurba Das, S. Mukherjee, S. K. Giri and A. K. Lohar, "An Improved Learning Based Multilayer Height Control Strategy in LMD Process," 2017 14th IEEE India Council International Conference (INDICON), Roorkee, 2017, pp. 1-6, doi: 10.1109/ INDICON.2017.8488059.

Invited Talk:

- 1. Deliver talk on "Rheocasting Process: Opportunities and Challenges", during National Conference on "Emerging Technologies in Foundry and Forge (NCETFF-2016)" NIFFT Ranchi on November 25, 2016
- 2. Pre-Conference Workshop on "Additive Manufacturing & Micro-Nano Systems Engineering" December 14, 2017 at CSIR-CMERI, Durgapur
- 3. Deliver talk on "Additive Manufacturing Technology in India", in the workshop on "Additive manufacturing industrial needs & deployment strategies" on September 11, 2018, at CMTI, Bangalore
- 4. Deliver S K MEMORIAL Lecture on "Tool to tool less", July 21, 2019, at Institute of Engineers, Jharkhand Chapter
- 5. Deliver talk on "Casting Defects and remedies", July 03, 2021 through webinar at Indian Institute of Foundry society.
- 6. Deliver talk on "Metallurgy of Non-Ferrous casting" in the seminar on "Technologies for Indian Engineering Sector" Organized by EEPC India on November 10, 2022 in Kolkata

Research Interest

Cast component development of advanced alloys and composites Near Net Shape Manufacturing of components through solidification processing. Additive manufacturing process

Project / Research Grants

- 1. Development of semi solid extrusion process (PI), sponsored by DST April 18 2023 to April 17 2025
- 2. Robotics and Micro Machines- Design and Development of Multimaterial deposition system (**PI**), sponsored by CSIR in 12th Five-year plan project, Mar.2012 Mar.2017, 108L
- 3. Design and development of Multi-Material Deposition (MMD) system. (PI), sponsored by CSIR-DST Mar. 2013 -Sept. 2017

- 4. Twinning on Capacity Building to Transform Metal Industry Development Institute (MIDI), (PI), sponsored by Metal Industry Development Institute (MIDI), Ethiopia Apr. 2018 -Mar. 2021
- 5. Infrastructure upgradation of metal casting facility(**PI**), sponsored by Institute project Sept. 2017-Dec. 2018
- 6. Development of Process technology of ADI Friction Wedge for application in Railways (PI), sponsored by M/s Mandeep Industries, Lucknow September 20, 2022 to January 19, 2022.
- 7. Establishment of Science & Technology Hub for Sal Butter at Kanska Block, Paschim Bardhaman District West Bengal (Co-PI) sponsored by DST March 22, 2022 to March 21, 2025
- Hydrogen Technology (H2T) Mission Program (Co-PI) sponsored by CSIR April 01, 2022 to Sept. 30, 2024
- Development of aeronautical-standard, high strength, long-endurance casting with Al-7Si-0.3Mg-0.05Mn-0.05Cu alloy for Aero Engine Power Transmission Box(Co-PI) sponsored by GTRE, DRDO, Bangalore Aug 2021– Apr 2024
- 10. Development of fuel housing system for gas turbine engine by melting and solidification of aluminium base alloy (Co-PI) sponsored by GTRE (DRDO) Nov.2017-Jan.2020
- 11. Rheo pressure die casting of ADC-12 Aluminium alloy (Co-PI) sponsored by Sona Koyo Steering Systems Ltd., Gurgaon Nov. 2014 Mar. 2017
- 12. Rheo pressure die casting of nano TiB₂ reinforced Al-Mg alloy composite and Mg₂Si reinforced Al-Mg alloy composite (Co-PI) sponsored by CSIR Apr. 2012-Mar. 2017,
- 13. Process technology for manufacturing of ADI components for mining application (Co-PI) sponsored by CSIR Sept. 2016 Aug.2018
- 14. Facility for rheo pressure die casting (Co-PI) sponsored by DST & CSIR Nov.2010 Oct. 2013
- 15. Development of porous nickel wick through MIM route (Co-PI) sponsored by ISRO Satellite Center, Bangalore & CSIR Nov.2007-Dec.2009
- 16. Standardization of process parameters of metal injection moulding(MIM) for production engineering components (Co-PI) sponsored by CSIR (Under AMT, 10th Five year Plan) Jan.2004-Mar.2007
- 17. Development of process technology and manufacturing of austempered ductile iron components for engineering application (Co-PI) sponsored by DST & CSIR Jul.2003-Mar.2008
- 18. Mechanized system to replace tuyere stock assembly **(Co-PI)** sponsored by Durgapur Steel Plant Sept.2009-Dec.13
- 19. NNS manufacturing of Al–alloy based particulate Metal Matrix Composites through Investment Casting (Co-PI) sponsored by DST Nov. 2003- Oct. 2005
- 20. Development of Helo Dunking system (Co-PI) sponsored by M/S Naval Physical & Oceanographical Laboratory NPOL May 07 to Mar. 08

