DEPARTMENTOFMECHANICALENGINEERING PRASADVPOTLURISIDDHARTHAINSTITUTEOFTECHNOLOGY,VIJAYAWADA

Publications (2020-21)

Web of Science		Scopus	Referred	Total	International Conference		Book Chapters	Total Conference	Total
SCI	ESCI	Scopus	Referred	Journals	(Scopus)	(Others)	(Scopus)	Publications	Publications
05	-	03	34	42	4	22	-	26	68

SCI Indexed Journals

- 1. M.Somaiah Chowdary, Raghavendra, **M.S.R. Niranjan Kumar**, Shakuntala Ojha, M.Om Prakash, A review on the degradation of properties under the influence of liquid medium of hybrid polymer composites, SN AppliedSciences, Springer nature Journal, Springer Nature Switzerland AG 2020 (2020)2:1708, September, 2020-10-05, **SCI Indexed**
- 2. M. Somaiah Chowdary, G. Raghavendra, M. S. R.Niranjan Kumar, S. Ojha, Vasavi Boggarapu, Influence of Nano-Silica on Enhancing the Mechanical Properties of Sisal/Kevlar Fiber Reinforced Polyester Hybrid Composites, Silicon 2020, Springer Nature Switzerland AG. Part of Springer Nature, November, 2020, SCI Indexed
- 3. Jakeer Hussain Shaik, J Srinivas, T Srinivas Rao, K Rama Kotaiah, **B Raghu Kumar**, Identification of practical spindle tool interface parameters using an optimization based statistical approach, Sadhana,46,111(2021), June-2021, Springer Publications, **SCI Indexed**
- 4. Vasavi B, Raghavendra G, Shakuntala Ojha, Sk Acharya, P. Venkateswara Babu, **Somaiah Chowdary***, Dheeraj Kumar G State of the art in functionally graded materials Composite Structures, Elseveir Publications, 262(2021), January 2021 https://doi.org/10.1016/j.compstruct.2021.113596 *SCI Indexed
- 5. Om Prakash Minugu, Raghavendra Gujjala, Ojha Shakuntala, Panchal Manoj, **M. Somaiah Chowdary****Effect of biomass derived biochar materials on mechanical properties of biochar epoxy composites Proc IMechE Part C: J Mechanical Engineering Science 0(0) 1–13, IMechE 202, February-2021 *SCI Indexed **Scopus Indexed Journals**
- **1.** V. Sri Sai Harsha Vardhan, **K. Ravi Prakash Babu**, B. Raghu Kumar, G. Rama Krishna Mechanical Characterization of E-Glass Fibre Reinforced Composite with Graphene Nano Particles as Filler, International Journal of Emerging Trends in Engineering Research Volume-8.No.9, September-2020, pp.5043-5047

Scopus Indexed

- 2. **P.Phani Prasanthi**, K.SivajiBabu, M.S.R.Niranjan Kumar, A.Eswar Kumar
 - Comparison of elastic properties of different shaped particle reinforced composites using micromechanics and finite element method, International Journal of Computational Materials Science and Engineering, Vol.9, No.2 (2020)2050011 (16pages) September-2020, ESCI Indexed

Scopus Indexed

3. Reddy Sreenivasulu, Goteti Chaitanya, G. Vijay Kumar, M.Radha Devi, Inverse Kinematic Solution for Five bar Parallel Linkage Planar Manipulator using PYTHON and Optimization by Taguchi Method, International Journal of Engineering Trends and Technology, Volume 69 Issue 5, 94-100, May 2021, ISSN: 2231 – 5381, doi:10.14445/22315381/IJETT-V69I5P214 Scopus Indexed

Other /Referred Journals

1. M.S.R.NiranjanKumar, M.Somaiah Chowdary, N.Sivateja, N.Prudhviraj,

Effect of Nano Clay on the Mechanical Properties of Kevlar Fiber Reinforced EpoxyComposites", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), ISSN(P):2249-6890; ISSN(E): 2249-8001, Vol.10, Issue3, August, 2020, Pp.8547-8554, Others

