

Name : **B. V. R. RAVI KUMAR**  
Designation : Professor  
Department : Mechanical Engineering



### **1. Educational/ Technical Qualifications**

- Ph.D in Mechanical Engineering (Joining Process) from Jawaharlal Nehru Technological University, Hyderabad, India (Guide: Dr. J.S. Soni); Work has been carried out in Defence Research Development Laboratory (DRDL) and Defence Metallurgical Research Laboratory (DMRL). Thesis Title: Comparative Study of Welding Characteristics during TIG welding of Aluminum Alloy (65032) and Alloy Steel (15 CDV 6); Awarded in year 2007
- M.Tech. (Design and Production Engineering – Machine Tools) in Mechanical Engineering from National Institute of Technology (NIT), Warangal ; Awarded in 1998.
- A.M.I.E., in Mechanical Engineering from Institution of Engineering ,India, Awarded in 1996.
- Diploma in Mechanical Engineering (DME) , Awarded in 1991
- Intermediate (+2) Education at Government Junior College, Awarded in 1987.
- S.S.C. in Govt. High School awarded in 1985.

### **2. Membership in Professional Societies**

- Indian Welding Society (LM 425)
- Institution of Engineers – IEI (INDIA) – AM/090055/1
- Society for Aerospace Quality and Reliability (LM 125)
- Indian Society for Technical Education (ISTE) (LM62915)

### **3. Teaching, Research, and Consultancy Profile**

#### **3.1 Teaching Interests**

Mechanics of Solids, Engineering Mechanics, Mechanics of Fluids, Hydraulic Machinery, Engineering Graphics, Precision Engineering, Theory of Machines , Design of Cutting Tools.

#### **3.2 Ph.D works guided/ being Guided**

Presently guiding Two Ph.D. students on the topic, “Study of Weld Characteristic using Friction Stir Welding & GTAW area

#### **3.3 B.Tech/ M.Tech/Ph.D. Projects Guided : 11 B.Tech / 06 M.Tech/2 Ph.D. Projects Guided**

#### **3.4 B.Tech./ M.Tech/ Ph.D. Projects being Guided. :**

02 B.Tech/ 01 M.Tech Projects and 02 Ph.D Projects are guiding

#### **3.5 Research Interests**

Joining processes

#### **3.6 Sponsored Research Projects Carried Out : Nil**

#### **3.7 Sponsored Research Projects being Carried Out : 03 projects**

**1. AICTE-RPS Project Worth of Rs. 7.84 Lakhs – On Going Project**

**2. AICTE-RPS Project Worth of Rs. 15.7 Lakhs – Completed and submitted**

**3. DRDO (CARS) Project worth of Rs. 9.91Lakhs - Completed and submitted**

3.8 Consultancy Projects Carried Out : Nil

3.9 Consultancy Projects being Carried Out : Nil

#### 4. Outcome of Research

##### 4.1 M.Tech./ Ph.D. Thesis

Ph.D. Thesis: “Comparative study of Weld Characteristics of Alluminum Alloy and Alloy Steel”.

##### 4.2 Papers Published in Reviewed Journals and Conferences

1. K.Vijay Krishna Varma, **B.V.R. Ravi Kumar**, Dr. M.Venkata Ramana , “Experimental Examination of Weld Hardness Profile with Various Tool Pin Probes using Friction Stir Welding of AA 6082-T6 Aluminum Alloy”, published in **International Journal of Recent Technology and Engineering (IJRTE)** ISSN: 2277-3878 **Volume-8 Issue-6, March 2020. Scopus Indexed Journal** Page No.: 3514-3518. (**Impact factor 6.04**)
2. P. Sneha , K.Vijay Krishna Varma, , S.R.Siva Kumar, **Dr. B.V.R. Ravi Kumar**, Dr. M.Venkata Ramana, “Effect of Skewness during Friction Stir Welding of dissimilar Aluminum Alloys AA 5083-H116 and AA 6082-T6 Including Fracture Observations” published in **International Journal of Innovative Technology and Exploring Engineering (IJITEE)** ISSN: 2278-3075, **Volume -9 ; Issue -6 April 2020, Scopus Indexed Journal** pp.1896-1900. (**Impact factor 6.03**)
3. Dr. M.Venkata Ramana, **B.V.R. Ravi Kumar**, M.Krishna, M.Venkateswara Rao & V.S.Kumar, “Optimization and Influence of Process Parameters of Dissimilar SS 304L-SS 430 Joints Produced by Robotic TIG Welding” published in *Materisals Today : Proceedings* 23 (2020) 479-482. Elsevier, 2214-7853.
4. K.Vijay Krishna Varma, **Dr. B.V.R. Ravi Kumar**, “Experimental Investigation of weld defects in friction stir welded joints AA6082-T6 Aluminum alloy by x-Ray radiography” has been accepted and presented in International conference on Advanced Light Weight Materials and Structures (ICALMS 2K20) organized by department of Mechanical Engineering , CMR Technical Campus, Hyderabad , on 6<sup>th</sup>-7<sup>th</sup> March 2020. ISBN : 9788192705125.
5. K.Vijay Krishna Varma, **Dr. B.V.R. Ravi Kumar**, Dr. M.Venkata Ramana,, “Influence of MX Trivex, A-Skew, Three Flat Threaded and Concave Shouldered Mx-Triglute tool pin profiles on tensile properties and fractural behavior of AA 6082-T6 weldments during Friction stir welding” published in *International Journal of Innovative Technology and Exploring Engineering (IJITEE)* ISSN: **2278-3075**, Volume-9, Issue 4, February 2020. pp. 1376-1384 (**Scopus Indexed Journal, DOI:10.35940/ijitee.B1638.029420 , B Impact factor : 5.54**)
6. **Dr. B.V.R. Ravi Kumar**, A. Sudheer, K.Vijay Krishna Varma, , “Experimental Behaviour of Tensile Properties of AA2014-T6 Aluminum Alloy using FSW and GTAW” has been accepted for publication in *International Journal of Engineering and Advanced Technology (IJEAT)* ISSN: **2249-8958**, Volume-9, Issue 2, December 2019. pp. 1566-1569 (**Scopus Indexed Journal, DOI:10.35940/ijeat.B3807.129219 , B Impact factor : 5.97**)
7. K.Nageswara Rao, **Dr. B.V.R. Ravi Kumar**, Dr. M.T.Naik, , “Experimental Investigation on GTAW of AL 6061-T6 Material with SUS 304” has been accepted for publication in *International Journal of Innovative Technology and Exploring Engineering* Volume-8, July 2019. (**Scopus Indexed Journal, Impact factor : 5.15**)
8. K.Nageswara Rao, Dr. B.V.R. Ravi Kumar, Dr. M.T.Naik, “c ” Published in *International Journal of Advanced Science and Technology (IJAST)*, ISSN : 2207-6360, Vol.126 May 2019, pp. 118-127 (**UGC approved Sr.No. 49016**)
9. Dr. M.Venkata Ramana, **B.V.R. Ravi Kumar**, M.Krishna, M.Venkateswara Rao & V.S.Kumar, “Optimization and Influence of Process Parameters of Dissimilar SS 304L-SS 430 Joints Produced by Robotic TIG Welding” Published in the *Proceedings of*

