LIST OF PUBLICATIONS

Citations (Google Scholar)	h-index	i10-index
751	**17**	**22**

Peer-Reviewed International Journals (* corresponding author)

From IIT (ISM) Dhanbad

1. Saswati Swateelagna, Manish Singh, **M.R. Rahul*,** Explainable Machine Learning based approach for the design of new refractory high entropy alloys, *Intermetallics* 167 (2024), 108198, https://doi.org/10.1016/j.intermet.2024.108198, **(Q1, Impact factor: 4.4)**

2. L Naveen, Umre Priyanka, Chakraborty Poulami, **M.R. Rahul**, Samal Sumanta, Raghvendra Tewari, Development of single-phase BCC refractory high entropy alloys using machine learning techniques, *Computational Materials Science*, 238 (2024), 112917, https://doi.org/10.1016/j.commatsci.2024.112917, **(Q2, Impact factor: 3.3)**

3. Vivek Sharma, **Rahul M R**, Ashis Mallick, Microstructural, mechanical, and tribological behaviors of Cu40Fe30Mn20Cr5Ti5 high entropy alloy via powder metallurgy route, *Materials Today Communications,* 38 (2024), 108313, https://doi.org/10.1016/j.mtcomm.2024.108313, **(Q2, Impact factor: 3.8)**

4. Surya Prakash Mishra, **M R Rahul***, A detailed study of convolutional neural networks for the identification of microstructure, *Materials Chemistry and Physics*, 308 (2023), 128275, https://doi.org/10.1016/j.matchemphys.2023.128275, **(Q2, Impact factor: 4.6)**

5. Shambhu Kushwaha, M Agilan, **Rahul M R***, Gandham Phanikumar, Study of TIG weld microstructure formation in Inconel 718 alloy using ICME approach, *Integrating Materials and Manufacturing Innovation*, (2023) (accepted) **(Q2, Impact factor: 3.3)**

6. Piyush Kumar, **M R Rahul**, Sumanta Samal, Abhijit Ghosh, Gandham Phanikumar, Constitutive Behavior With Microstructure and Texture Evolution During the High-Temperature Deformation of Fe11.5Co20.6Ni40.7Cr12.2Al7.8Ti7.2 High-Entropy Alloy, *Metallurgical and Materials Transactions A,* 54 (2023), 3249–3260, https://doi.org/10.1007/s11661-023-07093-x, **(Q1, Impact factor: 2.8)**

7. Reliance Jain, **M R Rahul**, Poulami Chakraborty, Rama Krushna Sabat, Sumanta Samal, Nokeun Park, Gandham Phanikumar, Raghvendra Tewari, Integrated experimental and modeling approach for hot deformation behavior of Co-Cr-Fe-Ni-V High Entropy Alloy, *Journal of Materials Research and Technology,* 25(2023), 840-854, https://doi.org/10.1016/j.jmrt.2023.05.257, **(Q1, Impact factor: 6.4)**

8. A Bansal, P Kumar, S Yadav, VS Hariharan, **M R Rahul***, G Phanikumar, Accelerated design of high entropy alloys by integrating high throughput calculation and machine

learning, *Journal of Alloys and Compounds*, 960 (2023), 170543, https://doi.org/10.1016/j.jallcom.2023.170543, **(Q1, Impact factor: 6.2)**

9. K Saphal, P Hrutidipan, S Naishalkumar, **M R Rahul**∗, G Phanikumar, Machine learning enabled processing map generation for high-entropy alloy, *Scripta Materialia*, 234 (2023), 115543, https://doi.org/10.1016/j.scriptamat.2023.115543, **(Q1, Impact factor: 6)**

10. P Kumar, R Jain, **M R Rahul**, A Ghosh, S Samal, G Phanikumar, High Temperature Deformation Behavior and Processing Maps of FeCoNiCrAlTi Dual Phase High Entropy Alloy, *Metals and Materials International*, (2023), https://doi.org/10.1007/s12540-023-01399-6, **(Q1, Impact factor: 3.5)**

