## **DEPARTMENT OF MECHANICAL ENGINEERING::VRSEC**

# **FACULTY PUBLICATIONS**

### **2016-17**

#### **International Journals**

- K.Nagamalleswara rao, M.Ramgopal &F Souvik Bhattacharyya, "Development of thermodynamic and reaction kinetic data on BaCl<sub>2</sub> – NH<sub>3</sub>system with and without expnanded natural graphite", Science and technology for the Built Environment, 2017, DOI: 10.1080/23744731.2016.1275785, ISSN 2374-4731, PP 1-9, SCIE, IF 1.284
- N.Ravi Kumar, P.Srikant, Ch. Ranga Rao, K.Meera Saheb, "Statistical analysis of mechanical properties of vakka fiber reinforced polypropylene composites using Taguchi method", Materials Today Proceedings 4, 2017, ISSN 2214-7853,PP 3361-3370.SCOPUS
- 3. B.Sreenivasa Rao, G.Sambasiva Rao, J.Suresh kumar, "Static vs Buckling Failure of thin FRP laminate under Thermal Loading", Materials Today Proceedings 4, 2017,ISSN 2214-7853, PP3110-3115.**SCOPUS**
- 4. K.Srinivas, Dr. B.Balu Naik, Dr. K. Kalyani Radha, "Impact of Fuel Injection Pressure and Compression Ratio on Performance and Emission Characteristics of VCR CI Engine Fueled with Palm Kernel Oil- Eucalyptus oil Blends", Materials Today Proceedings 4, 2017, ISSN 2214-7853,PP 2222-2230.SCOPUS
- Prakash D., Balakrishna Murthy.V, Chandra Mohan R, Karteek N, "Effect of Material Mismatch on Static behavior of Flex seal", Materials Today Proceedings 4, 2017, ISSN 2214-7853,PP 2290 -2297.SCOPUS
- P.Sateesh Kumar Reddy, Ch. Naga Raju, "Weight optimization and Finite Element Analysis of Composite automotive drive shaft for Maximum Stiffness", Materials Today Proceedings 4, 2017, ISSN 2214-7853,PP 2390-2396.SCOPUS
- 7. V. Sridhar, Ch. Rathnam, M.Ashok Chakravarthy, "Synthesis and Mechanical Characterization of MagnesiumReinforced With Nano Alumina Composites", Materials Today Proceedings 4, 2017, ISSN 2214-7853,PP 3131-3140.**SCOPUS**
- 8. M.Bala Chennaiah, P.Nanda Kumar, P.Prahlada Rao, "Effect of PWHT on the Hardness and fractured microstructure of IS-103Crl welded joint", Materials Today Proceedings, 4, 2017, ISSN 2214-7853,PP 1193-1198.**SCOPUS**