- International Conference on Recent Advances in Materials, Manufacturing & Energy Systems (ICRAMMES 2019), 3<sup>rd</sup> – 4<sup>th</sup> January 2019**, association with Materials Today Journal of Achievements in Materials and Manufacturing Engineering , International Journal of Engineering and Technology (UAE), Department of Mechanical Engineering V R Siddhartha Engineering College , Vijayawada, A.P.
10. A.Raveendra, **B.V.R. Ravi Kumar**, & S.Sudhakara Reddy, “Microhardness and Mechanical Properties of 5052 Aluminum Alloy Weldments using Pulsed and Non-Pulsed Gas Tungsten Arc Welding” **Published in International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), ISSN : 2249-8001, Volume 8, Issue 6, Dec 2018, pp. 691-698. (Scopus Indexed Journal ) (IMF : 7.6197) UGC Recognized** **DOI** : 10.24247/ijmperddec201871 - [http://www.tjprc.org/view\\_paper.php?id=10795](http://www.tjprc.org/view_paper.php?id=10795)
  11. S.Veerendra Prasad, **B.V.R. Ravi Kumar**, & V.V.Subba Rao, “Optimization of Process parameters in Hard Turing of Aisi 5150 Steel by Anova” **Published in the Proceeding s of International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Vol. 7, Issue – 4 , November 2018, pp. 108-110. (Scopus Indexed )**
  12. S.Veerendra Prasad, **B.V.R. Ravi Kumar**, & V.V.Subba Rao, “Optimization of Process parameters in Hard Turing of Aisi 5150 Steel by Anova” **Published in the Proceeding s of International conference on Research Advancements in Applied Engineering Sciences, Computer and communication Technolgies, (IFERP- ISBN:978-81-937041-9-6), 12<sup>th</sup> & 13<sup>th</sup> July 2018, BVRIT, Narsapur, Medak, Telangana.Pg.69.**
  13. K.Nageswara Rao, **Dr. B.V.R. Ravi Kumar**, **Dr. M.T.Naik**, “Study and Parameter Optimization of Dissimilar Materials using MIG Wleding Process ” **Published in International Journal of Engineering and Technology, ISSN : 2395-1303,Vol.4 Issue 2, Mar-April 2018 2018 , pp. 1081-1085. (IMF: 6.088)**
  14. K.Nageswara Rao, **Dr. B.V.R. Ravi Kumar**, & M.T.Naik “Optimization of Process Parameters during TIG Welding of Si-Mg-Mn Alloy 64430” **Published in International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), ISSN : 2249-8001, Volume 8, Issue 3, June 2018, pp. 659-666. (Scopus Indexed Journal ) UGC Recognized (IMF : 7.6197) - http://www.tjprc.org/view\_paper.php?id=10154, DOI : 10.24247/ijmperddec201871 (IMF : 7.6197)**
  15. K.Nageswara Rao, **Dr. B.V.R. Ravi Kumar**, “Joined field Modelling of Gas Tungsten Arc Welding “ **Published in International Journal of Current Engineering and Scientific Research (IJCESR), ISSN : 2397-0697, Volume 5, Issue 4, 2018, pp. 448-455. (UGC Recognized) (IMF : 3.24)**
  16. Srirangam Adithya Vamshi, M.S.Srinivas Rao, **Dr. B.V.R. Ravi Kumar**, **Dr. M.Manzoor Hussain**, “Experimental Investigation on Influences of tool Rotational speed and pin profile on Friction Stir Welding of AA7075 Aluminum Alloys, **Published in International Journal of Creative Research Thoughts (IJCRT) , ISSN: 2320-2882, Volume 6, Issue 1 March 2018, pp 272-277. (UGC Recognized) (IMF : 5.97)**
  17. K.Nageswara Rao, **Dr. B.V.R. Ravi Kumar**, **Dr. M.T.Naik**, “A Review on Dissimilar Materials Welding Techniques ” **Published in International Journal of Advancement in Engineering Technology, Management and Applied Science , ISSN 2349-3224,Vol.5 Issue 1, January 2018 , pp. 111-123.**
  18. K.Nageswara Rao, **Dr. B.V.R. Ravi Kumar**, **Dr. M.T.Naik**, “A Comparative study of Tensile strength of Dissimilar Materials (SS 202,304,310,316 and Mild Steel) Joined using MIG and TIG Welding Process ” **Published in International Journal of Multidisciplinary Educational Research (IJMER) ISSN 2277-7881,Vol.6 Issue 7, July 2017 , pp. 95-109.(IMF: 6.014)**
  19. M.S.Srinivas Rao, **Dr. B.V.R. Ravi Kumar**, **Dr. M.Manzoor Hussain**, “Friction Stir Welding : Process and Its Variables – A Review ” **Published in 9<sup>th</sup> International Conference on Recent Innovations in Science, Engineering and Management (RISEM-17), organized by**

