BIO—DATA

1. Name : KALIDINDI BRAHMA RAJU
2. Designation : Professor & Head
3. Date of Birth, Age and Place of Birth : 01-06-1968, 51 Years, Mogallu, W.G. Dt.
4. Address for Communication : Dept. of Mechanical Engineering, ChinnaAmiram, Bhimavaram-534204
5. Permanent Address : F1, Gayatri Enclave, Balusumudi, Bhimavaram-534202
6. Mobile No : +91 9849503522
7. Email-ID : brahmaraju68@gmail.com
8. Educational Qualifications :

Qualification	University/Board	Name of the College	Specialization	Year of Passing	Division/Class
X Class	Board of Secondary Education, Andhra Pradesh	ZPH School, Mogallu, AP	SSC	1983	First
Intermediate	Board of Intermediate Education, Andhra Pradesh	DNR College Bhimavaram, AP.	MPC	1985	First
B.E	Mangalore University	MIT Manipal	Mechanical Engineering	1989	First
M.E	University of Roorkee (Presently I.I.T Roorkee).	University of Roorkee	Machine Design Engineering	1993	First
Ph. D	JNTU College of Engineering Anantapur	University College of Engineering (A), Anantapur	Mechanical Engineering	2009	---

9. Project/Thesis:

B.E : **Design & Fabrication of Bio Gas Reactor Safety System**

M.E : **Photo elastic Determination of Stresses in a Simulated Fillet Welded T-Joint**

Ph.D. : **Parametric Studies on Stress Intensity Factors in a Fillet Welded T-Joint with Weld Discontinuities**

10. Teaching /Industry Experience:

S No	Designation	Organization	Period		Total Exp. Years and Months
			From	To	
1.	Teaching Assistant	S.R.K.R. Engineering College	01-11-1990	28-02-1991	4 Months
2.	Lecturer / Assistant Professor	S.R.K.R. Engineering College	01-03-1991	31-08-2006	15 Years 6 Months
3.	Associate Professor	S.R.K.R. Engineering College	01-09-2006	30-09-2009	4 Years
4.	Professor	S.R.K.R. Engineering College	01-10-2009	Till Date	7 Years 10 Months
5	Head of the Department	S.R.K.R. Engineering College	08-01-2013	Till Date	6 Years 9 Months

11. Total Experience: **Teaching**:- **29** Years

Research: **14** Years

12. Any other Distinctions/Achievements:

- Number of **M.Tech**. Projects **Guided** : **11**
- Number of **Ph.D.** Students :

  Guided : 03

  Submitted : 01

  Guiding : 05

- **Council member**, **The Institution of Engineers (India) Kolkata** from 2015 to till date.
- **Founder Chairman**, **The Institution of Engineers** (India), **Bhimavaram local centre** (2015-2017)
- **Member**, Indo-Russian Technovation Delegation Team- 2015, **National Design & Research Forum** – The Institution of Engineers (India).
- **Member**, **Technovation Delegation Team-2017** to visit **Industrial Trade Fair** at **Germany**.
- **Member**, **Academic advisory committee & Technical publication committee**, **Indian Technology Congress** (ITC) 2014&2015
- **Member**, **Board of studies, Department of Mechanical Engineering**, Sri Vishnu college of engineering for women (Autonomous)
- **Member, Research Board, Department of Mechanical Engineering,** Sri Vishnu

college engineering for women (Autonomous)

- **Member**, **Editorial Board, Journal of Manufacturing Technology & Management**, A Quarterly Journal of Indian Institutions of Production Engineers
- **Editor**, **Proceedings of Indian Engineering Congress 2011 & Member**, Academic Advisory Board, held at Palace grounds Bangalore
- **Member**, **Academic Advisory Committee**, **TEAM TECH International Conferences** 2006,2007,2008,2009, JN Tata auditorium, IISc, Bangalore
- **Member**, **Organizing Committee, International Symposium on Engineering Analysis and Simulation: Frontiers in FEM** and Practices, M.S.R. Memorial Auditorium, Banglore-2007
- **Fellow, The Institution of Engineers** (INDIA)
- **Fellow, Indian Institute of Production Engineers**.
- **Member, Indian Society for Technical Education**
- **Member, Engineering Design & Analysis Forum**
- **Member, Accreditation Committee The Institution of Engineers (India)**
- Received **Technology Excellence Award-2019,** for significant contributions to the research and development of welding technologies and educating, guiding future engineers, from **Indian Technology Congress, Bengaluru.**

13. Research Experience:

Research Papers Published in Journals

International Journals:

1. **Raju.,K.B.,** N. Harsha., and V.K.V. Raju "**Prediction Of Tensile Strength Of Friction Stir Welded Joints Using Artificial Neural Networks**", International Journal of Engineering Research & Technology,vol-1,issue-9,pages:1-5. (2012)
2. **K.Brahma Raju**,V.K.Viswanatha Raju,B.Siva Krishna, "**Optimization of weld penetration problem in butt welded joints using stress concentration factors and stress intensity factors**", International Journal of Engineering Science& Technology, Vol-4,issue-12,pages: 797-804. (2012)
3. **Raju.,K.B**., Maneiah. Dakkili., and K. Prahlada Rao," **Stress Analysis of Weld Penetration Problem in Butt Welded Joints**", International Journal of Engineering Research & Technology, Vol-2, issue-12,pages: 2367-2379. (2013)
4. **Raju.,K.B.,** K.Balaji, and M.Surya Narayana," **Kinematic Performance Analysis Of 4-Link Planar Serial Manipulator**", International Journal of Engineering Research & Technology, Vol-3 issue-11,pages: 179-183. (2014)

5. **Raju.,K.B.,** Reddy.,V.S and VenkataSubbiah., "**Parametric Studies on Stress Intensity Factors in a Fillet Welded Cruciform Joint**", International Journal of Scientific Engineering & Technology research, Vol-3 issue-46,pages: 9347-9352. (2014)
6. K.Balaji, & **Dr.K.Brahma Raju**," **Fracture Analysis of Hole Expansion Test for AHSS sheet**", International Journal of Advanced and Innovative Research Vol-4 issue-6,pages: 205-209. (2015)
7. K.Balaji, **Dr.K.Brahma Raju,** &Prof.K.V.Subbaiah," **Oxidization And Hot Corrosion Behavior Of Inconel718 And Ass 316 Dissimilar Joints In GTAW Process**" Journal of Metallurgy and Mechanical Engineering-2016.
8. Bhanu Prakash P,Ramya V, **Brahma Raju K**, Venkata Subbaiah K, ManiKandan N," **Development of Aluminium 6061 Silicon Carbide (SiC) Composites using Stir Casting Technique**", International Journal of Engineering Research in Mechanical and Civil Engineering, Vol-2 issue-3,pages: 119-121. (2017)
9. N Satish ,S.Narendar , **K.Brahma Raju,**" **Magnetic field and surface elasticity effects on thermal vibration properties of nanoplates**" Journal of composite structures, Vol-2 issue-180,pages: 568-580. (2017)
10. VenkataSubbaiah, BhanuPalampalle, **K. Brahmaraju**, "**Microstructural Analysis and Mechanical Properties of Pure Al–GNPs Composites by Stir Casting Method**" Journal of Inst. Eng. India Ser. C, Springer Publications
11. Bhanu Prakash Palampalle, **K. Brahmaraju**, and K. VenkataSubbaiah, "**Development and Characterization of Al-GNPs Composites by Stir Casting Method**", SAE, 2018-28-0096.(2018)
12. K. VenkataSubbaiah, P. NarenChakravarthy, Bhanu Prakash Palampalle, **K. Brahma Raju**, J. S. Binoj, "**Microstructural Analysis And Mechanical Behaviour Of Aluminium-GNPs Composites Fabricated By Ultrasonic Assisted Stir Casting Technique**", International Journal of Mechanical and Production Engineering Research and Development, Vol-8 issue-8,pages: 385-392. (2018)
13. P. Bhanu Prakash, **K. Brahma Raju**, K. VenkataSubbaiah, P.C. Krishnamachary, N. ManiKandan, V. Ramya, "**Application of Taguchi based Grey Method for Multi Aspects Optimization on CNC Turning of AlSi7Mg**", Materials Today: Proceedings Elsevier Publication, Vol-5 issue-6,pages: 14292–14301.(2018)
14. Srinivas Reddy Vempati , **K.Brahma Raju** ,K.VenkataSubbaiah, "**Estimation of fatigue life of Ti-6Al-4V welded joints using Response surface methodology and simulation through Abaqus**", International Journal of Current Engineering and Technology, Vol-8 issue-6,pages: 1635-1639.(2018)
15. K.VenkataSubbaiah, Srinivasa Reddy Vempati, **K.Brahma Raju**, "**Fatigue loading on Ti-6Al-4V cruciform shape welded joints with different weld bead Shapes**", International Journalof

Mechanical and Production Engineering Research and Development,Vol-8 issue-6,pages: 819-826.(2018)