Organize conference /workshop/ training programme

- 1. National Conference on Investment Casting (NCIC- 2003) Sept. 22- 23, 2003 CMERI, Durgapur
- 2. National Symposium on Investment Casting (NSIC- 2006) Jan. 06-07, 2006 Sarat Sadan, Howrah
- National Conference on Investment Casting (NCIC- 2006) Dec. 28-29, 2006 Osmania University, Hyderabad
- 4. National Workshop & Training Programme on Investment Casting Sept. 14-19, 2006 CMERI, Durgapur
- 5. International Conference on Investment Casting (ICIC- 2010) Jan. 22-24, 2010 CMERI, Durgapur
- 6. National Workshop & Training Programme on Investment Casting Sept. 17-20, 2007 CMERI, Durgapur

- 7. National Workshop on Machining & Machinability of Advanced Materials Mar. 29-30, 2007 CMERI, Durgapur
- 8. International conference on Advanced Manufacturing Technology Nov. 29-30, 2007 CMERI, Durgapur
- 9. National Seminar on Advanced Functional Materials(NSAFM-2013) Jan. 24, 2013CSIR-CMERI, Durgapur
- 10. Seminar on Additive and Allied Manufacturing (SAAM-2014)" jointly with CSIR-CMERI and Institute of Engineers, Dec. 01-02, 2014 CMERI, Durgapur
- 11. Workshop on "Rheo Pressure Die Casting Technology (RPDC-2014) Feb. 25, 2014 CSIR-CMERI, Durgapur
- 12. Additive Manufacturing and Micro-Nano Systems Engineering Dec. 14, 2017 CMERI Durgapur
- 13. National Conference on Investment Casting Process Technology (NWIC- 2015) Jan. 14, 2015 CSIR-CGCRI, Kolkata
- 14. National Workshop & Training Programme on Investment Casting Process Technology (NWIC-2016) Sept. 01- 02, 2016 CSIR-CMERI, Durgapur
- 15. International Conference on Sustainable Manufacturing, Automation and Robotics Technologies (IC-SMART) Dec. 15–16, 2017 CMERI, Durgapur
- 16. National Workshop on Artificial Intelligence in industry 4.0 Nov. 07-09, 2019 CMERI Durgapur
- 17. National Workshop on Advances in Energy Storage Technologies, Systems and Materials (AESTSM-2020) Jan. 23-24, 2020 CMERI Durgapur
- 18. Advanced Materials and Manufacturing (AMM 2021)" held during March 29 to 31, 2021 CSIR-CMERI Durgapur
- 19. CSIR-Industry meet on additive manufacturing on February 8, 2022 through webinar.
- 20. National Conference cum Industry meet on Foundry 4.0 Opportunities and Challenges 24th 25th February, 2022 CSIR-CMERI Durgapur