11. AS Bundela, **M R Rahul**∗, Application of Machine Learning Algorithms With and Without Principal Component Analysis for the Design of New Multiphase High Entropy Alloys, *Metallurgical and Materials Transactions A*, 53 (2022), 3512–3519, https://doi.org/10.1007/s11661-022-06764-5, **(Q1, Impact factor: 2.8)**

12. AS Bundela, **M R Rahul**∗, Machine learning-enabled framework for the prediction of mechanical properties in new high entropy alloys, *Journal of alloys and compounds*, 908 (2022) 164578, https://doi.org/10.1016/j.jallcom.2022.164578, **(Q1, Impact factor: 6.2)**

13. VS Goud, **Rahul M R**∗, G Phanikumar, Prediction of growth velocity of undercooled multicomponent metallic alloys using a machine learning approach, *Scripta Materialia*, 207 (2022), 114309, https://doi.org/10.1016/j.scriptamat.2021.114309, **(Q1, Impact factor: 6)**

14. AK Sah, Agilan, M, S Dinesh raj, **M R Rahul**∗, B Govind, Machine learning-enabled prediction of density and defects in additively manufactured Inconel 718 alloy, *Materials Today Communications*, 30 (2022), 103193, https://doi.org/10.1016/j.mtcomm.2022.103193, **(Q2, Impact factor: 3.8)**

15. **M R Rahul**∗, M Agilan, D Mohan, G Phanikumar, Integrated experimental and simulation approach to establish the effect of elemental segregation in Inconel 718 welds, *Materialia*, 26 (2022), 101593, https://doi.org/10.1016/j.mtla.2022.101593, **(Q2, Impact factor: 3.4)**

16. S Naishalkumar, DJ Mathew, **M R Rahul**∗, G Phanikumar, Microstructure prediction of eutectic high entropy alloy using physical and computer simulation for additive manufacturing condition, *Journal of alloys and compounds*, 929 (2022), 167268, https://doi.org/10.1016/j.jallcom.2022.167268, **(Q1, Impact factor: 6.2)**

17. Yegi Vamsi Krishna, Ujjawal Kumar Jaiswal, **Rahul M R**∗*,* Machine learning approach to predict new multiphase high entropy alloys*, Scripta Materialia*, 197 (2021), 113804, https://doi.org/10.1016/j.scriptamat.2021.113804, **(Q1, Impact factor: 6)**

18. Ujjawal Kumar Jaiswal, Yegi Vamsi Krishna, **Rahul M R**∗**,** Gandham Phanikumar, Machine learning-enabled identification of new medium to high entropy alloys with solid solution phases*, Computational Materials Science,* 197 (2021), 110623, https://doi.org/10.1016/j.commatsci.2021.110623, **(Q2, Impact factor: 3.3)**

19. Surya Prakash Mishra and **Rahul M R***, A comparative study and development of a novel deep learning architecture for accelerated identification of microstructure in material science, ***Computational Materials Science***, 200 (2021), 110815, https://doi.org/10.1016/j.commatsci.2021.110815, **(Q2, Impact factor: 3.3)**

20. Naishalkumar Shah, **Rahul M R*****,** Sandip Bysakh, Gandham Phanikumar, Microstructure stability during high-temperature deformation of CoCrFeNiTa eutectic high entropy alloy through nano-scale precipitation, ***Materials science and Engineering A***, 824 (2021), 141793, https://doi.org/10.1016/j.msea.2021.141793, **(Q1, Impact factor: 6.4)**

21. Naishalkumar Shah, **Rahul M R*** and Gandham Phanikumar, Accelerated design of eutectic high entropy alloy by ICME approach, ***Metallurgical and Materials Transactions A***, (2021), 52 (5), 1574-1580, https://doi.org/10.1007/s11661-021-06218-4, **(Q1, Impact factor: 2.8)**