2. N.Prudhviraj, M.Somaiah Chowdary, Dr.M.S.R. Niranjan Kumar, N.Sivateja,

Effect Of Nano Clay On The Mechanical Properties Of S-Glass Fiber Reinforced Epoxy Composites, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), ISSN(P):2249–6890; ISSN(E):2249–8001,Vol.10, Issue-3, 13747–13754, September- 2020, **Others**

3. K.Srividya, P.Phani Prasanthi, M. Radha Devi, G.Vamsi Krishna, P. Anuroop,

Tensile And Flexural Studies On Banana And Americana Hybrid Composite, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), ISSN(P):2249–6890; ISSN(E):2249–8001, Vol.10, Issue-4, August-2020, 219–228

Others

4. K. Gopi Krishna, Koteswara RaoUnnam, Nagaraju Cherukuri

Mitigation Of Stress Concentration In A Plate Having A Central Hole Subjected To Tensile Load Using Piezoelectric Patches, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), ISSN(P):2249–6890; ISSN(E):2249–8001, Vol.10, Special Issue, August-2020,414–419

Others

5. Sd.Abdu l Kalam

Design and Analysis Of Hydraulic Actuated Mandrel, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), ISSN(P):2249–6890; ISSN(E):2249–8001, Vol.10, Special Issue, August-2020, 49–60

Others

6. Vinay Kumar Gurram, P.Phani Prasanthi, Sri Ram Vikas.k, A. Eswar Kumar

Tensile Strength of Starch Based Sisal Fiber Reinforced Composite, International Journal of Advanced Science and Technology, Vol.29, No.4, September (2020), pp.8680–8687

Others

7. T. Naveen Kumar, **Sd. Abdul Kalam**, V. S. N. Venkata Ramana, K. Sri Ram Vikas Experimental Investigation on Mechanical Properties of Burnished Aluminum Metal Matrix Composites, International Journal of Advanced Science and Technology Vol.29, No.3(2020), September-2020,

Others

8. G.Naga Mallikarjun Rao, **P.Phani Prasanthi**, B.Raghu Kumar, N. Raghu Ram, A.Eswar Kumar,

Tensile Strength of Bagasse Fiber Reinforced Composite with Different Orientation of Bagasse Fiber, International Journal of Advanced Science and Technology, Vol.29, No.3, (2020), pp.14432–14438,September-2020,

Others

9. Arava Madhava Sai Swamy, G.Vijaya Kumar, P.Phani Prasanthi

Analysis of E-Glass Particle Reinforced PLA Matrix Composite for 3D Printing Applications using ANSYS, International Journal of Emerging Trends in Engineering Research ISSN:2347–3983, Volume 8.No.10, October-2020

10.K.I.Vishnu Vandana, K.N.S.Suman

Evaluation of Cutting Performance of Alumina- Graphene Composite Ceramic Tool International Journal of Emerging Trends in Engineering Research, ISSN(P):2347-3983, Vol.8, Issue10, 7524–7531, October-2020

Others

11.T J Prasanna Kumar, K Venkata Rao, Ch Lakshmikanth, P Gopala Krishnaiah

Vibration Analysis on Sandwich Beams & Plates using Finite Element Technique,International Journal of Engineering Research & Technology (IJERT), Volume 09, Issue12 (December 2020), ISSN(Online):2278-0181

Others

12.Rupa Athimakula, **Ch.Lakshmikanth**, Sai Bargav Chowdary B, Ismail Karawada,

Modeling and Analysis of Cylinder Block for V8 Engine, International Research Journal on Advanced Science Hub Volume-2; Issue-12, December-2020; ISSN: 2582-4376

Others

13. Makkena Veeranjaneyulu, Anay Jain, B Raghu Kumar

Effect of Cutting Factors on Surface Roughness and MRR during End Milling of Aluminum Alloy Al6063-T6, International Journal of Scientific & Engineering Research , ISSN:2229-5518, Volume 12, Issue-2, 336-34, February-2021

Others

14.M. Naga Swapna, Anusha Peyyala, B. Purna Chandra Sekhar, N. Venkata Krishna, Experimental investigation of GTA Welded SS316L plates using shape memory alloy as a filler material, Global Journal of Engineering and Technology Advances, 2021, 06(03), 042–048,

