

2022* FACULTY PUBLICATIONS

Journal Publications

1. Ramu Inala, Study on mechanical and tribological characteristics of layered functionally graded polymer, composite materials Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, Accepted, Jan-2022, SCI, IF=1.62, <https://doi.org/10.1177%2F09544089221074841>.
2. N Naga Krishna, Evolution of Microstructure and Mechanical Properties of LM25-HEA Composite Processed Through Stir Casting with Bottom Pouring System, Materials, 15, 1-14, Jan – 2022. Scopus, IF = 3.623, <https://doi.org/10.3390/ma15010230>.

2021 FACULTY PUBLICATIONS

Patents

Patent granted

1. Ramu Inala, A Srinivas Pavan Kumar, M. Venu, L. Daloji, K. Anupamafrancy, D. Vamsi, P. Srinivas, KVGR Seshu, G. Narasingarao Effects On Mechanical Properties Of New Hybrid Fiber Reinforced Polypropylene Composites, Patent No. 2021103445, DOF:18/6/2021, DOP: 3/11/2021.

Australian Patent GRANTED

Patent published

1. .Ramu Inala, Daloji Locherla, Mr.Ch.Bhanu Prakash, Gullipalli Narasinga Rao, Duvvuri VamseeKrishna, B.Bangarraju, Stress Test on Single Thermoelectric Cell in water-based Cooling CTEG System, Patent application no. 202041055617 A, Filed 2020-12-21, Published 2021-01-22.
2. Ramu Inala, Vinod M, Raghuraman M, Srinivas P, Mahesh Chakravarthi V, Bhanuteja Krapa, Venu Mangam, Effects of the wind on the High-Level Water Collecting Wet Cooling Tower, Patent No. 202041055058 A, filed 2020-12-17, Published 2021-01-22.
3. Ramu Inala, An Effective and Reliable Grid-Connected PV System with Battery for Uninterrupted Supply to Loads, Patent No. 202141006879 A, filed 2021-02-18 Published 2021-02-26, Journal No. 9/2021 Dated 26/02/2021, Page 3177.

Journal Publications

1. Gubbala, G. R., & Inala, Ramu, Design and Evolution of a Prosthetic Socket for Lower Limb Amputation to Patient, Trends in Biomaterials & Artificial Organs, 35(3), 277-282,2021. Scopus, IF=0.85, <https://biomaterials.org.in/tibao/index.php/tibao/article/view/489>
2. Giri Ratnakar Gubbala, Ramu Inala, Design and development of patient-specific prosthetic socket for lower limb amputation, Material Science, Engineering and Applications, Vol. 1, Issue 2, 2021, p. 32-42.Google scholar,<https://doi.org/10.21595/msea.2021.22012>
3. Anupama Francy Kothasiri MULTIPLE PROCESS PARAMETER OPTIMIZATION OF FORWARD EXTRUSION PROCESS ON AA 2024, International Journal of Modern Manufacturing Technologies, Vol. XIII, No. 2 / 2021. Scopus, <https://doi.org/10.54684/ijmmt.2021.13.2.63>.
4. S Venkata Sai Sudheer, K Kiran Kumar, Karthik Balasubramanian, Effect of heater and condenser orientations on fluid flow behavior in a two-phase natural circulation loop, Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 235, pp: 1718-1725, Oct 2021. SCI,<https://doi.org/10.1177%2F09544089211015874>.
5. K Anupama Francy, Design and Static Structural Analysis of Pressure Vessel using Finite Element Technique, International Journal of Disaster Recovery and Business Continuity, Vol.12, No. 1, (2021), pp. 1288–1299, Jun 2021. ESCI Web of Science,

Book Chapter Publications:

1. Ramu I ,M. Raghuraman, M. Venu, Effect of Porosity and Thermal Medium on the Vibration Characteristics of Two-Dimensional FGM Plates Advanced Manufacturing Systems and Innovative Product Design, Lecture Notes in Mechanical Engineering. Springer, pp. 413-423, 2021. Scopus, IF=0.55, https://doi.org/10.1007/978-981-15-9853-1_35
2. M. Raghuraman. RamuV. Chaithanya Vinay, Comparison of Mechanical Performance of the Various Stent Materials: A Finite Element Analysis (FEA) Approach, Advanced

Manufacturing Systems and Innovative Product Design, Lecture Notes in Mechanical Engineering. Springer, pp 449-455, 2021, Scopus, IF=0.55, https://doi.org/10.1007/978-981-15-9853-1_38

3. T. Ramya, M. Venu, K. T. Sunil Kumar, K. Anupama Francy, Influence of Vegetable Oil Based Lubricants with Nano-Particles on Surface Roughness of AISI 1020 and AA 2024 Alloy, Advanced Manufacturing Systems and Innovative Product Design, Lecture Notes in Mechanical Engineering. Springer, pp 163-173, Scopus, IF=0.55, DOI: 10.1007/978-981-15-9853-1_14

4. Mummina Vinod, M. Raghuraman V. Mahesh Chakravarthi, Experimental Investigation of Automatic Aeration Process and Condition of Aqua Ponds Monitoring System with the Help of Internet of Things Advanced Manufacturing Systems and Innovative Product Design, Lecture Notes in Mechanical Engineering. Springer, pp.381-390, Scopus, IF=0.55, https://doi.org/10.1007/978-981-15-9853-1_32

2020 FACULTY PUBLICATIONS

Patents

1. **Mangam Venu**, Professor, Department of Mechanical Engineering, Vishnu Institute of Technology, Bhimavaram 534201, West Godavari, A.P.