From IIT Madras

22. Reliance Jain, **Rahul M R**, Poulami Chakraborty, Rama Krushna Sabat, Sumanta Samal, Gandham Phanikumar, Raghvendra Tewari, Design and deformation characteristics of single-phase Co-Cr-Fe-Ni-V high entropy alloy, ***Journal of Alloys and Compounds,*** 888 (2021), 161579, https://doi.org/10.1016/j.jallcom.2021.161579, **(Q1, Impact factor: 6.2)**

23. **Rahul M R**, G. Phanikumar, Solidification behaviour of undercooled equiatomic FeCuNi alloy, ***Journal of Alloys and Compounds***, 815 (2020) 152334, https://doi.org/10.1016/j.jallcom.2019.152334, **(Q1, Impact factor: 6.2)**

24. **Rahul M R**, G Phanikumar, Growth kinetics, microhardness and microstructure evolution of undercooled FeCoNiCuSn high entropy alloy, ***Material science and Engineering A***, 777 (2020) 139022, https://doi.org/10.1016/j.msea.2020.139022, **(Q1, Impact factor: 6.4)**

25. **Rahul M R**, Sumanta Samal, A. Marshal, V I Nithin Balaji, K. G. Pradeep, Gandham Phanikumar, Nano-sized Cu clusters in deeply undercooled CoCuFeNiTa high entropy alloy, ***Scripta Materialia***, 177 (2020), 58-64, https://doi.org/10.1016/j.scriptamat.2019.10.006, **(Q1, Impact factor: 6)**

26. Rajeev G.P., **Rahul. M. R.,** Kamaraj M., Srinivasa Rao Bakshi, Microstructure and high-temperature mechanical properties of wire arc additively deposited Stellite 6 alloy using cold metal transfer process, ***Materialia,*** 12 (2020) 100724***,*** https://doi.org/10.1016/j.mtla.2020.100724, **(Q2, Impact factor: 3.4)**

27. Reliance Jain, Avi Jain, **Rahul M R**, Ashok Kumar, Mrigendra Dubey, Rama Krushna Sabat, Sumanta Samal, Gandham Phanikumar, Development of ultrahigh strength novel Co-Cr-Fe-Ni-Zr quasi-peritectic high entropy alloy by an integrated approach using experiment and simulation, ***Materialia***, 2020, 100896, https://doi.org/10.1016/j.mtla.2020.100896, **(Q2, Impact factor: 3.4)**

28. Jinu Kurian, **Rahul M R**, J. Arout Chelvane, A. V. Morozkin, A. K. Nigam, Gandham Phanikumar and R. Nirmala, Enhanced Magnetocaloric effect in Undercooled Rare earth intermetallic compounds RNi (R = Gd, Ho and Er), *Journal of Magnetism and Magnetic Materials,* 499 (2020) 166302, https://doi.org/10.1016/j.jmmm.2019.166302, **(Q2, Impact factor: 2.7)**

29. **Rahul M R,** Sumanta Samal, Gandham Phanikumar, Metastable microstructures in the solidification of undercooled high entropy alloys, *Journal of Alloys and Compounds,* 821 (2020), 153488, https://doi.org/10.1016/j.jallcom.2019.153488, **(Q1, Impact factor: 6.2)**

30. Reliance Jain, **Rahul M R**, Sumanta Samal, Vinod Kumar, Gandham Phanikumar, Hot workability of Co-Fe-Mn-Ni-Ti eutectic high entropy alloys, *Journal of Alloys and Compounds,* 822 (2020), 153609, https://doi.org/10.1016/j.jallcom.2019.153609, **(Q1, Impact factor: 6.2)**

31. **Rahul M R**, G. Phanikumar, Design of a Seven-Component Eutectic High-Entropy Alloy, *Metallurgical and Materials Transactions A*, 50 (2019), 2594-2598, https://doi.org/10.1007/s11661-019-05210-3, **(Q1, Impact factor: 2.8)**

32. **Rahul M R**, S. Samal, G. Phanikumar, Effect of niobium addition in $FeCoNiCuNb_x$ high-entropy alloys, *Journal of Materials Research*, 34 (2019), 700–708. https://doi.org/10.1557/jmr.2019.36, **(Q3, Impact factor: 3)**