Others

15. Anusha Peyyala, M.Naga Swapna, B.Purna Chandra Sekhar, B. Sunil

Experimental investigation of COP for an air conditioner using zeotropic blend, Global Journal of Engineering and Technology Advances, 2021, 06(03), 014–023

Others

16.M.Naga Swapna, P.Anusha, V.Chittaranjandas, K.Srividya

Radiation Effect on MHD Casson Fluid Flow Linearly Porous Stretching Sheet in the Presence Chemical Reaction, Annals of R.S.C.B., ISSN:1583-6258, Vol.25, Issue3, 2021, Pages. 1858-1869., April-2021 **Others**

17. Abhijeet H. Kekan, B. Raghu Kumar

Artificial Neural Network and Finite Element Investigation of Cracked Rotor Shaft Turkish Journal of Computer and Mathematics Education, Vol.12 No.7(2021),1311–1319,May2021

Others

18.P.Anusha, M. Naga Swapna, R. Haranath, K.Sreedevi

Micro structure and Mechanical Properties of Lm25 Alloy with Chromium Metallic Composite, Annals of R.S.C.B.,ISSN:1583-6258, Vol.25,Issue 5,2021, Pages.3897-3906, May-2021 **Others**

19.T. Arun Kumar, **Sd. Abdul Kalam**, G. Bala Krishna, P. Ravi Kumar

Dynamic Analysis of Hydraulic Actuated Mandrel, Turkish Journal of Computer and Mathematics Education, Vol.12, No.7 (2021), 2675-2685, May 2021,

20.M. Rajyalakshmi, K.I.V. Vandana

A study on Recent development in Abrasive Water Jet Machining, IJSTE- International Journal of Science Technology & Engineering, Volume7, Issue11, pg:44-50, May 2021, ISSN (online):2349-784X **Others**

21.Ch. Mohan Sumanth, J.Surendra, M.V.H. Satish Kumar, K.Srividya, N.Nikhil Babu

Electro-Magnetic Cruise control System, International Journal of Research in Engineering and Science(IJRES), ISSN(Online): 2320-9364,ISSN(Print): 2320-9356,Volume-9, Issue-6, 2021, PP.28-33, June-2021,

Others

22.M.Tejaswini S. NPadhi, K.Venkata Rao

Fabrication and Testing of a Hybrid Composite Material Design Engineering, ISSN:0011-9342, Year 2021, Issue:6, Pages:777–784, June-2021,

Others

23. N. Yuvamani Kumar, N. Pavan Krishna, V. Manohar, M. Navyakanth, T. J. Prasanna Kumar

Design and Fabrication of Cargo Unmanned Aerial Vehicle featured with Vertical Take-Off and Landing, Journal of Emerging Technologies and Innovative Research (JETIR), JSSN-2349-5162, JETIR June 2021, Volume 8, Issue 6, pg: 487-495,

Others

24.T.J.PrasannaKumar, B.Teja, B.ChaitanyaNaresh, B.Lokesh, B.Uday Teja

Computational Investigation on composite beam cross-sections and their influence on structural strength, Journal of Emerging Technologies and Innovative Research (JETIR), ISSN-2349-5162, JETIR, June-2021, Volume-8, Issue6, pg:226-236,

Others

25.M.Radhadevi, Dr.G.Vijay Kumar

Non linear analysis of adhesive lybonded SLJ in laminated FRP composite Journal of Emerging Technologies and Innovative Research (JETIR)ISSN-2349-5162, JETIR June-2021, Volume8, Issue-6, pg:186-191

Others

26.P Gopala Krishnaiah, T J Prasanna Kumar, K Venkata Rao, Ch Lakshmikanth, Ch Vidya, Optimization of Process Parameters for Material Removal Rate Kerf Width and surface Roughness in Wire Cut Electrical Discharge Machining Process, Journal of Emerging Technologies and Innovative Research (JETIR) ISSN-2349-5162, JETIR, June-2021, Volume-8, Issue-6, pg:825-831

Others

27.K Venkatarao, A Venkata Jayasri, A Bharathi Lakshmi, K Ramana Sai, K Pavan Kalyan, Effect of Post Chemical Treatment on Mechanical Properties of Jute/Teak Wood Powder Hybrid Composites, Journal of Emerging Technologies and Innovative ResearchISSN: 2349-5162, Vol.8, Issue 6, page no.g181-g188, June-2021,