- Dhruva Institute of Engineering and Technology, Nalgonda, Telangana. ISSN: 978-93-86171-22-1, 28<sup>th</sup> – 29<sup>th</sup> January 2017, pp118-126.**
20. M.S.Srinivas Rao, **Dr. B.V.R. Ravi Kumar**, Dr. M.Manzoor Hussain, “Effect of Process parameters on Metallurgical and Mechanical Properties of Friction Stir Welded AluminumAlloys ” **Published in International Journal of Theoretical Applied Mechanics, ISSN No.:0973-6085, Volume No. 12, Number 3 (2017),Research India Publications PP. 473-484. (Impact Factor : 2.38)**
  21. M.S.Srinivas Rao, **Dr. B.V.R. Ravi Kumar**, Dr. M.Manzoor Hussain, “Experimental study on the effect of welding parameters and tool pin profiles on the IS: 65032 Aluminum Alloy FSW Joints” **Published in 5<sup>th</sup> International Conference of Materials Processing and Characterization (ICMPC-2016) by Elsevier –Proceedings Vol. 4 , 2017 – pp 1394-1404.**
  22. Nanupatruni Ravishankar, **Dr. B.V.R. Ravi Kumar**, “Modeling and Exploration of a 2-Wheeler Automotive Brake Disc” **published in International Journal & Magazine of Engineering , Technology, Management and Research, ISSN No.:2348-4845, Volume No. 3(2016), Issue No.11November 2016, PP 206-214.**
  23. Surada Sanyasi Rao, **Dr. B.V.R. Ravi Kumar**, “Thermal and Structural Analysis of CI Engine Piston for Different Open Type Combustion Chambers with Composite Materials Using CATIA & ANSYS Tools” **published in International Journal & Magazine of Engineering , Technology, Management and Research, ISSN No.:2348-4845, Volume No. 3(2016), Issue No.11November 2016, PP 182-187.**
  24. M.S.Srinivas Rao, **Dr. B.V.R. Ravi Kumar**, Dr. M.Manzoor Hussain, “Optimiation of Process Parameters of Friction Stir Welded Aluminum Alloys for Maximum Tensile Strength” **published in International IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE), e-ISSN: 2278-1684,p-ISSN: 2320-334X, Volume 13, Issue 3 Ver. VII (May-Jun. 2016), PP 01-06. (Impact Factor : 3.781) (UGC approved )**
  25. **Venkateswara Rao R and Ravi Kumar BVR**, “Design and Deposition of Hard Thin coatings on Soft Substrates – A Review” published in Journal of Manufacturing Engineering, ISSN: 0973-6867 , September 2015,Vol.10, Issue 3, pp.126-129.
  26. **A. Raveendra, M. Satish Sagar Dr. B.V.R. Ravi Kumar**, “Effect of Pulsed Current on TIG Weldments of Aluminium Alloy (5052)and Alloy Steel (EN 24)” **published in International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET) ISSN : 2319-8753, Volume : 4 , Issue 5, May 2015, 3095-3101. (IP : 1.672)**
  27. **B.L.N.Krishna Sai, Dr. B.V.R. Ravi Kumar**, “Influences of Tool Pin Profiles and Welding parameters on Mechanical Properties and Joint Efficiency of AA5083 and AA6082 Joints produced by Friction Stir Welding” accepted for presentation and published in the proceedings of International Conference on Emerging Trends in Engineering and Technology (IFERP) ISBN :9788192958050 , 12<sup>th</sup> **April 2015** Organized by Insti1397-1404tute for Engineering Research and Publication, Hyderabad. pp. 1-5.
  28. **B.L.N.Krishna Sai, B.V.R. Ravi Kumar**, “A review of Friction Stir Welding of Dissimilar AA5083 and AA6082 Aluminum Alloy” accepted for presentation and published in the proceedings of National Conference on Fast Emerging Trends in Engineering and Technology (NCOFEET-2K15) , 25<sup>th</sup> & 26<sup>th</sup> **March 2015** Organized by Bharat Institute of Engineering and Technology, Hyderabad. pp. 180-185.
  29. **K.Ramu, R.Venkateswara Rao, Dr. B.V.R. Ravi Kumar**, “Experimental Observations and Microstructure study on AA6061 by FSW process with different tool Profiles” accepted for presentation and published in the proceedings of International Conference on Advances in Production and Industrial Engineering (INCAPIE 2015) , 20<sup>th</sup> & 21<sup>st</sup> **Feb 2015** Organized by Department of Production Engineering, National Institute of Technology (NIT), Tiruchirappalli , India. pp.397-400.
  30. **R.Venkateswara Rao, Dr. B.V.R. Ravi Kumar**, “Design and Deposition of Hard Thin coatings on Soft Substrates – A Review” accepted for presentation and published in the proceedings of two day seminar on **Advances in Industrial Tribology (AINT’15), 11 & 12**

