


## BIO – DATA

Name of the candidate	<b>Dr. B. Raghu Kumar</b>	
Father's Name	B. Nageswara Rao	
Date of Birth	31 – 03 – 1975	
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### Educational Qualifications

Degree	University	Year of passing	Specialization	Class obtained
B.Tech	Nagarjuna University	1997	Mechanical Engineering	I Class
M.Tech	J.N.T.U. Kakinada	2000	Machine Design	I Class with Distinction
Ph.D	J.N.T.U. Kakinada	2010	Mechanical (Condition Monitoring)	Awarded

### Experience Details

Name of the Institution	Designation	From	To
P V P Siddhartha Institute of Technology	Professor and Head	12 – 04 – 2021	Till Date
P V P Siddhartha Institute of Technology	Professor	30 – 06 – 2016	11 – 04 – 2021
K L University	Professor	01 – 07 – 2009	29 – 06 – 2016
K L College of Engineering	Assistant Professor.	01 – 05 – 2007	30 – 06 – 2009
K L College of Engineering	Sr. Lecturer	01 – 12 – 2005	30 – 04 – 2007
K L College of Engineering	Lecturer	04 – 08 – 2000	30 – 11 – 2005

### **Text Book Published:**

- **Strength of Materials** – BS Publications with ISBN NO: 978-93-89354-53-9, March 2020

### **Patents:**

1. Backpack Frame To Carry School/Travel Bag With Less Effort  
(No: 202041040749) Published – **Indian patent Authority – Chennai - 2020**
2. Mixer Grinder (No: 319157-00) – **Indian patent Authority – 2019**
- 3.

### **List of Research Scholars:**

Sl.No	Name of the Student	Affiliated University	Status
1	Mr. S. Naga Kalyan	K L University	Awarded
2	Mr. K. Ravi Prakash Babu	JNTU, Kakinada	Awarded
3	Mr P Kasi V Rao	K L University	Awarded
4	Mr. G. Bala Krishna	JNTU, Kakinada	Continuing
5	Mr M. Kishore Babu	JNTU, Kakinada	Continuing
6	Mrs. Naga Divya	K L University	Continuing
7	Sri K. Abhijith HanumanKekan	K L University	Continuing
8	Sri. V. Baba Saheb Kisan	K L University	Continuing
9	Sri. F. Sandeep Chandra Bhanu	K L University	Continuing

### **Publications**

- **Total Number of Papers listed in Scopus Data Base: 29**

	No. of Papers
<b>International Journals</b>	<b>46</b>
<b>National Journals</b>	<b>4</b>
<b>International Conferences</b>	<b>13</b>
<b>National Conferences</b>	<b>7</b>
<b>Total</b>	<b>70</b>

## International Journals

1. Kothuri Chenchu Kishor Kumar, **Bandlamudi Raghu Kumar**, Nalluri Mohan Rao, “MICROSTRUCTURAL, MECHANICAL CHARACTERIZATION, AND FRACTOGRAPHY OF AZ31/SIC REINFORCED COMPOSITES BY STIR CASTING METHOD”, **Silicon**, 2<sup>nd</sup> August, 2021. Springer, SCI Expanded, <https://doi.org/10.1007/s12633-021-01180-7>
2. 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”, **Sādhanā, Published by the Indian Academy of Sciences, Springer (SCI and Scopus Indexed)**, Volume 46, issue 2, June 2021, Article No. 111, Page 1: 15, ISSN: 09737677
3. K. Ravi Prakash Babu, **B. Raghu Kumar**, G. Durga Prasad, “COMPARATIVE MODAL ANALYSIS STUDIES FOR MODELLING A TURBINE BLADE AS TWISTED CANTILEVER BEAM”, **Journal of Emerging Technologies and Innovative Research (JETIR)**, June 2021, Volume 8, Issue 6, ISSN: 2349 – 5162, pp: g198 – g203.
4. Makkena Veeranjanyulu., Dr. Anay Jain., **Dr. 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**, Volume 12, Issue 2, February-2021, ISSN 2229-5518, pp 336 – 343.
5. V. Sri Sai HarshaVardhan, 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**, (Scopus Indexed) Volume-8. No. 9, September 2020, pp. 5043-5047.
6. Md. Abid Ali, G. Durga Prasad, **B. Raghu Kumar** and K. Ravi Prakash Babu, “MECHANICAL BEHAVIOUR OF ZN AND CU REINFORCEMENT IN AL-SIC COMPOSITE”, **International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)**, ISSN (P): 2249–6890; ISSN (E): 2249–8001 Vol. 10, Issue 3, Jun 2020, pp 2551-2558.