Others

28.K. Ravi Prakash Babu, B. Raghu Kumar and G. Durga Prasad,

Comparative Modal Analysis Studies for Modelling a Turbine Blade as Twisted Cantilever Beam, Journal of Emerging Technologies and Innovative Research, ISSN: 2349-5162, Vol.8, Issue-6, June-2021, g198-g203

Others

29.Dr. G. Vijay Kumar, K.Sudheer, K.Sai Krishna, A.Naga Ravi teja, G.Ashok Babu, Simulation of composite raft mount system for on board centrifugal pump used in ships, Journal of Emerging Technologies and Innovative Research, ISSN:2349-5162,Vol.8, Issue6,June2021,g204-g212

30.E. Kavitha, Ismail. Kakaravada

Study & Analysis Of Anti-Lock Breaking System (ABS) Journal of Emerging Technologies and Innovative Research, ISSN:2349-5162, Vol. 8, Issue-6, June-2021, g213-g217

Others

31.Makkena Veeranjaneyulu, **Dr. B Raghu Kumar**, Dr. AnayJain

Prediction of Input Parameters by Optimization of Response Variables in Universal Vertical Milling of Al6063-T6 alloy, International Journal of Advanced Research in Education & Technology (IJARET) Vol.8, Issue-2 (Apr.-June 2021), ISSN:2394-2975(Online)

Others

32.Sankararao Vinjavarapu, K.V.Viswanadh, B.Sudheer Kumar, **P.Gopala Krishnaiah**, Jaya Raju Gandepudi,

Fabrication and Modal Analysis of Composite Leaf Spring International Journal of Disaster Recovery and Business Continuity, Vol.12, No.1, (2021), pp.1133–1145, ISSN:2005-4289, June-2021,

Others

33.T J Prasanna Kumar, P Gopala Krishnaiah , Siva Sankara Babu Chinka, Kanulla Karthik, Kolahalam Sai Babu,

Design Optimization and Computational Flow Analysis of Annular Type Combustion Chamber, International Journal of Disaster Recovery and Business Continuity, Vol.12, No.1,(2021), pp.1195–1206, ISSN:2005-4289, June2021,

Others

34.P.MastanRao, T J Prasanna Kumar, P Gopala Krishnaiah, K Anupama Francy, Kolagotla Venkateswara reddy

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, ISSN:2005-4289, June2021

International Conference Published (2020-21)

1. K.Sri Ram Vikas, N.Raghu Ram, B.Sai Charan, Sastry S.Indrakanti,

Hot pressing of copper and copper-based composites: Microstructure and suitability as electrodes for electric discharge machining, International Conference On Advances in Minerals, Metals, Materials, Manufacturing and Modelling (ICAM5-2019), (September 25-27, 2019), Organised by Department of Metallurgical and Materials Engineering and proceedings by Materials Today. July-2020, **ScopusIndexed**

2. GeethaSatyaSai,S.,Sailesh,V.,Mobin,S.K.,...SaiKrishna,Y.,Prasanthi, P.P.

Analysis of Composite Leaf Springs Using Finite Element Method, Lecture Notes in Mechanical Engineering, 2021, 26, pp.479–488, December-2020,

Scopus Indexed

3. Dr.G. Vijay Kumar, Dr.P.Phani Prasanthi,

Analysis of composite raftmounts for vibration reduction of a centrifugal pump International conference ICi4TCME 2020 organized by VVIT, Guntur on 4th & 5th December-2020, IOP-Material Science and Engineering,

Others

4. Koona Bhavani, V.S.N. Venkata Ramana, Rahul, K. Sri Ram Vikas, Ch. Kishore Reddy

Effect of Number of Passes on Surface Properties of Burnished Aluminium Alloy, Industry 4.0 Technologies in Civil and Mechanical Engineering (ICI4TCME 2020), IOP Conf.Series:Materials Science and Engineering 1112(2021) 012011, May 2021, doi:10.1088/1757-899X/1112/1/012011,