- Feb 2015** Organized by Centre for Manufacturing Sciences , Department of Mechanical Engineering, National Engineering college, K.R.Nagar, Kovilpatti, Tamilnadu, India.
31. **A. Raveendra, Dr. B.V.R. Ravi Kumar**, “Microscopic study of EN24 Alloy Steel weldments using pulsed and non-pulsed current Gas Tungsten Arc Welding” accepted for presentation and **published in the proceedings of International conference on Emerging Technologies in Mechanical Sciences ICEMS-14** Organized by MRITS , Hyderabad, ISBN 978-93-83038-28-2: 2<sup>6th</sup> -27<sup>th</sup> , December 2014, pp.192-198..
  32. **Dr. B.V.R. Ravi Kumar**, M.Srivatsva, “Experimental study of Mechanical Properties of 5083 Aluminum Alloy using Gas tungsten Arc Welding ” accepted for presentation and **published in the proceedings of International conference on Advanced Materials an Manufacturing Technologies (AMMT)** Organized by JNTUH college of Engineering Hyderabad and sponsored by UGC and TEQIP-II, ISBN 978-93-82163-46-6:18<sup>th</sup> -20<sup>th</sup> , December 2014, pp.95-103.
  33. **A. Raveendra, Dr. B.V.R. Ravi Kumar**, “Micro-Hardness and Mechanical Properties of 5052 Aluminum Alloy Weldments using pulsed and Non-pulsed Current Gas Tungsten Arc Welding, accepted for presentation and **published in the proceedings of International conference on Advanced Materials an Manufacturing Technologies (AMMT)** Organized by JNTUH college of Engineering Hyderabad and sponsored by UGC and TEQIP-II, ISBN 978-93-82163-46-6:18<sup>th</sup> -20<sup>th</sup> , December 2014, pp.104-112.
  34. **Dr. B.V.R. Ravi Kumar**,B.L.N, Krishna Sai, S. Rajasekhar, “Evaluation of Mechanical AA 6082-T6 Aluminum Alloy using pulse & Non-pulse Current GTAW Process ” **published in International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)** ISSN : 2319-8753, Volume : 3 , Issue 12, December 2014, 18139-18146. (IP : 1.672)
  35. **Dr. B.V.R. Ravi Kumar** ,K.Swathi, B.L.N, Krishna Sai “Mechanical and Micro structural Characterization of Al5083 and Al6082 butt Joints made by GTAW ” **published in International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)** ISSN : 2319-8753, Volume : 3 , Issue 12, December 2014, 18023-18030. (IP : 1.672)
  36. **Dr. B.V.R. Ravi Kumar** and V. Harshitha, “Experimental Investigation into the effect of Gas Tungsten Arc Welding on Ti-6Al-4V ” **published in the proceedings of International Conference on Mechatronics and Mechanical Engineering (ICMME 2014)** ISBN : 978-81-930280-2-5, 30<sup>th</sup> November 2014, Warangal , organized by Technical Research Organization India . pp 15-20.
  37. **Dr. B.V.R. Ravi Kumar**, M.Srivatsva, “Experimental Investigation of effect of filler wires and current on properties of 5083 Aluminium alloy using Gas Tungsten Arc Welding” accepted for presentation and **published in the proceedings of International Welding Symposium 2014 – IWSK14**, Organized by Indian Welding Society , at Bombay convention & Exhibition Centre, Mumbai, India : 28<sup>th</sup> -30<sup>th</sup> , December 2014, pp.217-225.
  38. B. Tulasirama Rao, K. Srivinivs, P. Ramireddy, A. Raveendra, **Dr. B.V.R. Ravi Kumar**, “Finding Cutting Focres while turning operation on lathe machine at different depth of cut of different metals ” **published in International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)** ISSN : 2319-8753, Volume : 3 , Issue 10, October 2014, 16866-16872. (IP : 1.672)
  39. A.Raveendra and **Dr. B.V.R. Ravi Kumar**, “Micro-Hardness and Mechanical Properties of EN24 Alloy Steel Weldments using Pulsed and Non-pulsed Current Gas Tungsten Arc Welding” **published in International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)** ISSN : 2319-8753, Volume : 3 , Issue 10, October 2014, 16588-16593. (IP : 1.672)
  40. B. Tulasirama Rao, K. Srivinivs, P. Ramireddy, A. Raveendra, **Dr. B.V.R. Ravi Kumar**, “Measuring cutting forces while cutting of different metals with different speeds” **published in International Journal of Application or Innovation in Engineering & Management**