16. K.VenkataSubbaiah, **K.Brahma Raju**, Srinivasa Reddy Vempati, ”**Examination of Hardness values for Ti-6Al-4V welded specimens and micro structural characterization of fractured Specimens**”, International Research Journal of Engineering and Technology,Vol-5 issue-12,pages: 371-375.(2018)
17. K. Balaji, **K. Brahma Raju**, & K. Venkata Subbaiah, ”**Effect of Temperature on Corrosion Behavior of Dissimilar weldments of Inconel 718 Vs ASS 316 with mixer of sodium sulfate and vanadium pentoxide Deposit**”, International journal of Engineering and Technology(Scopus Indexed Journal) Vol-7 Issue-4,pages: 4862-4865.(2018)
18. K. Balaji, **K. Brahma Raju**, & K. Venkata Subbaiah, ”**Oxidation Behavior of dissimilar weldments in presence of molten salt at 1123K**”, International Journal Of Mechanical And Production Engineering Research And Development (IJMPERD), Vol-8 Issue-5,pages: 7-12.(2018)
19. K. Venkata Subbaiah, K. Balaji, **K. Brahma Raju**, ”**High Temperature Oxidation and Corrosion studies on Dissimilar Weldments in Aggressive solution of a Na_2So_4-V_2O_5 environment**”, International Research Journal of Engineering and Technology**,** Vol-6 Issue-1,pages: 7-12.(2018)

National Journals:

1. **Raju., K.B**., Raju, G.V., and Prahlada Rao, “**Stress Intensification of Fillet welded T-joints with Under Cuts**”, Manufacturing Technology & Management (MT&M), Vol-2, 2009.
2. **Raju., K.B**., Raju, G.V., and Prahlada Rao, “**Photo elastic Stress Intensification of fillet Welded T-Joint**”, Manufacturing Technology today, Vol-8 Issue-7,pages: 31-40.(2009)
3. **Raju., K.B**., Raju, G.V., and Prahlada Rao, K,” **Determination of SIF Values in a Simulated Fillet Welded T-joints with overlaps**”, Manufacturing Technology & Management (MT&M) Vol-3 Issue-1,pages: 68-74.(2009)

(a) Research Papers Published in Conferences

National Conferences:

1. **Raju, K.B**., Mulchandani,K.B and Shukla,D.P, “**Stress Intensification of Fillet Welded T-Joints With the Presence of Weld Discontinuities Using Photoelasticity**”, Proceedings of Sixteenth AIMTDR Conference.1994.
2. **Raju, K.B**., Rajeswari, P.,Raju, G.V.,Bhaskara Raju .P, and Prahlada Rao K,” **Determining of Stress Intensity Factors of Fillet Welded T-joint with Weld Discontinuities**”, Proceedings of TIME-2004.

3. **Raju, K.B**., K. Suresh Babu, G.V. Raju and Kishore Raju K, "**Stress intensification of fillet welded T-joint with weld discontinuities using finite element analysis**", Proceedings of XIII ISME National Conference,2004.
4. **Raju, K.B**., K. Kishore Raju, G.V.Raju and K. Prahlada Rao," **Stress intensification of fillet welled T-joints using finite element analysis**", Proceedings of INCDCM, 2004.
5. K. Suresh Babu, **Raju, K.B**., A.Balakrishna,"**Review of step compliant NC(STEP-NC)**", Indian Technology Congress 2015.
6. A.Naresh Kumar, **Dr. K.Brahma Raju**, Dr. P.Srinivas Kishore, K.Narayana," **An Experimental Investigation on Performance and Emissions of a Compression- Ignition Engine with Lemon- Peel Oil and Diesel Blends using Exhaust- Gas Recirculation**", Indian Technology Congress 2016.

International Conferences:

1. Balaji., **Raju, K.B**. and K. Venkatsubbiah," **Critical crack length and SIF computation of high grade steel C45**", Indian Technology Congress 2015.
2. **Raju., K.B**., Naidu, K V S," **Determination of EOQ for inventory models with shortages using fuzzy logic**", International Conference on Operations Research applications in infrastructure development.(2005)
3. **Raju., K.B**., K.SureshBabu, G.V.Raju and K.Prahladarao," **Stress Analysis Of Butt Welded Joints with Weld Penetration Problem**", Proceedings of Team Tech 2006.
4. **Raju., K.B**., Raju, G.V., and Prahlada Rao, K," **The effects of Flange Plate Thickness and Flange Flexibility on a Fillet Welded T-joint**" International Symposium on" Engineering Analysis and Simulation", International Symposium on" Engineering Analysis and Simulation. (2007)
5. **Raju., K.B**., Raju, G.V., and Prahladarao, "**Stress Intensification of Fillet welded T-Joint**" Proceedings of Team Tech 2008.
6. K. Balaji, **K. Brahma Raju**," **Calibration of the Dp780 Sheet for Plasticity and Fracture**", NCCTET 2014.
7. A. Naresh Kumar, Dr. P. Srinivas Kishore, **Dr. K. Brahma Raju**, V. Dhana Raju," **Performance Analysis of Diesel Engine Fueled with Tobacco Seed Oil Methyl Ester**", Energy Environment and Engineering (ICEEE-2016).
8. Srinivasa Reddy Vempati, **Dr.K.Brahma Raju**, Dr.K.VenkataSubbaiah, "**Optimization Of Welding Parameters Of Ti 6Al 4vCruciform Shape Weld Joint To Improve Weld Strength Based On Taguchi Method**", Indian Technology Congress, 2016.
9. K. Balaji, **K. Brahma Raju**, & K. Venkata Subbaiah, "**Microstructure And Hot Corrosion Behaviour Of Inconel718 And Ass 316 Dissimilar Joints In GTAW Process**", International Conference ITC Bangalore. 2016.