33. **Rahul M R**, S. Samal, G. Phanikumar, Hot Deformation Behavior and Microstructural Characterization of $CoCrFeNiNb_{0.45}$ Eutectic High Entropy Alloy, *Materials Performance and Characterization*, 8 (2019) 1062-1075, DOI: 10.1520/MPC20190014, **(Q4, Impact factor: 1.1)**

34. **Rahul M R**, G Phanikumar, Experimental and simulation studies of solidification behaviour in undercooled CuCoNi equiatomic medium entropy alloy, *European Physical Journal (EPJ- Special Topics)*, 229 (2020) 145-155, https://doi.org/10.1140/epjst/e2019-900111-5, **(Q2, Impact factor: 2.8)**

35. R. Sonkusare, A. Swain, **Rahul M R**, S. Samal, N.P. Gurao, K. Biswas, et al., Establishing processing-microstructure-property paradigm in complex concentrated equiatomic CoCuFeMnNi alloy, *Materials Science and Engineering A,* 759 (2019), 415-429, https://doi.org/10.1016/j.msea.2019.04.096, **(Q1, Impact factor: 6.4)**

36. **Rahul M R**, S. Samal, S. Venugopal, G. Phanikumar, Experimental and finite element simulation studies on hot deformation behaviour of $AlCoCrFeNi_{2.1}$ eutectic high entropy alloy*, Journal of Alloys and Compounds*, 749 (2018), 1115–1127, https://doi.org/10.1016/j.jallcom.2018.03.262, **(Q1, Impact factor: 6.2)**

37. R. Jain, **Rahul M R**, S. Jain, S. Samal, V. Kumar, Phase Evolution and Mechanical Behaviour of Co–Fe–Mn–Ni–Ti Eutectic High Entropy Alloys, *Transactions of the Indian Institute of Metals,* 71 (2018) 2795–2799, https://doi.org/10.1007/s12666-018-1437-2, **(Q2, Impact factor: 1.6)**

38. S. Jain, R. Jain, **Rahul M R**, S. Samal, V. Kumar, Phase Equilibria and Mechanical Properties in Multicomponent Al–Ni–X (X = Fe, Cr) Alloys, *Transactions of the Indian Institute of Metals,* 71 (2018) 2819–2825, https://doi.org/10.1007/s12666-018-1420-y, **(Q2, Impact factor: 1.6)**

39. Sumanta Samal, **Rahul M R**, Ravi Sankar Kottada and Gandham Phanikumar., Hot deformation behaviour and processing map of Co-Cu-Fe-Ni-Ti eutectic high entropy alloy, ***Materials Science and Engineering A***, 664 (2016), 227-235, https://doi.org/10.1016/j.msea.2016.04.006, **(Q1, Impact factor: 6.4)**

40. **Rahul M R** and Phanikumar, G., Correlation of Microstructure With HAZ Welding Cycles Simulated in Ti-15-3 Alloy Using Gleeble® 3800 and SYSWELD®, ***Materials Performance and Characterization***, 4 (2015), 381-398, doi:10.1520/MPC20140065, **(Q4, Impact factor: 1.1)**

Conference Proceedings

1. **Rahul M R**, Sumanta Samal, Gandham Phanikumar, Undercooling studies and growth velocity measurements on multi-component FeCuNi{X} alloys. *Solidification and Gravity VII*, Edited by: A. Roósz, Zs. Veres, M. Svéda, G. Karacs, Hungarian Academy of Sciences – University of Miskolc, Materials Science Research Group (2018) pages 250-254 ISBN: 978-963-508-889-8

2. **Rahul M R**, Reliance Jain, Sumanta Samal, Gandham Phanikumar, Microstructure evolution and mechanical properties of Co-Fe-Ni-Ti-V eutectic high entropy alloy, *Solidification and Gravity VII*, Edited by: A. Roósz, Zs. Veres, M. Svéda, G. Karacs, Hungarian Academy of Sciences - University of Miskolc, Materials Science Research Group (2018) pages 313-318. ISBN: 978-963-508-889-8