- 9. Ch. Hari Krishna, MJ Davidson and CH. Nagaraju, "Effect of aging on hardness in the upsetting tests using experimental and finite element investigations", journal of Mechanical Engineering Science, September 2016, issn 0954-4062, **SCOPUS**
- 10. A.Mallikarjuna Rao , K.Ramji, B.S.K. Sundaram Siva Rao, V.Vasu, C.Puneeth, "Navigation of Non holonomic Mobile Robot Using Neuro- fuzzy Logic with Integrated Safe Boundary Algorithm", International Journal of Automation and Computing, doi: 10.1007/s11633-016-1042-y. volume 14(3), June 2017, ISSN: 1751-8520 PP 285-294, SCOPUS
- 11. M.Balaji, B.S.N.Murthy ,N.Mohan Rao, "Optimization of Cutting Parameters in Drilling of AISI 304, Stainless Steel Using Taguchi and ANOVA", Procedia Technology, vol 25, September 2016, pp 1106-1113.ISSN NO: 2212-0173 **SCOPUS**
- 12. Srinivas Prasad Sanka, A. Venkateswarlu, K. Vijay Kumar, "Systematic Study of Head Loss in Pipes Conveying Oil in a Process Plant", International Journal of Mechanical Engineering and Technology, Volume 8, Issue 6, June 2017, ISSN 0976 6359, PP 662- 666.**SCOPUS**
- 13. M.Venkateswarlu, D.Venkata Lakshmi, K. Naga Malleswara Rao, "SORET, Hall Current, Rotation, Chemical Reaction and Thermal radiation effects on unsteady MHD Heat and Mass Transfer natural convection flow past an accelerated Vertical plate", Journal of KSIAM, vol 20, No.3, 203-224, ISSN NO: 1226-9433 July 2016, pp 203-224, SCOPUS.
- 14. G.Sulochana, Ch. Venkata Prasad, P.Kumaran, "Performance, Emissions and Combustion Characteristics of a Diesel Engine Fuelled With Hybrid Biodiesel", International Journal of Mechanical Engineering and Technology, Volume 8, Issue 6, June 2017, ISSN: 0976-6359, PP 501-509. SCOPUS
- 15. Rajesh Gunti, A.V.Ratna Prasad, A.V.S.S.K.S.Gupta, Preparation and Properties of Successive Alkali Treated Completely Biodegradable Short Jute Fiber Reinforced PLA Composites", Polymer composites 2015, vol 37, issue 7, July 2016, pp 2160-2170., ISSN No :1548-0569.
- 16. A.Sreenivasulu, N. Venkata Chalapathi, G.Prasanthi, "Simulation Modeling and Analysis for Investigation of Part Launching Rule in a FMS Scheduling", Indian Journal of Science and Technology, Vol 9, (S1), ISSN 0974-5645, PP 1-5. December 2016.
- 17. A. Adilakshmi, A. Venkateswaarlu, "Assessment Of Ground Water Quality In Deshmukhi Village Nalgonda District, Telangana", International Journal Of

- Advancement In Engineering Technology, Management and Applied Science (IJAETMAS), Volume 4, issue 6, June 2017, ISSN: 2349-3224, PP 69-83.
- 18. K.Siva Prasad, G.Chaitanya, "A Review on Current Research Trends in abrasive Water Jet machining", International Research Journal of Engineering and Technology, Volume 4, issue 6, June 2017, ISSN: 2395-0056, PP 3264-3270.
- 19. K.Srinivasa Rao, G. Sai Meghana, Sk. Umar, K.MounikaChowdary, N.KrishnaReetika, "Modelling of a Cracked Pipe into a beam and Prediction of Fatigue crack Propagation", International Research Journal of Engineering and Technology (IRJET), ISSN: 2395-0072, Volume 3, Issue 12, December 2016, pp 1057-1063.
- 20. K.Srinivasa Rao, G.Sreedhara Babu, M.Rajesh, "Automatic Sun Tracking System With Dual Axis", International Journal of Modern Trends in Engineering and Research, Volume 4, issue 6, June 2017, ISSN 2349 -9745, PP 106-113.
- 21. Srinivas Prasad Sanka, P.K.Bharadwaj, BLVS Gupta, "Experimental Investigation and Fabrication of Serpentine Flat-Plate Collector to Predict the Performance", International Journal of Engineering and Innovative Technology, Volume 6, Issue 1, June 2017, ISSN: 2277-3754, PP 1-5.
- 22. Bapi Raju V., Balakrishna Murthy V, Prasanna K.G.L., "Limitation of Classical, Bending Theory in Isotropic and FRP Beams", International Journal for Research in Applied Science & Engineering Technology, Volume 5, Issue 6, June 2017, ISSN 2321-9653, PP 1204-1210.
- 23. A.V.A. R Durga Rao, N.Vijaya Sai, K. Prakash Babu, "An Integrated approach using VIKOR and ENTROPY methods for a Supplier selection problem", International Journal of Innovations in Engineering and Technology, Volume 8, issue 3, June 2017, ISSN: 2319 1058, PP 1-9.
- 24. K. Prakash Babu, M. Bala Chennaiah, A.Jagadeesh, "Determining Optimal Parameters for Surgface Roughness of Cylinder Liners During Honing Process by Taguchi Methodology A Case Study", International Journal of Innovations in Engineering and Technology, Volume 8, issue 3, June 2017, ISSN: 2319 1058, PP 78-87.
- 25. K.Srinivasa Rao, M.Rajesh, G.Sreedhra Babu, "Design and Analysis of Alloy Wheels", International Research journal of Engineering and Technology, volume 4, issue 6, june 2017, ISSN 2395-0056, PP 2036-2042.