7. G.Naga Mallikarjun Rao, P. Phani Prasanthi, **B. Raghu Kumar**, N. Raghu Ram, and 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, ISSN : 2005-4238.
8. K. Ravi Prakash Babu, **B. Raghu Kumar**, “MODAL BASED SENSITIVITY ANALYSIS OF CRACK IN TURBINE BLADES USING VALIDATED FINITE ELEMENT MODELS”, **International Review on Modelling and Simulations**(Scopus Indexed), Vol 12, No 5, (2019)
9. G. Durga Prasad, V. Mohan Manoj, K. Ravi Prakash Babu, **B. Raghu Kumar**. “ESTIMATION OF REDUCED STIFFNESS UNDER THE INFLUENCE OF CRACK IN A BEAM”, **International Journal of Innovative Technology and Exploring Engineering**, (Scopus Indexed), ISSN: 2278-3075, Volume – 9, Issue – 1, November 2019, pp 711 – 714
10. Abhijeet H. Kekan, **B. Raghu Kumar**, “NATURAL FREQUENCY RESPONSE OF ROTOR SHAFT TO CRACK DEPTH AND CRACK LOCATION”, **International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)**(Scopus Indexed); ISSN (P): 2249–6890; ISSN (E): 2249–8001; Vol. 9, Issue 6, Dec 2019, 499–510
11. Arun Babu, I., **Raghu Kumar, B.**, PhaniPrasanthi, P., Eswar Kumar, A., Vidya, C, “FATIGUE CHARACTERIZATION OF SISAL FIBER REINFORCED COMPOSITES USING EXPERIMENTAL AND FINITE ELEMENT METHOD”, **International Journal of Innovative Technology and Exploring Engineering** (Scopus Indexed), Volume-8 Issue-10, August 2019, ISSN: 2278-3075, pp 1728 – 1732.
12. Abhijeet H. Kekan, **B. Raghu Kumar**, “CRITICAL SPEED AND NATURAL FREQUENCY ANALYSIS OF CRACKED ROTOR SHAFT”, **International Journal of Mechanical Engineering and Technology (IJMET)**, (Scopus Indexed), Volume 10, Issue 06, June 2019, ISSN Print: 0976-6340 and ISSN Online: 0976-6359, pp 232 – 240
13. Ravi Prakash Babu, K., Rao, P.K.V., Ali, M.A., **B. Raghu Kumar**, “CRACK SIMULATIONS IN SHAFT-HUB-BLADE SYSTEM USING MODAL ANALYSIS”, **International Journal of Recent Technology and**