- (**IJAIEM**) ISSN : 2319-4847, Volume : 3 , Issue 09, September 2014, 163-169. (IMF:2.379) (**Indexing Thomas Reuters**)
41. A. Raveendra, **Dr. B.V.R. Ravi Kumar**, Dr. A. Siva kumar, and V. Pruthivi Kumar Reddy “Influence of welding parameters on weld characteristics of 5052 Aluminum Alloy sheet using TIG Welding ” **published in International Journal of Application or Innovation in Engineering & Management (IJAIEM)** ISSN : 2319-4847, Volume : 3 , Issue 3, March 2014, 186-190. (IP : 2.379) (**indexing Thomas Reuters**)
  42. A. Raveendra, **Dr. B.V.R. Ravi Kumar**, Dr. A. Siva kumar, N. Santosh “Effect of welding parameters on 5052 Aluminum Alloy weldments using TIG Welding ” **published in International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)** ISSN : 2319-8753, Volume : 3 , Issue 3, March 2014, 10302-10309. (IP : 1.672)
  43. **Dr. B.V.R. Ravi Kumar**, “A Review on Importance of Microalloying in Steel ” **published in International Journal of Mechanical Engineering & Technology (IJMET)**, ISSN : 0976-6340, Volume : 5 , Issue 2, February 2014. (IP: 3.8731) (**Scopus Index Journal**)
  44. A.Raveendra and **Dr. B.V.R. Ravi Kumar**, “Effect of Pulsed Current on Welding Characteristics of EN24 Alloy Steel using Gas Tungsten Arc Welding” **published in International Journal of Advances in Science and Technology (IJAST)**, ISSN : 2229-5216, Volume : 8 , Issue 1, January 2014, 28-37. (IP: 1.41)
  45. S. Veerendra Prasad and **Dr. B.V.R. Ravi Kumar**, “Optimization of Process Parameters in Friction Stir Welding of AA 6082-T6 Aluminum Alloy” **published in International Journal of Advanced Scientific and Technological Research (IJAST)**, ISSN : 2249-9954, Volume : 6 , Issue 3, Nov-Dec, 2013, 818-831. (IP:2.94)
  46. **Dr. B.V.R. Ravi Kumar**, “A Review on Steels for Aeronautical Applications” **published in International Journal of Advanced Scientific and Technological Research (IJAST)**, ISSN : 2249-9954, Volume : 6 , Issue 3, Nov-Dec, 2013, 583-590. (IP:2.94)
  47. A.Raveendra and **Dr. B.V.R. Ravi Kumar**, “Experimental Investigations on Welding Characteristics of Similar Metal Weldments and Dissimilar Metal Weldments, using Gas Tungsten Arc Welding , **published in National Conference on “Role of Civil & Mechanical Engineer in Development of Society (RCMS 2K13)” Under TEQIP – II, held on 2<sup>0th</sup> & 2<sup>1st</sup> September 2013, pp 1-8.**
  48. B. Tulasirama Rao, K. Sriviniwas, P. Ramireddy, A. Raveendra, **Dr. B.V.R. Ravi Kumar**, “Experimental Study on the Effect of cutting parameters on surface finish obtained in CNC Turning Operation ” **published in International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)** ISSN : 2319-8753, Volume : 2 , Issue 9, September 2013, 4547-4555. (IP : 1.672)
  49. A.Raveendra and **Dr. B.V.R. Ravi Kumar**, “Experimental study of Pulsed and Non-pulsed current TIG welding of Aluminum Alloy sheet (6082)” **published in International Journal of Engineering Science and Research (IJESR)** ISSN : 2277-2685, Volume : 3 , Issue 6, June 2013, 4102-4108. (**UGC Recognized**)
  50. A.Raveendra and **Dr. B.V.R. Ravi Kumar**, “Experimental study of Pulsed and Non-pulsed current TIG welding of Stainless Steel sheet (SS304)” **published in International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)** ISSN : 2319-8753, Volume : 2 , Issue 6, June 2013, 2337-2344. (IP: 1.672)
  51. **Dr. B.V.R. Ravi Kumar**, “A Review on Blisk Technology” **published in International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)** ISSN : 2319-8753, Volume : 2 , Issue 5, May 2013, 1353-1358. (IP: 1.672)
  52. A.Raveendra and **Dr. B.V.R. Ravi Kumar**, “Effect of Pulsed Current on welding characteristics of Aluminum Alloy (5052) using Gas Tungsten Arc Welding” **published in International Journal of Science and Research (IJSR)** ISSN : 2319-7064, Vol 2 , May 2013, 82-86.
  53. A.Raveendra and **Dr. B.V.R. Ravi Kumar**, “Effect of Pulsed Current on welding characteristics of EN19 Alloy Steel Using Gas Tungsten Arc Welding” **published in**