Others

5. Ch. Kishore Reddy, M. Gopi Krishna, Rahul, V.S.N. Venkata Ramana, K. Sri Ram Vikas

Optimization of dry sliding wear parameters of Al4 Mg system reinforced with high strength alloy particulate (HSAp), Industry 4.0 Technologies in Civil and Mechanical Engineering (ICI4TCME 2020)IOP Conf. Series: Materials Science and Engineering, 1112(2021) 012003; doi:10.1088/1757-899X/1112/1/012003, May 2021,

Others

6. K. Srividya, J. Surendra, K. Krishna Kishore, CH. Mohan Sumanth, K. Bharath,

Experimental and analytical studies on natural frequencies of thin bonded metallic plates, Materials Today: Proceedings, Volume 44, Part1, 2021, Pages 2257-2260, May 2021

ScopusIndexed

7. M.Rajvalakshmi, M.VenkateswaraRao,

Multi-Response Optimization of Machining factors in Pocket Milling of AISI304 Using Grey Relational Analysis, International conference ICi4TCME 2020 organized by VVIT, Guntur on 4th & 5th December-2020, IOP-Material Science and Engineering,

Others

8. Ch. Vidya, Thermodynamic Analysis of cross flow heat exchanger with organic blends as substitute to ionic coolants, 5thInternational Conference on Applications of Fluid Dynamics (ICAFD-2020) Organized by School of Mechanical Engineering, VIT-AP University

13thto15th December-2020, Proceedings to Lecture notes in Mechanical Engineering, Springer

9. KoonaBhavani,VSNVenkataRamana,Rahul,**ChLakshmikanth**,KSriramVikas,**Ch**Kishore Reddy,

Modification of surface properties of AA7075 by friction stir welding, 5thInternational Conference on Applications of Fluid Dynamics (ICAFD-2020) Organized by School of Mechanical Engineering, VIT-AP University, 13th to15th December-2020, Proceedings to Lecture notes in Mechanical Engineering, Springer

10. Ch.V.S.S.Vivek,G.V.R.D.Eswar,Dr.K.Srividya,Ch.MohanSumanth,J.Surendra,K.KrishnaKanth, Cruise Control System Using Electro-Magnetic Force, International Conference on Recent Advancements in Mechanical Engineering (ICRAME)2021,26th &27th March 2021,Department of Mechanical Engineering, PVPSIT.

Others

- **11.** V.Sai Madhav, V.Naga Manoj, T.Naga Gopi,M.Venkatesh, **Dr.K.Srividya**, M.V.H.Satish Kumar, Fabrication of sentry plant fibre and banana fibre based hybrid composite, International Conference on Recent Advancements in Mechanical Engineering (ICRAME) 2021,26th & 27th March 2021,Department of Mechanical Engineering, PVPSIT. **Others**
- 12. Dr.P.Phani Prasanthi, Dr.K.SivajiBabu, Ch.Vidya,

Simulating the Health Impact Of Particulate Matter Using Multipath Particle Deposition Model (MPPD), International Conference on Recent Advancements in Mechanical Engineering (ICRAME)2021, 26th & 27th March2021, Department of Mechanical Engineering, PVPSIT. **Others**

13. Srikar Gemaraju, Kiran Kumar Yadav Aerra, Phaneendra Kumar Kopparthi, Bhaskara Rao Patha kokila, **Ismail.Kakaravada**,

Mechanical properties of Glass Fibre Reinforced composites in addition to TiO 2 particles International Conference on Recent Advancements in Mechanical Engineering (ICRAME) 2021, 26th & 27th March2021, Department of Mechanical Engineering, PVPSIT. **Others**

- **14.** U Koteswara Rao, Naidu Govardhan, P Mahesh, Y Rajesh, SkAzees Rehman, Design and fabrication of Mechanical Chemical Sprayer, International Conference on Recent Advancements in Mechanical Engineering (ICRAME) 2021, 26th &27th March 2021, Department of Mechanical Engineering, PVPSIT. **Others**
- 15. ONVP Bhagavan Kumar, Dr.Eswaraiah Punna, Dr.G.Vijay Kumar,

A Review OnUniversal Grippers Used In Industrial Robot Applications, International Conference on Recent Advancements in Mechanical Engineering (ICRAME)2021,26th & 27th March2021, Department of Mechanical Engineering, PVPSIT. **Others**