- Engineering** (Scopus Indexed), May 2019, Vol 8, Issue 1, ISSN: 2277 – 3878. pp 2646 – 2650.
14. Dr.R.Nagendra Babu, Dr.K.V.Ramana, **Dr. B. Raghu Kumar** “EXPERIMENTAL AND THEORETICAL INVESTIGATION OF STRESS CONCENTRATION EFFECT UNDER THERMAL AND DYNAMIC LOADS ON HIGH, INTERMEDIATE AND LOW PRESSURE TURBINE ROTORS”, **International Journal of Research and Analytical Reviews (IJRAR)**(UGC Approved). May 2019, Vol. 6, Issue 2.E-ISSN 2348-1269, P- ISSN 2349-5138, pp 685 – 693.
  15. Abhijeet H. Kekani, **B. Raghu Kumar**, “CRACK DEPTH AND CRACK LOCATION IDENTIFICATION USING ARTIFICIAL NEURAL NETWORK”, **International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)**; ISSN (P): 2249–6890; ISSN (E): 2249–8001; Vol. 9, Issue 2, April 2019, 685 – 694
  16. Pothamsetty Kasi V. Rao, **B. Raghu Kumar**, “INFLUENCE OF SIZE AND WEIGHT FRACTION OF CARBON NANOTUBE ON COEFFICIENT OF THERMAL EXPANSION OF Al-CNT METAL MATRIX”, **Journal of Mechanical Engineering Research & Developments (JMERRD)** (Scopus Indexed). Vol: 42 (1), February, 2019, pp 89 – 93. ISSN: 1024-1752 (Print),DOI: <http://doi.org/10.26480/jmerrd.01.2019.89.93>
  17. V. Sridhar, **B. Raghu Kumar**, P. PhaniPrasanthi, N. Ramesh, “NATURAL FREQUENCY OF COMPOSITE BEAMS WITH DIFFERENT SHAPES USING FINITE ELEMENT METHOD”, **International Journal of Research and Analytical Review (IJRAR)**, (UGC Approved), Vol. 5, Issue 3, August, 2018, E-ISSN: 2348 – 1269, P-ISSN:2349 – 5138, pp: 290 – 295.
  18. Pothamsetty Kasi V. Rao, **B. Raghu Kumar**, B. Sudheer Kumar, G. Phanindra Swamy, Y. Ganga Raju, P. Sajjad Ali Khan. “INVESTIGATION OF FLEXURAL AND IMPACT STRENGTH OF CARBON NANOTUBE REINFORCED AA7075 METAL MATRIX”, **International Journal of Engineering & Technology (IJET)**,(Scopus Indexed), Vol. 7 (2), 2018, doi: 10.14419/ijet.v7i2.11295. ISSN: 2227-524X. pp: 764 – 767.
  19. Pothamsetty Kasi V. Rao, **B. Raghu Kumar**, A. Saiteja, N.S.V. Srikar, V. Sreenivasulu, D. Adithya Prakash. “EXPERIMENTAL INVESTIGATION OF THERMAL STABILITY OF CARBON NANOTUBES REINFORCED

- ALUMINUM MATRIX USING TGA – DSC ANALYSIS”, **International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)**, (Scopus Indexed), Vol, 8, Issue 3, June, 2018, ISSN(P): 2249–6890, ISSN(E): 2249–8001, pp: 161 – 168.
20. AVS Ram Prasad, Koonam Ramji, **B. Raghu Kumar**, “STUDY OF WIRE-ELECTICAL DISCHARGE MACHINING PARAMETERS OF TITANIUM ALLOY BY USING TAGUCHI METHOD”, **International Journal of Engineering & Technology (IJET)**, (Scopus Indexed), Vol. 7 (2.8), 2018. pp 10 – 12, ISSN: 2227-524X (March 2018)
  21. E. Venkata sai Krishna, **B. Raghu Kumar**, “FATIGUE ANALYSIS ON TURBINE BLADES”, **International Journal of Modern Trends in Engineering and Research** (UGC Approved Journal), Vol.4, Issue.10, October – 2017, ISSN (Online): 2349 – 9745, ISSN (Print): 2393 – 8161, pp: 205 – 214. DOI: 10.21884/IJMTER.2017.4328.DXVWD. (UGC Approved Journal)
  22. P. Prasanthi, Dr. K. Sivaji Babu, **Dr. B. Raghu Kumar** and Dr. M.S.R Niranjan Kumar, “EFFECTIVENESS OF NANO LAYERS ON INTERLAMINAR STRESSES OF COMPOSITE LAMINATE”, **International Journal of Mechanical Engineering and Technology (IJMET)**, (Scopus Indexed), Volume 8, Issue 1, January 2017, ISSN Print: 0976-6340 and ISSN Online: 0976-6359, pp 15 – 24.
  23. J.V.Sai Ram, K.M.S.V.Manikanta, G.Pavanth, B.Jagadeep, **Dr. B.Raghu Kumar**, “AUTOMATIC BRAKING SYSTEM USING ULTRASONIC SENSOR”, **International Journal of Innovative Science and Research Technology**, Volume 2, Issue 4, April– 2017, ISSN No: - 2456 – 2165, pp 398 – 404
  24. K.Ravi Prakash Babu, **B Raghu Kumar**, K.M. Rao, “FINITE ELEMENT MODELLING OF A TURBINE BLADE TO STUDY THE EFFECT OF MULTIPLE CRACKS USING MODAL PARAMETERS”, **Journal of Engineering Science and Technology (JEST)**, (Scopus Indexed), Vol.11, No.12, December, 2016, ISSN : 1823-4690, pp 1758 – 1770, ESCI
  25. K.Ravi Prakash Babu, **B Raghu Kumar**, K.M. Rao, “MODAL TESTING AND FINITE ELEMENT ANALYSIS OF CRACK EFFECTS ON TURBINE BLADES”, **Journal of Solid Mechanics**, (Scopus Indexed) , Vol.8, No.3, 2016, pp :614 – 624, ISSN (Print): 2008-3505, ISSN (Online): 2008-7683

