

Dr. R. Tharmaraj M.E., Ph.D.,

Assistant Professor,

Dept of MECH, CET, SRMIST

Ramapuram Campus, Chennai – 89



Email : - tharmarr@srmist.edu.in

Overview:-

Dr. R. Tharmaraj working as an Assistant Professor in the Department of Mechanical at SRMIST, Ramapuram. He graduated in Mechanical Engineering from Anna University, Chennai, India. He secured a Master of Engineering in CAD/CAM from Anna University, Chennai, India. He pursued Ph.D. in the field of Powder Metal Forming at the National Institute of Technology Warangal, India. He is in the teaching profession for more than 4 years. He has presented a number of papers in International Journals, and Conferences.

Areas of Research:

Powder metal forming, Friction welding, Metal matrix composites

Selected Publications:

Web of Science/SCI

1. Navasingh Rajesh Jesudoss Hynes, Selvaraj Raja, **Ramakrishnan Tharmaraj**, Michael Brykov and Antoaneta Ene, “Investigation on impact strength of friction stud welded AA6061-B₄C composite/AISI 1030 steel joints in inert gas atmosphere”, Processes, 2022, 10, 2052.
2. **R. Tharmaraj** and N. Rajesh Jesudoss Hynes, “Investigation on the thermal behaviour of friction stud welding of dissimilar aluminium/mild steel joints”, Surface Review and Letters, 2022; 29(7): 2250093(1)- 2250093-(13).
3. J. Rojek, R. Kasztelan and **R. Tharmaraj**, “Discrete element thermal conductance model for sintered particles”, Powder Technology, 2022; 405(5): 117521.
4. N. Rajesh Jesudoss Hynes, M. Prabhu, P. Shenbaga Velu, R. Kumar, **R. Tharmaraj**, Farooq Muhammad Umar and Pruncu Catalin, “An experimental insight of friction stir welded joints during the joining of AA 6061 and Mg AZ 31 B alloys”, Journal of Engineering Manufacture, 2022; 236(6-7): 787-797.
5. **R. Tharmaraj**, M. Joseph Davidson and Richard S, “Role of localized heating on the

workability of powder metallurgical Al-4 % Ti components in cold compression”, Journal of Mechanical Engineering Science, 2022; 236(5): 2428-2446.

6. **R. Tharmaraj**, M. Joseph Davidson and R. Raja, “A novel method to improve the critical damage parameter of powder metallurgical components during the cold upsetting”, Journal of Process Mechanical Engineering, 2021; 235(6): 1820-1834.

7. **R. Tharmaraj** and M. Joseph Davidson, “Influence of selective heating on strain-based formability and pore closure rate of sintered powder metallurgy preforms during upsetting”, Journal of Engineering Manufacture, 2020; 234(4): 752-772.

8. **R. Tharmaraj** and M. Joseph Davidson, “Effect of titanium in aluminium matrix on densification and forming limit of P/M composites during upsetting process”, Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020; 42(3): 1-13.

9. **R. Tharmaraj**, N. Rajesh Jesudoss Hynes and P. Shenbaga Velu, “Investigation on friction stud welded AMC/AISI 304 steel joints with ceramic intercoating”, Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020; 42(10): 1-8.

10. **R. Tharmaraj** and M. Joseph Davidson, “Workability, densification and failure characteristics of selective heated sintered powder metallurgy preforms during upsetting”, Journal of Materials Engineering and Performance, 2020. 29(2): 933-948.

11. N. Rajesh Jesudoss Hynes, S. Raja, **R. Tharmaraj**, Catalin Iulian Pruncu and Derya Dispinar, “Mechanical and tribological characteristics of boron carbide reinforcement of AA 6061 matrix composite”, Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020; 42(4): 1-11.

12. **R. Tharmaraj**, M. Joseph Davidson and S. Kanmani Subbu, “Effect of selective heating on formability and densification of powder metallurgy preforms during upsetting”, Transactions of the Indian Institute of Metals, 2019; 72(5): 1289- 1298.

13. **R. Tharmaraj** and M. Joseph Davidson, “Failure studies of selectively heated sintered P/M Al-4 wt % Ti composite during cold axial forming”, Arabian Journal for Science and Engineering, 2019; 44(9): 8005-8021.