Title of the invention: Solid-state deposition process of surface alloy coating.

Patent application no. 202041015774 A

Patent Journal No. 23/2020 Dated 05/06/2020, Page 21078.

International journals

1. Ramu Inala, Influence of Hygrothermal Environment and FG Material on Natural Frequency and Parametric Instability of Plates Mechanics of Advanced Composite Structures, 7(2020) 89 – 101, Scopus, IF=0.32, DOI: 10.22075/MACS.2019.17822.1207

2. M. Venkataiah V. Uma Sai Vara Prasad, K. Venkata Rao, Ch. Nagaraju, M. Venu, Experimental surface quality estimation in ultrasonic vibration-assisted helical milling, Journal of mechanics of continua and mathematical sciences, Volume 15, Pg:472-479, July 2020, Google Scholar, <https://doi.org/10.26782/jmcms.2020.07.00041>

Book Chapter Publications:

1. Sk. Md Riyaz, P. Srinivas, I. Ramu, Optimization of EDM Process Parameters on Aluminum Alloy 6082 by Using Multi-objective Genetic Algorithm, Innovative Product Design and Intelligent Manufacturing Systems, Lecture Notes in Mechanical Engineering. Springer pp 499-508, 2020, Scopus, IF=0.55, https://doi.org/10.1007/978-981-15-2696-1_49
2. I. Ramu, M. Raghuraman, M. Venu, Influence of FGM on the Parametric Instability of Skew Plates in Thermal Environment, Innovative Product Design and Intelligent Manufacturing Systems, Lecture Notes in Mechanical Engineering. Springer. pp 529-539, 2020, Scopus, IF=0.55, https://doi.org/10.1007/978-981-15-2696-1_52
3. M. Raghuraman, I. Ramu, Experimental Investigation for Finding Defects on Epoxy-Coated Cantilever Beam Using Optical Method, Innovative Product Design and Intelligent Manufacturing Systems, Lecture Notes in Mechanical Engineering. Springer. pp 331-338, 2020, Scopus, IF=0.55, https://doi.org/10.1007/978-981-15-2696-1_32
4. Kali Prasad Varma Namburi, Anupama Francy Kothasiri, Venkata Sai Mounik Yerubandi, Modeling and simulation of Aluminum 1100 alloy in an extrusion process, Materials Today: Proceedings, pp. 518-522, Scopus, <https://doi.org/10.1016/j.matpr.2019.05.398>
5. Mummina Vinod, M. Raghuraman, V. Mahesh Chakravarthi, Experimental Investigation of Paddy Grain Drying Mechanism Innovative Product Design and Intelligent Manufacturing Systems, Lecture Notes in Mechanical Engineering. Springer. Pp.135-143, Scopus, IF=0.55, https://doi.org/10.1007/978-981-15-2696-1_13

2019 FACULTY PUBLICATIONS

Journal Publications

1. GSD Prasad, GD Ray, M Venu, Accreditation of Self-Financing Technical Institutions in India: A New Perspective to Improve Quality, Journal of Engineering Education Transformations, Volume 32, Pg 48-55, April 2019, google scholar, <https://doi.org/10.16920/jeet%2F2019%2Fv33i2%2F137422>
2. Anantha Gopal, C. Naga Bhaskar, Ch. Naveen Kumar DESIGN AND CFD ANALYSIS OF A 3D CONVERGENT DIVERGENT NOZZLE USING ANSYS FLUENT, International Journal of Research Volume VIII, Issue VI, JUNE/2019, google scholar, paid.

Book Chapter Publications:

1. Ramu, M. Raghuraman K. V. G. R. Seshu, Vibration Response of Sandwich Beam with Viscoelastic Core and FGM Face Sheets Using Finite Element Method, Emerging Trends in Mechanical Engineering, Lecture Notes in Mechanical Engineering. Springer, pp. 377-386, 2019, Scopus, IF=0.55, https://doi.org/10.1007/978-981-32-9931-3_37
2. M. Raghuraman, I. Ramu, Image Correlation Technique for Slope and Curvature of a Cantilever Beam Using Light Intensity, Emerging Trends in Mechanical Engineering, Lecture Notes in Mechanical Engineering. Springer, pp 539-547, 2019, Scopus, IF=0.56 https://doi.org/10.1007/978-981-32-9931-3_52
3. Bhanuprakash Chebrolu, Manjunath Taredahalli Shanmukappa, Integration of Grid Tie Solar Energy Using Bidirectional Meter for Electrical Power and to the Utility Power Grid " IJIEMR Transactions, Volume 08, Issue 12, Pages: 172-178. <http://www.ijiemr.org/downloads.php?vol=Volume-08&issue=ISSUE-12>