26. S. Naga Kalyan, K L Narayana, **B. Raghu Kumar**, “DESIGN AND SIMULATION OF ENERGY HARVESTING SYSTEM USING PMN – PT AND PZT – 5H INTEGRATED WITH SILICA”, **ARNP Journal of Engineering and Applied Sciences**, (Scopus Indexed), Vol: 11, Issue:15, August 2016, pp: 9171 – 9176, ISSN: 1819 – 6608.
27. K.Ravi Prakash Babu, **B Raghu Kumar**, K Mallikharjana Rao, “VIBRATION ANALYSIS OF LOW PRESSURE TURBINE BLADES WITH CRACK”, **Canadian Journal of Basic and Applied Sciences**. Vol. 03(1), January, 2015. pp 18 – 28. ISSN: 2292 – 3381
28. K.Ravi Prakash Babu, **B Raghu Kumar**, K L Narayana, K Mallikharjana Rao, “MULTIPLE CRACK DETECTION IN BEAMS FROM THE DIFFERENCES IN CURVATURE MODE SHAPES”, **ARNP Journal of Engineering and Applied Sciences**,(Scopus Indexed), Vol: 10, Issue:4, 2015, pp: 1701 – 1710, ISSN: 1819 – 6608.
29. S.Naga Kalyan, **B.Raghu Kumar**, “MODELLING AND ANALYSIS OF PMN – PT SILICON – INTEGRATED MICRO – ACTUATOR”. **International Journal of Applied Engineering Research**. (Scopus Indexed) Vol. 10, Issue 6, 2015, pp: 13967 – 13973.
30. S.Naga Kalyan, **B.Raghu Kumar**, “FABRICATION OF CAR PARKING PROTOTYPE USING PIEZOELECTRIC SENSORS”, **International Journal of Mechanical and Mechatronics Engineering IJMME – IJENS**. (Scopus Indexed) Vol: 14, No.4, August, 2014.
31. K V Ramana, **B.Raghu Kumar**, K.L Narayana, “AN EXPERT SYSTEM FOR DIAGNOSIS OF BEARING FAULTS OF ROTATING MACHINERY”, **International Journal of Applied Engineering Research**.(Scopus Indexed) Vol. 9, Issue 14, 2014, pp: 2591 – 2599.
32. S. Naga Kalyan, **B. Raghu Kumar**, “FABRICATION AND DIELECTRIC, STRUCTURAL ANALYSIS ON PMN-PT”, **i-manager’s journal on Mechanical Engineering**”, Vol 4, Issue 2, February – April, 2014, pp 14 – 19, ISSN Print: 2230-9055 ISSN Online: 2249-0744.
33. S. Naga Kalyan, **B. Raghu Kumar**, “FABRICATION AND VIBRATION ANALYSIS ON PIEZOELECTRIC MATERIAL”, **European Scientific Journal**,(EBSCO Indexed) May 2014, Vol.10, No.15, ISSN: 1857 – 7881 (Print) e-ISSN 1857- 7431