10. Bhanu Prakash P,**Brahma Raju K**, VenkataSubbaiahK, P.C.K.Chary, ManiKandanN, Ramya V," **Multi Objective Optimization on CNC Turning of AlSi7 Mg Using Taguchi Based Grey Approach**", Proceedings of the International Conference on Advanced Functional Materials,2017.
11. Bhanu Prakash P,**Brahma Raju K**, VenkataSubbaiah K, ManiKandan N, "**Investigations on microstructure and Mechanical behavior of stir casted Al 7075 GNP composites**", Proceedings of the International Conference on Advanced Functional Materials,2017.
12. A.Naresh Kumar, Dr. **K.Brahma Raju**, Dr. P.Srinivas Kishore, K.Narayana," **Some Experimental Studies on Effect of Exhaust- Gas Recirculation on Performance and Emission Characteristics of a C.I. Engine Fuelled with Diesel and Lemon- Peel Oil Blends**", Materials Processing and Characterization,2017.
13. P. Bhanu Prakash, **K. Brahma Raju**, K.VenkataSubbaiah,N.ManiKandan," **Microstructure Analysis and Evaluation of Mechanical Properties of Al 7075 GNP's Composites**", Materials Today Proceedings(Elsevier Publications),2017.
14. K.VenkataSubbaiah, **K.Brahma Raju**, Srinivasa Reddy Vempati," **Fracture examination of Ti-6Al-4V cruciform welded joints of different weld bead shapes subjected to fatigue load at various stresses**", International conference on Recent Advances in Materials and Manufacturing Technologies, ICRAMMT-2018.
15. K. Balaji, **K. Brahma Raju**, & K. Venkata Subbaiah," **Hot Corrosion Behaviour and Microstructure Studies of Dissimilar Weldments at Different Temperatures in the Presence of Soluble Salt**", International Conference on Recent Advances in Materials and Manufacturing Technologies-2018.

(b) Workshops/STTP Attended

S No	Name of the workshop/ STTP	Place	Period	
			From	To
1.	Vibration Control	IIT, Bombay	27-06-1994	01-07-1994
2.	Advances in Manufacturing Processes and Automation	REC, Roukela	19-05-1997	29-05-1997
3.	Industry-Institute Partnership	REC, Roukela	28-07-1997	02-08-1997
4.	New Trends in Finite Element Analysis	Andhra University. Visakhapatnam.	01-12-2005	02-12-2005
5.	Train the Trainers	CIT, Guddi, Tumkur, Karnataka	06-04-2006	07-04-2006
6.	Finite Element Analysis Best Practices & Visions	Team Tech, 2006, IISc, Bangalore.	28-02-2006	02-03-2006

(c) Details of Research Projects

S No	Title of the Project	Amount Sanctioned(Rs.)	Issued Authority	Status	Year of Sanction
1.	"Path Planning on 3d terrain using potential field planner" as guide	10,000/-	Institution of Engineers(India) Kolkata	Completed	2009
2.	"Convertible tricopter for surveillance and defence purpose" as Guide	31,600/-	Institution of Engineers(India) Kolkata	Completed	2011
3.	"Solar Mobile Sugar Cane cutter and Crusher" as Guide	50,000/-	Institution of Engineers(India) Kolkata	Completed	2012
4.	"Development of multilayer thin film sensors for4 practical monitoring of weld stresses" as P.I.	15,10,000/-	AICTE	Completed	2012
5.	"Solar smart cultivation system"	50,000/-	Institution of Engineers(India) Kolkata	Completed	2016

14. Strengths:

- Hardwork
- Team work
- Adaptability to any environment
- Interested in innovative projects

15. Other Details if any:

- **T&P Officer**, S.R.K.R. Engineering College, from 01-08-2006 to 30-09-2012.
- **In-charge**, **College Govt. Relations &Development Cell** from 01-10-2012 to Till Date.
- **Head**, **Department of Mechanical Engineering**, S.R.K.R. Engineering College from 08-01-2013 to Till Date.

16. Personal Details:

(a) Name of the Father : K. Suryanarayana Raju
(b) Name of the Mother:K. Suryakanthamma
(c) Gender : Male
(d) Marital Status :Married
(e) Nationality :Indian

Date:25-10-2019

Place: Bhimavaram Signature of the Candidate