Editorial Assignment

- Editor for the Special Issue "High-Entropy Alloys: From Fundamentals to Applications" in Crystals (ISSN 2073-4352) Jointly with Dr. Amalraj Marshal (Northwestern University), Dr. Jiří Zýka (Czech Republic), Prof. Dr. Jakub Čížek (Charles University, Czech Republic), Dr. Hany R. Ammar (Qassim University, Buraydah)

List of paper/posters and invited talks in international/national conferences

From IIT (ISM) Dhanbad

1. Delivered **invited talk** on " CME framework for the design and development of new materials", at the Five-Day Workshop on "Computational Materials Engineering" organized by **MNIT Jaipur** on 22 - 27 January 2024.

2. Delivered **invited talk** on "ICME and physical simulation approach for manufacturing process optimisation", at the Five-Day Workshop on "Computational Materials Engineering", organized by **MNIT Jaipur** on 22 - 27 January 2024.

3. Delivered **invited talk** on "Microstructure simulation using phase field method" at the Five-Day Workshop on "Computational Materials Engineering" organized by **MNIT Jaipur** on 22 - 27 January 2024.

4. Delivered **invited talk** on "Machine learning enabled phase prediction in HEAs" at the Five-Day Workshop on "Computational Materials Engineering", organized by **MNIT Jaipur** on 22 - 27 January 2024.

5. Delivered **invited talk** on "ML-based alloy design and development", at the workshop on AI &ML applications with Thermo-Calc software, organized by **Thermo-Calc** on 26th January 2024.

6. Delivered **invited talk** on "ICME + Machine Learning based framework for understanding solidification behaviour of high entropy alloys", at the International Conference on Solidification Science and Processing (ICSSP 2023), organized by **IIT Jodhpur** and **IIT Hyderabad** on December 11-14, 2023.

7. Delivered **invited talk** on "ICME and machine learning framework for the design and development of materials" at the five-day Winter School on ICME at **IIT Gandhinagar** on December 8th, 2022

8. Given **invited training** on "Microstructure simulation by integrating Thermo-Calc and Micress" on five day Winter School on ICME at **IIT Gandhinagar** on December 8th, 2022

9. Delivered **invited talk** on "ICME and machine learning framework for the design and development of new materials" in the workshop on "Computational Techniques in Metallurgical and Materials Engineering (CTiMME-2022)" Organized by: Department of Metallurgical & Materials Engineering, **NIT Srinagar**, 17-21 October 2022

10. Delivered **invited talk** on "ICME and physical simulation approach for manufacturing process optimization" in the workshop on "Computational Techniques in Metallurgical and Materials Engineering (CTiMME-2022)" Organized by: Department of Metallurgical & Materials Engineering, **NIT Srinagar**, 17-21 October 2022

11. Given training on "Microstructure simulation during welding and casting processes" in the workshop on "Computational Techniques in Metallurgical and Materials Engineering (CTiMME-2022)" Organized by: Department of Metallurgical & Materials Engineering, **NIT Srinagar**, 17-21 October 2022

12. *Amit Bundela,* **Rahul M R, "**Machine Learning-enabled Framework for the Screening of Hydrogen Storage Materials**",** Feb 27 – Mar 3, 2022, **TMS 2022** (virtual), California USA.

13. *Gandham Phanikumar*, Dasari Mohan, **M R Rahul**, V.S. Hariharan, "High Performance Computing for Microstructure prediction via Process Parametric Space", NMD ATM 2022

14. **Technical section chair** for International Conference on Advances in Mechanical and Aerospace Engineering, TKM college of Engineering Kerala, India, 16-18 December 2021.

15. **Organized (Convenor)** Webinar on "Metallurgy and Material Science in the Era of Artificial Intelligence (MMSEAI 2021)", Department of Fuel Minerals and Metallurgical Engineering (27-28 February 2021), sponsored by TEQIP III, IIT (ISM) Dhanbad

16. **Coordinated** the Expert lecture series of "**Materials Informatics**" by **Prof. Krishna Rajan**, Erich Bloch Chair, Empire Innovation Professor, Department of Materials

Design and Innovation, University at Buffalo, Date (25-29/10/2021), conducted by IIT (ISM) Dhanbad.