16. K.I.V.Vandana, M.Rajyalakshmi, S.NagaKumar,

Abrasive Water Jet Machining- A Review on current development, International Conference on Recent Advancements in Mechanical Engineering (ICRAME) 2021, 26th & 27th March 2021, Department of Mechanical Engineering, PVPSIT. **Others**

17. M.Radhadevi, Dr.V.Balakrishna Murthy,

Modelling of infinitely wide SLJ in laminated FRP composite, International Conference on Recent Advancements in Mechanical Engineering (ICRAME) 2021, 26th &27th March 2021, Department of Mechanical Engineering, PVPSIT. **Others**

18. T.ArunKumar, Sd.AbdulKalam, G.BalaKrishna, P.RaviKumar, P.TharunKumar

Dynamic Analysis of Hydraulic Actuated Mandrel, International Conference on Recent Advancements in Mechanical Engineering (ICRAME) 2021, 26th & 27th March 2021, Department of Mechanical Engineering, PVPSIT. **Others**

- **19. K.Venkatarao**,IsmailKakaravada,A.VenkataJayasri,A.BharathiLakshmi,K.RamanaSai, K.PavanKalyan, Effect of chemical treatment on mechanical properties of natural fiber composites, International Conference on Recent Advancements in Mechanical Engineering (ICRAME) 2021, 26th & 27th March 2021, Department of Mechanical Engineering, PVPSIT. **Others**
- 20. Balakrishna.G, B.Raghukumar, B.Balakrishna,

Multiple objective optimization of process factors in friction stir welding on casted AlSi10 Mg plates with Taguchi-grey relational analysis, International Conference on Recent Advancements in Mechanical Engineering (ICRAME) 2021, 26th & 27th March 2021, Department of Mechanical Engineering, PVPSIT.

Others

21. Murahar i Kolli, K.Ravi Prakash Babu, Nageswara Rao Medikondu,

Investigation on Material Removal Rate and Taper Angle in Abrasive Aqua Jet Machining of Al7075/SiC/Gr Composites Using RSM Approach, International Conference on Recent Advancements in Mechanical Engineering (ICRAME) 2021, 26th & 27th March 2021, Department of Mechanical Engineering, PVPSIT. **Others**

22. Dr. M. Naga Swapna Sri ,Dr. Anusha Peyyala, K. Ganesh, D. Prudhvi Raju,

Improving Process Parameters On Gas Tungsten Arc Welded SS316L Plates Uses Nitinol As A Filler Material", Virtual International Conference On HVAC & R, ISHRAE Mysore Chapter, on 06.03.2021. **Others**

23. Dr. Anusha Peyyala, Dr. M. Naga Swapna Sri, K. Ganesh, D. Prudhvi Raju, K. Ajay, Vasu Nayak, An Experimental investigation On Application Of Al2o3 And Tio2 Nano Particles In VCRS", Virtual

International Conference On HVAC & R, ISHRAE Mysore Chapter, on 06.03.2021. Others

24. Dr.P.Phani Prasanthi,

Failure load of Jute-Coir Fibre Reinfroced epoxy matrix Composites Using Micromechanics and Finite Element Method, 4th International Conference on "INNOVATIONS IN MECHANICAL ENGINEERING" (ICIME)-2021 held on 26th and 27th February at Guru Nanak Institutions, Ibrahimpatnam, Telagana-501506.(Springer)

25. T J Prasanna Kumar, P Vamsi Raj Kumar, Md Saif, Sk Abdur Rehman, SkAbbas,

Steady State Thermal Analysis to Investigate Total Heat Flux in a Fibre Metal Laminate for Variable Thickness, Second International Conference on Advances in Science Hub (ICASH), organized by the RSP Conference Hub, Coimbatore, India, 26th and 27th June 2021. **Others**

26. M. V. Ramesh, G Vijaya Kumar

Solar Powered Autonomous Vehicle for Seed Sowing New Approaches in Engineering Research Volume-4, 22 June 2021; Page 1-12 http://doi.org/10.9734/bpi/naer/v4/9229D, ISBN: 978-93-91312-90-9