34. S. Naga Kalyan, **B. Raghu Kumar**, KV Abhilash, “COMPARATIVE STUDY OF PIEZOELECTRIC MATERIALS FOR VIBRATION ENERGY HARVESTING”, **International Journal of Research in Aeronautical and Mechanical Engineering**, Vol 1, Issue 7, November 2013, pp 160 – 166, ISSN: 2321 – 3051
35. S. Naga Kalyan, **B. Raghu Kumar**, KV Abhilash, Abhijeet Singht, “ACTIVE VIBRATION ISOLATION USING PIEZOELECTRIC”, **International Journal of Innovative Research in Science, Engineering and Technology**. Volume 2, Issue 11, November 2013. pp 1 – 4, ISSN: 2319-8753
36. S. Kalyan, **B. Raghu Kumar**, Modal testing and finite element analysis of crack effects on turbine blades, “OPTIMIZATION OF VIBRATION ENERGY HARVESTING ON WIND-SPAR”, **International Journal of Engineering Research**, Volume 2, Number 3, July, 2013.pp 218 – 223.ISSN: 2319 – 6890.
37. S. Naga Kalyan, **B. Raghu Kumar**, “ANALYSIS OF PIEZOELECTRIC MICRO PUMP”, **International Journal of Mechanical Engineering and Robotics Research**, Volume 2, Number 3, July, 2013.pp 101 – 107.ISSN: 2278 – 0149.
38. S. Naga Kalyan, **B.Raghu Kumar**, “OPTIMIZATION OF ENERGY HARVESTING”, **International Journal of Innovative Technology and Research**, Volume 1, Issue 2, February – March 2013, pp 161 – 175. ISSN:2320 – 5547.
39. **B.Raghu Kumar**, R. Vijaya Prakash, N.Ramesh, “STATIC ANALYSIS OF MONO LEAF SPRING WITH DIFFERENT COMPOSITE MATERIALS”, **Journal of Mechanical Engineering Research**,Vol.5 (2), pp 32 – 37, February, 2013, ISSN: 2141 – 2383.
40. G. Durga Prasad, B.S.K. Sundara Siva Rao, **B.Raghu Kumar**, “PREDICTIVE MAINTENANCE AND FAULT DIAGNOSIS OF HYDRAULIC GEAR COUPLING OF A BOILERFEED PUMP UNIT”, **Journal of Experimental Sciences**, 2012, 3(9), pp 30 – 35, ISSN: 2218 – 1768
41. **B.Raghu Kumar**, Niraj Tiwari, Devendra Kunwar, R.R Vara Lakshmi,Mohan Chhetri,“TRANSMISSION ERROR ON SPUR GEAR”, **International Journal of Advanced Engineering Research and Studies**, Vol.1, Issue III, April – June, 2012, pp 122 – 125.E – ISSN: 2249 – 8974.