- International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET) ISSN : 2319-8753, Volume : 2 , Issue 5, Mar 2013, 1359-1367. (IP: 1.672)**
54. M.S. Srinivas Rao, Kode Jaya Prakash, **Dr. B.V.R. Ravi Kumar**, “A Review of Friction Stir Welding Process and its Variables” **published in International Journal of Science and Research (IJSR) ISSN : 2319-7064, Volume : 2 , Mar 2013, 375-379 (3.358)**
  55. B. Tulasirama Rao, K. Sriviniivs, P. Ramireddy, A. Raveendra, **Dr. B.V.R. Ravi Kumar**, “Effect of Processing Parameters on Surface finish of the Components Processed by CNC Turning Machine” **published in International Journal of Mechanical Engineering applications Research (IJMEAR) ISSN : 2249-6564, Volume : 4 , Issue :01 Jan-Mar 2013, 224-228**
  56. A. Raveendra, **Dr. B.V.R. Ravi Kumar**, “Comparative Study on Welding Characteristics of EN8 & EN31 Alloy Steel Weldments, using Gas Turbine Arc Welding” is accepted for presentation and publication in **International conference on Advancements in Engineering and Management (RITS ICAME – 2013)27 & 28<sup>th</sup> February 2013**
  57. B. Tulasirama Rao, K. Sriviniivs, P. Ramireddy, A. Raveendra, **Dr. B.V.R. Ravi Kumar**,”Characterisitcs of Force Feed on Stability in various Turning Process”, is accepted for presentation and publication in **International conference on Advancements in Engineering and Management (RITS ICAME – 2013)27 & 28<sup>th</sup> February 2013**
  58. M.S.Srinivas Rao, **Dr. B.V.R. Ravi Kumar**, Dr. M.Manzoor Hussain, “Experimental study of welding characteristics during Friction Stir Welding (FSW) of Aluminum Alloy (AA6061-T6) **published in International Journal of Research in Engineering and Technology (IJRET), ISSN: 2319-1163, Volume : 1 , Issue :3 Nov 2012 , pp. 469-473 (Impact Factor :1.962)**
  59. A. Raveendra, **Dr. B.V.R. Ravi Kumar**, “Experimental Investigation on welding characteristics of Aluminum Alloy (6082) weldments using pulsed and non-pulsed current GTAW is accepted for presentation and publication in **International conference on Materials Processing and Characterization (ICMPC) , GRIET, Hyderabad, March 8-10, 2012**
  60. A. Raveendra, **Dr. B.V.R. Ravi Kumar**, “Experimental Investigation on welding characteristics of stainless steel weldments using pulsed and non-pulsed current GTAW is accepted for presentation and publication in **International conference on Advancements in Engineering and Management (RITS ICAME – 2012)28 & 29<sup>th</sup> February 2012**
  61. A. Raveendra, **Dr. B.V.R. Ravi Kumar**, “Welding Characteristics of Aluminum Alloy (6082) and Stainless Steel (304) weldments using Pulsed and Non-pulsed current GTAW” is accepted for publication in **International Journal of Mechanical Engineering Applications Research**, July 2011, Vol. 02, Issue 03, August 2011, pp 1-16.
  62. A. Raveendra and **Dr. B.V.R. Ravi Kumar**, “Optimizing pulsed current TIG Welding Parameters to refine the fusion Zone” is accepted for presentation and publication in proceedings of **International Conference of Convergence of Science and Engineering in Education and Research – A Global Perspective in the new Millennium- ICSE 2010**, organized by the DSI Campus , Bangalore , held on 21<sup>st</sup>, 22<sup>nd</sup>, & 23<sup>rd</sup> April 2010.
  63. A. Raveendra and **Dr. B.V.R. Ravi Kumar**, “Comparison of Welding Characteristics between TIG & MIG Weldments,” Published in Proceedings of **National Conference on Excellence in New Technologies in Mechanical Engineering (ENTIME), 12<sup>th</sup> -13<sup>th</sup> December , 2009.**
  64. A. Raveendra and **Dr. B.V.R. Ravi Kumar**, “Mechanical Properties of Gas Metal Arc Weldments,” Published in Proceedings of **National Conference on Aerospace Engineering (NCAE-09), MRCET, 04<sup>th</sup> -05<sup>th</sup> December , 2009.**
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66. **Dr. B.V.R. Ravi Kumar** and Dr. J.S. Soni, “ *Microstructure and Properties of Welded 15 CDV 6 Alloy Steel*” published in **The Icfai Journal of Science and Technology, June 2009, Vol. 5, No.2. PP.7-25**
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  69. **B.V.R. Ravi Kumar** and Dr. J.S. Soni, “*Microstructure and Properties of Welded 65032 Aluminum Alloy*” **Journal of Indian Welding Society, Weld 5, Bead 3, March 2008, pp. 37 – 50. Regd No. 41817/2002**
  70. **B.V.R. Ravi Kumar** and Dr. J.S. Soni, “*Micro – Hardness and Properties of Welded 65032 Aluminum Alloy*”, Published in the proceedings of **International Conference on Advances in Manufacturing & Technology Management (ICAMTM – 2007)**, organized by Department of Mechanical Engineering , Parshvanath College of Engineering, Thane (W), Mumbai , association with University of Mumbai, held on 18<sup>th</sup> – 20<sup>th</sup> January 2007, **pp.298 – 305.**
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  73. **B.V.R. Ravi Kumar** and Dr. J.S. Soni, “*Study of Welding Characteristics of 15 CDV 6 Alloy Steel Weldments using Pulsed and Non – Pulsed Current GTAW*”, Published in the proceedings of **International Conference on Quality and Reliability in Aerospace Systems (CONQUEST – 2006)**, organized by Research Center Imarat (RCI), Hyderabad, held on 15<sup>th</sup> – 17<sup>th</sup> January 2006, **pp. 239 – 253.**
  74. **B.V.R. Ravi Kumar** and Dr. J.S. Soni, “*Microstructure Study of Weldments of 15 CDV6 Alloy Steel using Pulsed and Non – Pulsed Current GTAW*”, **Journal of Indian Welding Society, Weld 3, Bead 2, March 2006, pp. 33 – 40. Regd No. 41817/2002**
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  76. **B.V.R. Ravi Kumar** , “*Static and Dynamic Analysis of Linear Positioner Structure Using Finite Element Analysis*”, Published in the proceedings of **International conference on Global Manufacturing and Innovation (GMI – 2006)**, organized by Coimbatore Institute of Technology jointly with University of Massachusetts – Dartmouth, USA, held on 27<sup>th</sup> – 29<sup>th</sup> July 2006, **pp. 1 – 9.**