14. N. Rajesh Jesudoss Hynes, R. Sankaranarayanan, **R. Tharmaraj**, Catalin Iulian Pruncu and Derya Dispinar, “A comparative study of the mechanical and tribological behaviours of different

aluminium matrix - ceramic composites”, Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019; 41(8): 1-12.

International Conferences

1. **R Tharmaraj**, V Akash, N E Yohan Dev, S Achyuth, B Santhosh, Optimization of process parameters of thermoplastics developed by the fused deposition modelling, 2nd International virtual conference on Advances in Automobile, Manufacturing and Mechanical Engineering (ICAAMME '23), Easwari Engineering College, Chennai, India, April 2023.
2. **R Tharmaraj**, V Akash, N E Yohan Dev, S Achyuth, B Santhosh, Optimization of polyethylene terephthalate glycol developed by the fused deposition modelling, 2nd International Conference on Advanced Intelligence and Innovations in Mechanical Sciences (AIIMS-2.0), SRM Institute of Science and Technology, Ramapuram Campus, Chennai, India, April 2023.
3. Jerzy Rojek, Szymon Nosewicz, **Tharmaraj Ramakrishnan**, Kamil Kaszyca and Marcin Chmielewski, Numerical determination of effective thermal conductivity porous materials manufactured by FAST/SPS, 1st Conference on on FAST/SPS: From Research to Industry, October 2021, Poznan, Poland.
4. N. Rajesh Jesudoss Hynes, **R. Tharmaraj**, P. Shenbaga Velu and R. Kumar, “Finite element based simulation on friction stud welding of metal matrix composites to steel”, AIP Conference Proceedings, 2016; 1728: 0205561 - 0205564.
5. N. Rajesh Jesudoss Hynes, P. Shenbaga Velu, **R. Tharmaraj** and R. Kumar, “Numerical investigation on friction welding of alumina / AA 6063 T6 joints”, AIP Conference Proceedings, 2016; 1728: 205501 – 2055015
6. N. Rajesh Jesudoss Hynes, R. Kumar, **R. Tharmaraj** and P. Shenbaga Velu, “Production of aluminium metal matrix composites by liquid processing methods”, AIP Conference Proceedings, 2016; 1728: 205581 - 2055815.
7. N. Rajesh Jesudoss Hynes and **R. Tharmaraj**, “Effect of process parameters on axial shortening distance in friction stud welding”, International Conference on Advances in Materials and Materials Processing, AMMP - 2015, Karunya University, Coimbatore, India, January 2015.
8. N. Rajesh Jesudoss Hynes and **R. Tharmaraj**, “Mathematical modelling of heat flow in friction

stud welding”, International Conference on Mathematics and its applications, ICMAA - 2014, University College of Engineering, Villupuram, India, December 2014.

9. N. Rajesh Jesudoss Hynes, P. Karuppasamy and **R. Tharmaraj**, “Regression modeling of friction stud welding of aluminum - mild steel combination”, International Colloquium on Materials, Manufacturing and Metrology, ICMMM - 2014, IIT Madras, Chennai, India, August 2014.

10. N. Rajesh Jesudoss Hynes, **R. Tharmaraj** and P. Karuppasamy, “Finite difference model to predict thermal cycle in friction stud welding”, International Colloquium on Materials, Manufacturing and Metrology, ICMMM - 2014, IIT Madras, Chennai, India, August 2014.

11. N. Rajesh Jesudoss Hynes, P. Nagaraj and **R. Tharmaraj**, “Thermal analysis on joining of dissimilar metals by friction stud welding”, International Conference on Recent Advances in Mechanical Engineering and Interdisciplinary Developments, ICRAMID -2014, Ponjesly College of Engineering, Nagercoil, India, March 2014.

National Conferences

1. N. Rajesh Jesudoss Hynes and **R. Tharmaraj**, “Impact strength of friction stud welded AA 1051/AISI 1030 joints”, National Conference on Advances in Mechanical Engineering, NME - 2015, Regional Centre, Anna University, Tirunelveli, India, April 2015.

2. **R. Tharmaraj** and N. Rajesh Jesudoss Hynes, “Thermal analysis of friction stud welded AA 6063 / AISI 304 joints”, National Conference on Advances in Mechanical Engineering, NACAME - 2014, Mepco Schlenk Engineering College, Sivakasi India, February 2014.

Professional Bodies:

Member - ISTE

Google Scholar:

https://scholar.google.com/citations?user=3qW_WP8AAAAJ&hl=th_