42. G. Durga Prasad, **B.Raghu Kumar**, K.V.Ramana, B.S.K.SundaraSivaRao, “DEVELOPMENT OF AN EXPERT SYSTEM FOR DIAGNOSIS OF BEARING FAULTS OF ROTATING MACHINERY WITH A CASE STUDY ON BOILER FEED PUMP”, **International Journal of Current Research and Review**, Vol 4, Issue 7, April 2012, India, pp 16 – 24.ISSN: 0975 5241, IC Value : 4.18.
43. **B.Raghu Kumar**, K.V.Ramana, K.Mallikharjuna Rao, “FAULT DIAGNOSIS OF BOOSTER PUMP UNIT” **International Journal of Mechanical Engineering Education**,(Scopus Indexed) 37/4, October 2009, Manchester Press, UK, London, pp 275 – 285. ISSN: 0306 4190. ESCI Indexed.
44. **B.Raghu Kumar**, K.V.Ramana, K.Mallikharjuna Rao, “CONDITION BASED MAINTENANCE AND FAULT DIAGNOSIS OF A BOOSTER PUMP UNIT” **Journal of Mechanical Engineering (Strojnickycasopis)**, 60, 2009 – 1, Slovakia, Russia, pp 19 – 32. ISSN: 0039 2472
45. **B.Raghu Kumar**, K.V.Ramana, K.Mallikharjuna Rao, “PREVENTIVE MAINTENANCE AND FAULT DIAGNOSIS OF BOOSTER PUMP UNIT” **International Journal of Systems and Technologies**. Vol.1(2), 2008, India, pp 83 – 94. ISSN: 0974 2107
46. **B.Raghu Kumar**, K.V.Ramana, K.Mallikharjuna Rao, “CONDITION BASED MAINTENANCE AND FAULT DIAGNOSIS OF A BOOSTER PUMP UNIT” **International Journal of Condition Monitoring and Diagnostic Engineering Management**, (Scopus Indexed), Vol. 11(4), Oct. 2008, UK, London, pp 35 – 41. ISSN: 1363 7681

#### National Journals

1. N Ramesh, **B. Raghu Kumar**,R. Vijya Prakash, “ANALYSIS COMPOSITE ROTATING DISCS”. **Journal of Manufacturing Engineering**, Vol 7, Issue 1, March 2012, pp 16 – 22. ISSN: 0973 6867
2. **B. Raghu Kumar**, N Ramesh, R. Vijya Prakash, “ANALYSIS OF MONO LEAF SPRING WITH DIFFERENT COMPOSITE MATERIALS”. **Journal of Manufacturing Engineering**, Vol. 6/4, Dec, 2011, pp 245 – 249. ISSN: 0973 6867
3. **B. Raghu Kumar**, K.V.Ramana, K.Mallikharjuna Rao, “EXPERIMENTAL INVESTIGATION AND FAULT DIAGNOSIS OF A BOILER FEED PUMP

UNIT”. **Journal of Manufacturing Engineering**, Vol. 4/4, Dec. 2009, pp 233–244 India, ISSN: 0973 6867

4. **B. Raghu Kumar**, K.V.Ramana, K.Mallikharjuna Rao, “CONDITION MONITORING AND FAULT DIAGNOSIS OF A BOILER FEED PUMP UNIT”. **Journal of Scientific and Industrial Research**, (Scopus Indexed) Vol. 68, Sept. 2009, JSIR, New Delhi, India, pp – 789 – 793, ISSN: 0975-1084, SCI Indexed