- 26. K.Siva Prasad, K.S.V.K. Sainath, B.Vijay Kumar "Investigation of Material Removal Rate on Mild Steel- using Taguchi Technique", International Journal of Engineering Technology Science and Research, Volume 4, issue 5, May 2017, issn: 2394-3386, PP 316-323.
- 27. G.Jamuna Rani, Hanumantha Rao. Y.V., Balakrishna. B, "Investigation of Performance and Emission Characteristics of VCR engine Fuelled with Mahua Bio diesel Blends Using Nanoparticles", Research Journal of Pharmaceutical, Biological and Chemical Sciences, volume 8, issue 3, May-June 2017, ISSN: 0975-8585, PP 51-59.
- 28. V.Uma Sai Vara Prasad, Ch.Karthik Sai, M.Balaji, "Geometric parameters optimization & Analysis of packing robot arm using ANSYS", International Journal of Advanced Rsearch in Basic Engineering Sciences and Technology, Volume 3, Special Issue 30, March 2017, ISSN: 2456-5717, PP 1-6.
- 29. A.Sreenivasulu, N. Venkata Chalapathi, G.Prasanthi, "Simulation Modelling and analysis for improvement of performance measures in a FMS" IOSR Journal of Mechanical and Civil engineering, Volume 14, issue 2, ver3, (Mar-Apr) 2017, ISSN: 2320-334X, PP 45-51
- 30. M.Balaji, B.S.N.Murthy, N.Mohan Rao, "Optimization of cutting parameters in drilling of Ti-6Al-4V Alloy Using Taguchi and ANOVA", Journal of Advances in Mechanical Engineering and science, Vol2(4), ISSN NO:2455-0957, August 2016, pp1-10.
- 31. N.Sucharitha, V.Dhana Raju, K.Srinivas, "Effect of Sunflower Biodiesel Blended Fuels with Ignition improver on Engine Performance and emission Characteristics of a Diesel", International Journal of Engineering Science and Computing, vol 6, issue 8 August 2016, pp 2596-2601.
- 32. T.Hari Krishna, VijayaSai.N, P.S.Srinivas, M.AshokChakravarthy, "Performance Evaluation of Container Terminals in Fuzzy Environment: A Case Study", International Journal of Management &Business Studies, Vol 6, issue 3, July-sep 2016.pp26-31.Issn Number: 2231 2463.
- 33. T.Haririshna, N.Vijaya Sai, "Evaluation of performance o Indian banks by using CAMEL and GRA Teniques", Iranian Journal of optimization, Volume 8,issue 1, winter 06, pp 925-936.ISSN NO: 2008-5427

- 34. T.Haririshna, N.Vijaya Sai, "A DEA-Topsis approach to analyse the financial efficiency of Indian public sector bank", Iranian Journal of optimization, Volume 8,issue 1, winter 06, pp 937-949. ISSN NO: 2008-5427
- 35. P.Satheesh Kumar Reddy, Ch. Nagaraju, M.Ashok Chakravarthy, "Structural Size Optimization of Ten Bar Truss Using Finite Element Analysis For Minimum Weight and Maximum Stiffness", International Journal of Research inn Mechanical Engineering & Technology, Vol 6, issue 2, May- Oct 2016.PP 94-98.ISSN: 2249-5762.