77. **B.V.R. Ravi Kumar** and Dr. J.S. Soni, “*Micro-Hardness and Properties of Welded 15 CDV 6 Alloy Steel* ” Published in the proceedings of **International Conference on Recent Advantages in Manufacturing Process (RAMP – 2006)**, organized by Department of Metallurgical Engineering, PSG College of Technology in collaboration with the Indian Institute of Metals, Coimbatore chapter, held on 15<sup>th</sup> – 16<sup>th</sup> December 2006.
78. **B.V.R. Ravi Kumar** and Dr. J.S. Soni, “*Effect of Pulsed Current GTAW on Porosity and Cracks in 65032 Aluminum Alloy Weldments*”, Published in the proceedings of **National Conference on Technological Advancements in Mechanical Engineering (TAME – 2005)**, organized by Department of Mechanical Engineering, Sreenidhi Institute of Science and Technology, Hyderabad, held on 2<sup>nd</sup> – 3<sup>rd</sup> December 2005, **pp. 20 – 27.**
79. **B.V.R. Ravi Kumar** and Dr. J.S. Soni, “*Experimental study of Welding Characteristics of 65032 Aluminum Alloy Weldments using Pulsed and Non – Pulsed Current GTAW*”, Published in the proceedings of **International Conference on Advances in Materials, Product Design & Manufacturing System (ICMPM – 2005)**, organized by Department of Mechanical Engineering, Bannari Amman Institute of Technology, Sathyamangalam, held on 12<sup>th</sup> – 14<sup>th</sup> December 2005, **pp. 492-500.**
80. **B.V.R. Ravi Kumar** and Dr. J.S. Soni, “*Experimental Study of Welding Characteristics of 15 CDV 6 Alloy Steel Weldments*”, Published in the proceedings of **National Conference on Advances in Joining Processes (NCAJP)**, organized by Department of Mechanical Engineering, Vasavi College of Engineering, Hyderabad, held in January 2004.
81. **B.V.R. Ravi Kumar**, “*Static Analysis of Linear Positioner Structure (LPS) using Finite Element Analysis*”, Published in the proceedings of National Seminar on “**Recent Advances in Mechanical Engineering (RAME-2004)**”, organized by Mechanical Engineering Department, K.K. Wagh College of Engineering, Nashik, held on 16<sup>th</sup> – 17<sup>th</sup> January 2004.

#### 4.3 Summary of Technical Contribution

- Study the Mechanical Properties of the Weldments of the new material of Alloy Steel and Aluminum Alloy. First person to investigate this properties.
- Study the Microstructure and Micro-hardness properties of the weldments of this new material.
- Present this Alloy steel material is used in Aerospace applications

### 5. Work Experience and Training Activities

#### 5.1 Professional Experience

- Working as Professor in Department of Mechanical Engineering , at VNR Vignana Jyothi Institute of Engineering & Technology, Bachupally, Nizampet , Hyderabad – 500 090.
- Worked as a Principal at N S Raju Institute of Technology (NSRIT), Sontyam, Visakhapatnam, during 23<sup>rd</sup> April 2015 to 20<sup>th</sup> December 2017.
- Worked as Professor in Department of Mechanical Engineering , during 1<sup>st</sup> January 2009 to 22<sup>nd</sup> April 2015 in Department of Mechanical Engineering at VNR Vignana

Jyothi Institute of Engineering & Technology, Bachupally, Nizampet , Hyderabad – 500 090.

- Worked as Professor in Department of Mechanical Engineering , during 19<sup>th</sup> June 2008 to 31<sup>st</sup> December 2008 in Department of Mechanical Engineering at Malla Reddy Engineering College, Maisammaguda, Dulapally, Secunderabad – 14.
- Worked as Associate Professor (1<sup>st</sup> July 2004 to 18<sup>th</sup> June 2008), Sr. Assistant Professor (1<sup>st</sup> January 2004 to 30<sup>th</sup> June 2004), Assistant Professor (4<sup>th</sup> December 1998 to 31<sup>st</sup> December 2003) in Department of Mechanical Engineering at Padmasri Dr. B.V. Raju Institute of Technology, Narsapur, Medak Dist.,
- Worked as a Lecturer in Department of Mechanical Engineering at Dr. Paul Raj Engineering College, Bhadrachalam, Khammam Dist.
- Resource Person for Tool Engineering Courses, in Central Institute of Tool Design (CITD), Balanagar, Hyderabad

5.2 Short Term Training Programs Conducted : Nil

5.3 Short Term Training Programs/Workshops/Conferences Attended

- A Three Days Indian Institute of Welding International conference 2014(IIWIC2014) held on 9<sup>th</sup> -11<sup>th</sup> April 2014 , at New Delhi
- A Two Days ISB-Management Development Programme for State Project Advisory – Government of A.P. at Indian School of Business, Hyderabad , on 2-3<sup>rd</sup> September 2013.
- A Two weeks Faculty Development Programme on Entrepreneurship conducted by the department of Mechanical Engineering , VNRVJIET in the month of June 2012
- A Two weeks Auto-CAD Training Programme conducted by the department of Mechanical Engineering , VNRVJIET in the month of April 2011.
- A Two Days training programme on “Modelling with Stella” conducted by the department of Mechanical Engineering , VNRVJIET , on 2<sup>nd</sup> and 3<sup>rd</sup> of January 2009.
- A Two-Days Workshop on Non-Destructive Testing conducted by the department of Mechanical Engineering, University College of Engineering, Osmania University, Hyderabad, Under TEQIP on 23<sup>rd</sup> and 24<sup>th</sup> of September, 2006.
- A Two-Days National Workshop on Faculty Development, conducted by the St.Stanley College of Engineering and Technology, Muthangi (V), Patancheru, Medak, held on 10<sup>th</sup> and 11<sup>th</sup> February, 2007.
- Faculty Development Programme on Instructional Design & Delivery Systems , National Institute of Technical Teachers Training and Research (NITTTR), Chennai held on 19<sup>th</sup> to 24<sup>th</sup> May 2008.