#### International Conferences

1. G. Bala Krishna, **B. Raghu Kumar**, B. Bala Krishna, “Multi Objective Optimization of Process Parameters in Friction Stir Welding of AlSi10mg Casted Alloy using Taguchi-Grey Relational Analysis”, International Conference on Recent Advances in Mechanical Engineering – 2021 (ICRAME – 2021), 26<sup>th</sup> and 27<sup>th</sup> March, 2021, PVPSIT, Vijayawada, pp 157 – 162.
2. Murahari Kolli, K. Ravi Prakash Babu, M.Nageswara Rao. **B. Raghu Kumar**, “Investigation on Material Removal rate and taper Angle in Abrasive Aqua Jet Machining of Al 7075/SiC/Gr Composites Using RSM Approach”, International Conference on Recent Advances in Mechanical Engineering – 2021 (ICRAME – 2021), 26<sup>th</sup> and 27<sup>th</sup> March, 2021, PVPSIT, Vijayawada, pp 163 – 169
3. K. Ravi Prakash Bab, **B. Raghu Kumar**. (2020) "Condition Monitoring of Turbine Blades with Experimental Validation Using FFT Analyzer". **Advances in Materials and Manufacturing Engineering. Lecture Notes in Mechanical Engineering. Springer**, January, 2020, pp – 221 – 222.://doi.org/10.1007/978-981-15-1307-7\_23 (Scopus Indexed)
4. S. Naga Kalyan, **B. Raghu Kumar**, “PREPARATION AND CHARACTERIZATION OF CARBON/EPOXY TOWPREG COMPOSITE MATERIAL”, **Materials Today: Proceedings**, (Scopus Indexed) <https://doi.org/10.1016/j.matpr.2019.05.395>, Vol, 23, part 3, (2020) 499–506
5. Rao, P.K.V., Gopiseti, N.S.R., Chouhan, S.G., **Raghu Kumar B.**, “NUMERICAL MODEL OF TOUGHNESS PARAMETER FOR AL-MWCNT COMPOSITES. AN FEA CASE STUDY”, “**Materials Today: Proceedings**” (Scopus Indexed). 2019
6. Pothamsetty Kasi V Rao, **B.Raghu Kumar**, Y. Veera Sai Chand, A. Teja, “FINITE ELEMENT ANALYSIS OF CNT REINFORCED ALUMINIUM

- COMPOSITE SUBJECTED TO MECHANICAL LOADING”, **Materials Today Proceedings** (Scopus Indexed), 2019 ,  
<https://doi.org/10.1016/j.matpr.2019.05.095>
7. S. Nagakalyan, **B. Raghu Kumar**, T. Thirumalai, Jhaswanth Kumar, “FINE TEXTURE ENHANCEMENT OF AL-MG-SC ALLOY BY USING CROSSACCUMULATIVE ROLL BONDING TECHNIQUE”, **IOP Conf. Series: Materials Science and Engineering** (Scopus Indexed). Vol: 455, 2018, Vol: 455 (2018) 012117doi:10.1088/1757-899X/455/1/012117
  8. Naga Divya. A, **B. Raghu Kumar**, Lakshmi Narayana G. “EXPERIMENTAL INVESTIGATIONS ON THE EFFECT OF ADDITIVE ON THE TENSILE PROPERTIES OF FIBER GLASS FABRIC LAMINA”, IOP Conference Series: Materials Science and Engineering 229 (2017) 012003 at Thailand, 22<sup>nd</sup> September, 2017. Vol. 229. (Scopus Indexed)
  9. Pothamsetty Kasi V Rao, Naga Sai Ram. G, **B. Raghu Kumar**, “HARDNESS OF AL-MWCNT SINTERED COMPOSITE BY THE VARIATION OF CNT PERCENTAGE”, International conference conducted at K L University
  10. K. Ravi Prakash Babu, **B. Raghu Kumar**. “VIBRATION ANALYSIS OF SIMPLY SUPPORTED BEAM WITH A U – NOTCH CRACK USING MODAL PARAMETERS”, IEEE International conference on Research and Development Prospects on Engineering and Technology, - E.G.S. Pillay Engineering College, Nagapatnam– 611002, 29<sup>th</sup> and 30<sup>th</sup> March, 2013
  11. **B. Raghu Kumar**, K V Ramana, “DEVELOPMENT OF AN EXPERT SYSTEM FOR DIAGNOSIS OF BEARING FAULTS OF ROTATING MACHINERY” VETOMAC VIII International Conference On Vibration Engineering And Technology of Machinery Gdansk, Poland, September, 2012
  12. R. Vijaya Prakash, N Ramesh, **B. Raghu Kumar**, K. Kishore Kumar, “DESIGN AND ANALYSIS OF MONO COMPOSITE LEAF SPRING WITH AND WITHOUT BONDED EMD JOINTS FOR LIGHT WEIGHT VEHICLES”. Proceedings of International Conference on Futuristic Trends in Materials and Energy Systems. 29 – 30 December, 2011 conducted by V R Siddartha Engineering College. pp 38 – 44.
  13. K. Ravi Prakash Babu, G. Durga Prasad, **B. Raghu Kumar**, , Y. Ranjith Kumar, “VIBRATION ANALYSIS OF CRACKED SIMPLY SUPPORTED BEAM”,