17. Delivered an **invited talk** on the topic "Materials Characterization using Thermo-mechanical simulator" on the STC (QIP) on "Materials Characterization Techniques", 22-27 March 2021, conducted by Dept. of MEMS, **IIT Indore**

18. Delivered a talk on the topic "Accelerated design of materials using ICME and Machine Learning" conducted by the Department of Fuel Minerals and Metallurgical Engineering (27-28 February 2021), sponsored by TEQIP III, IIT (ISM) Dhanbad

19. Delivered an **invited talk** on the topic "Design and development of multicomponent alloys using ICME and ML framework" conducted by **BARC** to initiate collaborative work on HEA design and development. Date (17/07/2021)

20. Shambhu Kushwaha, Agilan M, **Rahul M R**, G Phanikumar, "Integrated experimental and simulation study to modify the weld thermal cycle in Inconel 718 welding", NMD 13-15 November 2021 (virtual).

21. Rahul Kumar, Ashok K, **Rahul M R**, "Simulation guided grain refinement studies on as-cast multicomponent alloy", 13-15 November 2021 (virtual).

22. Delivered an **invited talk** on the topic "Welding and additive manufacturing studies of Advanced material using experimental and simulation methods" on the STC of "Advanced Materials for structural applications" conducted by the Department of Metallurgy Engineering and Materials Science, **IIT Indore**. Date: 29 /09/ 2020 to 04/10/2020.

23. Delivered an **invited talk** in the webinar on the topic "ICME approach for design and development of high temperature materials" conducted by the Society of Automotive Engineers (**SAE, TKMCE**), Kerala. Date: (05/09/2020)

From IIT Madras

24. **Rahul M R** and Gandham Phanikumar*, Design and development of high entropy alloys using solidification studies, IWHEM 2020, IIT Kanpur, March 7-8, 2020 **(Invited talk*)**

25. **Rahul M R,** Naishalkumar Shah, Gandham Phanikumar, Accelerated design of Eutectic High Entropy Alloys by integrating experimental and computer simulations, IWHEM 2020, IIT Kanpur, March 7-8, 2020

26. **Rahul M R** and Gandham Phanikumar, Effect of Sn addition on microstructural evolution and growth velocity of undercooled $FeCoNiCuSn_X$ (X= 0.5 & 5) high entropy alloy, International Symposium on Metastable, Amorphous and Nanostructured Materials (ISMANAM), July 8-12, 2019, Chennai, *(Best paper award)*

27. **Rahul M R**, Sumanta Samal, G Phanikumar, Metastable microstructures in solidification of undercooled high entropy alloys, International Symposium on Metastable, Amorphous and Nanostructured Materials (ISMANAM), July 8-12, 2019, Chennai

28. Reliance Jain, **Rahul M R**, Sumanta Samal, Vinod Kumar, Gandham Phanikumar, Hot workability of Co-Fe-Mn-Ni-Tieutectic high entropy alloys, International Symposium

on Metastable, Amorphous and Nanostructured Materials (ISMANAM), July 8-12, 2019, Chennai

29. **Rahul M R** and Gandham Phanikumar, Solidification, growth velocity and micromechanical properties of undercooled Fe-Co-Cu alloy, in the "7th International Conference on Solidification Science and Processing (ICSSP-2018)" 19/11/2018 - 22/11/2018 at Trivandrum, Kerala, India. *(Best paper award)*

30. **Rahul M R** and Gandham Phanikumar, Growth rate and segregation studies in undercooled high entropy alloys, in the "7th International Conference on Solidification Science and Processing (ICSSP-2018)" 19/11/2018 - 22/11/2018 at Trivandrum, Kerala, India