#### **International Conferences:**

- G.Dilli Babu, S.P. Kumar Gudapati, A.V. Ratna Prasad and Sivaji Babu, "
  Mechanical and Thermal Properties of Esculentus Cyperus Fiber Reinforced
  Polypropylene composites", International Conference on Advancements in
  Aeromechanical Materials for Manufacturing, during July 7<sup>th</sup> -9<sup>th</sup> 2016, Organized by
  MLR institute of Technology, Hyderabad, PP 35-41.
- 2. G.Jamuna Rani, Y.V.Hanuantha Rao, B.Bala Krishna, V.V.PrathibhaBharathi, "Performance and Emission Characteristics of a VCR Engine Fuelled with Rice Bran oil-diesel Blends", International Conference of Future Technologies in Mechanical Engineering, (ICFTME), during 17<sup>th</sup>-20<sup>th</sup> November 2016, organized by the department of Mechanical Engineering, Malla Reddy College of Engineering, Hyderabad, A.P., ISBN 978-93-85101-24-3.PP 222-227.
- 3. V.V.VenuMadhav,A.V.S.S.K.S.Gupta, V.Balakrishna Murthy, "Modelling of Angle-ply laminates for Thermo-elastic Fracture Behaviour", International Conference on Advances in Materials and Manufacturing (ICAMM-2016), during 8<sup>th</sup>-10<sup>th</sup> December, 2016, jointly organized by Department of Mechanical Engineering, University college of Engineering, Osmania University, Hyderabad and Defense Research & Development Laboratory (DRDL), DRDO, Ministry of Defense, Govt.of India, Hyderabad, A.P, e-ISBN :978-93-86256-19-5. pp 25-28.
- 4. DilliBabu, S.P.KumarGudapati, K.SivajiBabu, A.V.RatnaParasad, "Mechanical and Thermal Properties of AbelmoschusEsculentus Fiber Reinforced Polypropylene Composites", International Conference on Advances in Materials and Manufacturing (ICAMM-2016), during 8<sup>th</sup>-10<sup>th</sup> December, 2016, jointly organized by Department of

- Mechanical Engineering, University college of Engineering, Osmania University, Hyderabad and Defense Research & Development Laboratory (DRDL), DRDO, Ministry of Defense, Govt.of India, Hyderabad, A.P., e-ISBN :978-93-86256-19-5, pp 364-368.
- 5. V.V.VenuMadhav, K.Sairam, Ch.Ganesh, VenkatakiranKumar.R, "Analysis of embedded Elliptical interface delamination in flat plate composite laminates", 5<sup>th</sup> International conference on Recent Advances in Composite Materials, from 6<sup>th</sup> to 8<sup>th</sup>Febraury, 2017, organized by KLUniversity, Guntur, Ap.
- 6. VenkatakiranKumar.R, K.Sasidhar, A.S.L.Dinesh, M.Pavan Kumar, "Thermo-Elastic Analysis of Embedded Elliptical Delamination in Composite Cylindrical Laminates", 5<sup>th</sup> International conference on Recent Advances in Composite Materials, from 6<sup>th</sup> to 8<sup>th</sup>Febraury, 2017, organized by KLUniversity, Guntur, Ap.
- 7. G.Jamuna Rani, Y.V.Hanuantha Rao, B.Bala Krishna, "Performance and Emission Characteristics of VCR Engine Fueled with Mahua Biodiesel Blends Using Nano Particles," 2<sup>nd</sup> International Conference on Recent Advances in Chemical Environment and Energy Engineering (RACEE 2017) during 23<sup>rd</sup>- 24<sup>th</sup> February 2017, held at SSN Engineering college, Chennai, Tamilnadu. PP 27
- 8. V.Bapi Raju, "Optimization of price, Cycle time & production rate in a two level supply chain management in a competitive & Cooperative environment", International conference on Mechanical engineering: Enabling sustaiment (ISME-2017) during February 23<sup>rd</sup>-25<sup>th</sup>, 2017 at NIT Warangal, India.
- M.BalaChennaiah, Dr. P.Nanda Kumar, Dr.K. Prahlada Rao "Effect of grain size on Hardness of IS2062 MIG weldment before and after heat treatment process", International conference on Mechanical engineering: Enabling sustainable development (ISME-2017) during February 23<sup>rd</sup>-25<sup>th</sup>, 2017 at NIT Warangal, India.
- 10. A.Mallikarjuna Rao, K.Ramji, B.S.K. Sundara Siva Rao, "Experimental Investigation on Navigation of Mobile Robot Using Ant colony Optimization",1<sup>st</sup> International Conference on smart Computing & Informatics (SCI -2017), organized by ANITS, Vizag, during 3<sup>rd</sup>-4<sup>th</sup> March 2017, PP 89.
- 11. B.SreenivasaRao, Dr.G.Samba Siva Rao, Dr.J.SureshKumar, "Prediction of Failure mode of Thin FRP Laminate under thermal loading", International Conference on Materials, Manufacturing and modelling (ICMMM-2017) held during March 9<sup>th</sup>-11<sup>th</sup>, 2017, at VIT-University, Vellore.