## **6. Co-curricular and Extra-Curricular Activities**

6.1 Interests and Hobbies.

1. To promote work efficiency and good attitude towards work, in organizations.

6.2 CCA/ECA Organized

- Conducting training to 3 students towards Industry Oriented Mini Project at BHEL R& D.
- Coordinator, B.Tech final year M.E students Technical Seminar Presentations at VNRVJIET

6.3 CCA/ECA Involved : Nil

6.4 Counseling and Mentoring Activity

- Counseling the I year students , how to write the end (University ) examination for getting more marks . And explain about the presentation skills.
- Explain about how to prepare the Power point presentation slides for the IV year students for preparation of their End Projects

#### 6.5 Monitoring Activities (anti-ragging, general discipline)

- Act Vice-Principal for 2<sup>nd</sup> shift Polytechnic college and look after all the Polytechnic course activities
- Conducted class review meetings with student representatives.
- Prepared and submit the Research Proposal to AICTE for external fund on area of Tribology
- Prepared the Project Compendium and Project Arcade in year 2009-10.

#### 6.6 Member in committee

- Member in Board of Studies
- Member in Institute Academic Committee
- Member in M.Tech Project review Committee
- Member in UG Project Review Committee
- Member in Department Development Committee
- Department Research Committee
- Coordinator for DST-FIST

### **7. Laboratory Participation & Student Project Guidance**

#### 7.1 Involvement in Laboratories

1. Cross-Domain Laboratories Nil
- Domain Laboratories

To involve in activities of Thermal Engineering Laboratory.

3. Academic Laboratories

To involve in Fluid Mechanics and Hydraulic Machinery for Lab. class work and student projects. And

also involve in Metallurgy Lab for the Ph. D. work

#### 7.2 Areas of Guidance

1. Supporting students to learn by practice:  
Theoretical Explanation should be given to the students in their project work and its industrial application.
2. Guiding B.Tech. Projects and M.Tech./Ph.D. Theses:  
Research projects represent the current needs of industry and hence are given priority in allocating projects to students. A specific project will be allotted, in thorough consultation with students. As project work should meet standards of the University, special attention is paid towards choosing suitable projects.
3. Projects that can be pursued in various domains:  
*Overall Research Objectives:*
  - To train the students with engineering problems and state-of-the-art technology through summer/ special/ final projects at UG, PG and Doctoral level.
  - To create intellectual resources.
  - To contribute to institutional and professional improvement.
  - To enhance engineering & research perspective among students.



Dr B.V.R. Ravi Kumar with Ph.D. Students  
Mr. A. Raveendra (2009 batch) and Mr. M.S. Srinivasa Rao (2010 batch)  
both the students got Ph.D. degree from JNTUH, Hyderabad.



Dr. B.V.R.Ravi Kumar presented the Progress Review of DRDO Project on 10-07-2014. Dr. G.Madhusudhan Reddy, Sc-G-DMRL, Hyd., Dr.V.V.Rao , Sc-G-ASL, Hyd., Dr. A.Subhananda Rao, Dean R & D-VNRVJIET and Prof. P. Raja Rao-Professor& Head of Mechanical Engineering VNRVJIET were attended



Show & Tell activity of Mr. M.Srivastava-2011 batch M.Tech Student his M.Tech Project at Panda Punnaiah Square on 08-07-2014



Dr B.V.R.Ravi Kumar With Dr. Hee Jin Kim, Director , Reliability Assesment Centre for Metallic Materials/Advanced Welding & Joining R & D Group, Korea Institute of Industrial Technology, South Korea, on 9<sup>th</sup> – 11<sup>th</sup> April 2014 in IIWIC14 at New Delhi



Dr B.V.R.Ravi Kumar With Dr R.S Parmar, Professor and Guest faculty IIT, Delhi, New Delhi in IIWIC2014 held on 9<sup>th</sup> -11<sup>th</sup> April at New Delhi

## 8. Administrative Experience :

- 8.1 As a Principal have an experience to handle with personnel/council the Students / liaison the officials of University and other departments.
- 8.2 Prepared the Strategic plan for 10 years 2015-25 of the NSRIT and submitted to the Management for implementation.
- 8.3 Prepared documents and Participated in 3 JNTUK – FFC visits for Affiliation to the NSRIT
- 8.4 Prepared the application and submitted to UGC for recognition under 2(f) status
- 8.5 Prepared the documents and attended the AFRC meeting for Tuition fee hike in NSRIT to 50,200/- from academic year 2016-17.
- 8.6 Prepared the NAAC- SSR and involved the NAAC peer team visit held on 03-05<sup>th</sup> August 2017.



Dr B.V.R.Ravi Kumar received the NAAC peer team Report from Dr. Vasant M. Chavan, Chairman NAAC team on Exit meeting held on 05-08-2017 - NSRIT

## 9. Personal Details

- 9.1 Motto : Work is Worship – Success no Excuses – set a positive attitude and focuses the class on learning and Discipline objectives
- 9.2 Phone Number, Mobile Number, and E Mail  
0308844013/9866004618 [ravirajmani1970@gmail.com](mailto:ravirajmani1970@gmail.com) , [rajaravikumar\\_bv@vnrvjiet.in](mailto:rajaravikumar_bv@vnrvjiet.in)