Conference Publications

1. K Anupama Francy, Ch Srinivasa Rao, P Gopalakrishnaiah Optimization of direct extrusion process parameter on 16MnCr5 and AISI1010 using DEFORM-3D, Procedia in Manufacturing, Dec 2108, Scopus <https://doi.org/10.1016/j.promfg.2019.02.070>

2. K Anupama Francy, Ch Srinivasa Rao, P Gopalakrishnaiah Process Parameter Optimization of Cold Forward Direct Extrusion of Al 6063 alloy using DEFORM 3D, proceedings of ETME-2019, 9-10 Jan 2019.

2018 FACULTY PUBLICATIONS

Journal Publications

1. Gopalakrishnaiah, Srinivasa rao.Ch , Anupama francy .K Multiple Process Parameter Optimization of Roll Forming on High Strength Steel using TOPSIS, International Journal of Engineering & Technology,7, (2018) 199-202, https://www.researchgate.net/publication/329862786_Multiple_Process_Parameter_Optimization_of_Roll_Forming_on_High_Strength_Steel_using_TOPSIS
2. N. Naga Krishna, Study on CFF–Polyester Composites, Materials Today: Proceedings5, 1-10, 2018 Scopus,Free Publication<https://doi.org/10.1016/j.matpr.2017.11.548>
3. N. Naga Krishna, Study on Influence of Heat Treatment on Mechanical Properties and Machinability during CNC Turning of AA6061 Alloy, Materials Science & Engineering 377, 1-6, 2018, Scopus, Free Publication, https://ui.adsabs.harvard.edu/link_gateway/2018MS&E..377a2025N/doi:10.1088/1757-899X/377/1/012025
4. Ramu I, Narendra M and Venu M, Effect of hygrothermal environment on free vibration characteristics of FGM plates by finite element approach, Materials Science & Engineering, 377-012021, 2018, Scopus, Free Publication doi:10.1088/1757-899X/377/1/012021
5. Ramu I, P Srinivas and K Vekatesh, Taguchi based grey relational analysis for optimization of machining parameters of CNC turning steel 316, Materials Science & Engineering, 377- 012078,2018 Scopus, Free Publication, doi:10.1088/1757-899X/377/1/012078
6. I Ramu, K V G R Seshu and M Venu, Natural frequency of skew FGM plates using finite element method, Materials Science & Engineering, 455 (2018) 012024, Scopus, Free Publication, doi:10.1088/1757-899X/455/1/012024

Conference Publications

1. Bhanuprakash Ch., Vinod Mumminaand Mahesh Chakravarthi V, Performance Evaluation of an Eco-Cooler,analysed by varying the Physical and flowParameters, IOP Conference Series: Materials Science and Engineering, Materials and Renewable Energy 8–10 December 2017, Sikkim, India,Scopus,Free, <https://iopscience.iop.org/issue/1757-899X/377/1>
2. **K. Rajendra**, “Experimental Investigation on Performance Characteristics of Four Stroke single Cylinder Petrol Engine Using a Pre-Heating Set-Up and Fuel Blends”. International Conference on Advances in Design, Materials, Manufacturing & Energy System [ADMMES-2018], 15- Sept – 2018, MALLA REDDY ENGINEERING COLLEG, Hyderabad, India.

UPTO 2017 FACULTY PUBLICATIONS

BOOK PUBLICATION

1. Title: Copper Nanocomposites: Synthesis, Characterization and Properties Authors: **Mangam Venu**, Siddhartha Das Publisher: LAMBERT Academic Publishing, Germany ISBN No: 978-3-659- 96233-2 Year of Publication: 2016.

International Journals:

1. **N. Naga Krishna**, “Mechanical Anisotropy and Microstructural Changes during Cryorolling of Al-Mg-Si alloy”, Materials Characterization, Vol. 107, September 2015, 302 – 308. (SCI)
2. Ramu Inala, Parametric Instability Of Rotating Cantilever Functionally Graded Material Plates, International Journal Of Scientific Research, 6(7), pp. 488-494, 2017.
3. Ch. NS Krishna, Mangam Venu, SYNTHESIS OF ALUMINA NANOPOWDER USING MIXED FUEL BY SOLUTION COMBUSTION APPROACH, International Journal of Research in Engineering and Technology, Vol-5, Pg: 162 – 164, Sept 2016, google scholar
4. Ch. Naga Siva Krishna, **Mangam Venu**, (2016). Synthesis of alumina nanopowder using mixed fuel by solution combustion approach. International Journal of Research in Engineering and Technology, 5, 162-164.

International conferences

1. Prasad K.E.V. and **Anupama Francy K.**, (2016). Experimental Evaluation of Lubricant Effect on Cold Forward Extrusion of AA6063. International Conference on Mechanical & Production Engineering (ICMPE), 16th October 2016, Hyderabad.