- 12. G. V.N.B. Prabhakar, N.Ravi Kumar, B.Ratna Sunil, "Metal Matrix Composites of AI5083-Fly ash Produced by Friction Stir Processing", International Conference on Emerging Trends in Materials and Manufacturing Engineering, Organized by NIT , Tiruchirappali, during March 10-12, 2017
- 13. Ramanjaneyulu V, Naga Raju, Ch., Chandra Mohan R., Balakrishna Murthy V., "Analysis of Composite Rocket Motor Case Using Finite Element Method", 7<sup>th</sup> International Conference on Materials Processing and Characterization (ICMPC-2017), Organized by Department of Mechanical Engineering, Gokaruju Rangaraju Institute of Technology, Hyderabad during 17-19 March 2017, pp. 118.
- 14. V.V.VenuMadhav, A.V.S.S.K.S. Gupta and V.Bala Krishna Murthy, "Thermo-Elastic Fracture analysis of Angle-ply Laminates", 7<sup>th</sup> International conference on Materials processing and Characterization(ICMPC-2017), during 17<sup>th</sup>-19<sup>th</sup> March 2017, GRIET, Hyderabad, Telangana, in collaboration with MANIT, Bhopal, M.P., pp 136.
- 15. G.Jamuna Rani, Y.V.Hanuantha Rao, B.Bala Krishna, "Effect of Alumina and Zinc oxide nano additives on the performance and emissions characteristics of CI engine", International Conference on Nanotechnology Applications: Chemical, Energy and Environment(NACEE-2017) during 22<sup>nd</sup>-23<sup>rd</sup> March,2017, organized by Chemical Engineering Department, SVNIT, Surat,ISBN: 978-93-5268-680-3 PP 66
- 16. V.V.VenuMadhav, A.V.S.S.K.S.Gupta, V.Balakrishna Murthy, "Thermomechanical Fracture Studies-A Review", International conference on Contemporary Engineering and Technology (ICCET-2017) during 31<sup>st</sup> March-1<sup>st</sup> April,2017, Organized by PottiSriramuluChalavadiMallikarjuna Rao College Of Engineering and Technology(PSCMR), Vijayawada, A.P., ISBN:978-81-904760-9-6.
- 17. Dr. P.S.Srinivas, B.T.Hari Krishna, Dr. N.Vijaya Sai, "Optimal Strategies in Allocation of Land in Krishna District Considering Major Crops in Agriculture Planning", International conference on Contemporary Engineering and Technology (ICCET-2017) during 31<sup>st</sup> March-1<sup>st</sup> April,2017, Organized by Potti Sriramulu Chalavadi Mallikarjuna Rao College Of Engineering and Technology(PSCMR),Vijayawada, A.P.,ISBN:978-81-904760-9-6.
- 18. Dr. N.Vijaya Sai, B.T.Hari Krishna, Dr.P.S.Srinivas, "Modelling and Optimization of Overall Performance of Indian Public sector Banks- A Case Study", International conference on Contemporary Engineering and Technology (ICCET-2017) during 31<sup>st</sup> March-1<sup>st</sup> April,2017, Organized by Potti Sriramulu Chalavadi Mallikarjuna Rao

- College Of Engineering and Technology(PSCMR), Vijayawada, A.P., ISBN:978-81-904760-9-6.
- 19. B.L.V.S.Gupta, Srinivas Prasad sanka, K.Mallikarjuna Rao, "One dimensional thermodynamic analysis of a Steam Power Plant", International conference on Contemporary Engineering and Technology (ICCET-2017) during 31<sup>st</sup> March-1<sup>st</sup> April,2017, Organized by Potti Sriramulu Chalavadi Mallikarjuna Rao College Of Engineering and Technology(PSCMR),Vijayawada, A.P.,ISBN:978-81-904760-9-6.
- 20. K.siva Prasad, K.S.V.K. Sainath, B.Vijay Kumar "Investigation of Material Removal Rate on Mild Steel- using Taguchi Technique", International Conference on new Frontiers of Engineering, Science, Management and Humanities, at National Institute of Technical Teachers Training & Research, Chandigarh, India, India on 21<sup>st</sup> May 2017.