31. Reliance Jain, **Rahul M R**, Sandeep Jain, Sumanta Samal, Vinod Kumar**,** Phase evolution and mechanical behaviour of Co-Fe-Mn-Ni-Ti eutectic high entropy alloys, 7th International Conference on Solidification Science and Processing (ICSSP-2018)" 19/11/2018 - 22/11/2018 at Trivandrum, Kerala, India

32. Sandeep Jain, Reliance Jain, **Rahul M R,** Sumanta Samal, Vinod Kumar, Phase equilibria and mechanical properties in multicomponent Al-Ni-X (X= Fe, Cr) alloys, 7th International Conference on Solidification Science and Processing (ICSSP-2018)" 19/11/2018 - 22/11/2018 at Trivandrum, Kerala, India

33. **Rahul M R**, Sumanta Samal, Gandham Phanikumar, Undercooling studies and growth velocity measurements on multi-component FeCuNi{X} alloys, in the "7th International Conference on Solidification and Gravity (SG'18)" 03/09/2018 -06/09/2018 at Miskolc - Lillafüred, Hungary.

34. **Rahul M R,** Reliance Jain, Sumanta Samal, Gandham Phanikumar, Microstructure evolution and mechanical properties of Co-Fe-Ni-Ti-V eutectic high entropy alloy, in the "7th International Conference on Solidification and Gravity (SG'18)" 03/09/2018 - 06/09/2018 at Miskolc - Lillafüred, Hungary

35. **Rahul M R**, Sumanta Samal and Gandham Phanikumar, Phase evolution and kinetics in undercooled FeCoNiCuX$_{0.5}$ alloys, The 16th International Conference on Rapidly Quenched and Metastable Materials (RQ16), 27 August 2017 - 01 September 2017, Leoben, Austria

36. **Rahul M R**, Sumanta Samal and G.Phanikumar, Experimental and FEM simulation of hot deformation behaviour of multicomponent Fe-Co-Ni-Cr-Al eutectic high entropy alloys, National Gleeble Users Conference, IIT Bombay, 2017

37. **Rahul M R**, S. Samal, G.Phanikumar, Phase selection kinetics in undercooled FeCoNiCuX$_{0.5}$ alloys, International Workshop on High Entropy Materials (IWHEM-2017, School of Engineering Sciences and Technology, University of Hyderabad, March 11-12, 2017

38. **Rahul M R**, S. Samal, G.Phanikumar, Hot Deformation Behaviour and Processing Map of Multicomponent Fe-Co-Ni-Cr-Al Eutectic High Entropy Alloy, International Workshop on High Entropy Materials (IWHEM-2017, School of Engineering Sciences and Technology, University of Hyderabad,), March 11-12, 2017

39. **Rahul M R**, S. Samal, G.Phanikumar, Development of Novel Fe-Co-Ni-Cu-Nb Magnetic High Entropy Alloy, International Symposium for Research Scholars, Department of Metallurgical and Materials Engineering, IIT Madras,2016

40. **Rahul M R** and G. Phanikumar, HAZ simulation and Deformation studies in Ti-15-3 alloy using Gleeble, National Conference on Thermomechanical processing of steels using Gleeble Simulation and 5th Gleeble User Workshop India (GUWI-2015), 6th – 7th August 2015 at CSIR-NML, Jamshedpur-831007, India

41. S. Samal, **Rahul M R**, G. Phanikumar, Hot Deformation Behaviour and Processing Map of Multicomponent Co-Cu-Fe-Ni-Ti High Entropy Alloy, National Conference on Thermomechanical processing of steels using Gleeble Simulation and 5th Gleeble User Workshop India (GUWI-2015), 6th – 7th August 2015 at CSIR-NML, Jamshedpur-831007, India.

42. **Rahul M R** and G.Phanikumar, Correlation of HAZ microstructure and mechanical properties of Ti-15-3 alloy simulated in Gleeble, International Symposium for Research Scholars, Department of Metallurgical and Materials Engineering, IIT Madras,2014

43. **Rahul M R** and G.Phanikumar, HAZ Simulation and characterisation of Ti-15-3 alloy, National Gleeble Users Conference, IIT Madras, 2014