Proceedings of International Conference On Multi Body Dynamics, 24 – 26 Feb-2011 Conducted by K L University, India. pp 215 – 222

### National Conferences

1. Dr.R.Nagendra Babu, Dr.K.V.Ramana, **Dr. B. Raghu Kumar**“EXPERIMENTAL AND THEORETICAL INVESTIGATION OF STRESS CONCENTRATION EFFECT UNDER THERMAL AND DYNAMIC LOADS ON HIGH, INTERMEDIATE AND LOW PRESSURE TURBINE ROTORS”, Two day National Conference on Recent Advances in Mechanical Engineering Materials Characterization – 2019, 68 – 79.
2. N. Ramesh, M. Tirumalakrishna, **B. Raghu Kumar**, “INVESTIGATION OF MECHANICAL PROPERTIES OF SLAG REINFORCED POLYMER COMPOSITES” ,One day National Conference on Recent Advances in Mechanical Engineering – 2017. 2<sup>nd</sup> December, 2017. At Prasad V. Potluri Siddhartha Institute of Technology, Kanuru, Vijayawada.
3. R. Vijaya Prakash, MD. Touseef Ahamad, B. Poorna Chandra Sekhar, **B.Raghu Kumar**, “MODEL ANALYSIS OF A COMPOSITE LADER ARM OF A PNEUMATIC HIGH SPEED LOADER”, Andhra Pradesh Akademi of Sciences, A.P. Science congress – 2012. Acharya Nagarjuna University, Guntur.
4. R. Vijaya Prakash, **B.Raghu Kumar**,N Ramesh, “STATIC ANALYSIS OF COMPOSITE MONO LEAF SPRING”, Proceedings of national conference on “**Recent Advances in Mechanical Engineering, NCRAME – 2011**”, 7 – 8 July, 2011,RVR&JC College of Engineering, Guntur, AP; pp 417 – 422.
5. **B.Raghu Kumar**, K.V.Ramana, K.M.Rao, V.C.A.Vara Kumar, “CONDITION MONITORING AND FAULT DIAGNOSIS OF GEAR COUPLING”, proceedings of the **National Conference on Condition Monitoring**, Dec – 2009, conducted by Naval Science and Technological Laboratories (NSTL), Visakhapatnam
6. **B.Raghu Kumar**, K.V.Ramana, K.Mallikharjuna Rao, “CONDITION MONITORING AND DIAGNOSIS ANALYSIS OF BOOSTER PUMP UNIT OF A BOILER FEED PUMP TRAIN”, proceedings of the **National Conference on Condition Monitoring**, Dec – 2006, conducted by Naval Science and Technological Laboratories (NSTL), Visakhapatnam

7. K.I.V.Vandana, K.V.Ramana, **B.Raghu Kumar**,“AN EXPERIMENTAL METHOD BASED ON VISION SYSTEM FOR ON LINE MONITORING OF SURFACE FINISH ROUGHNESS DURING MACHINNING” proceedings of the **National Conference on “ADVANCES OF CAD/CAM”**, Feb – 2006, conducted by J N T U Kakinada.

## NPTEL/Coursera Certifications:

### 1. NPTEL online Certifications:

- a. **Problem Solving Through Programming in C** with 85% in January – April 2020 (12 weeks course)
- b. **Mechanics of Human Movement** with 76% in July – October 2018 (12 weeks course)
- c. **Introduction to Mechanical Vibration** with 87 % in January – March 2017 (8 weeks course) (**Topper** of the course)

### 2. Coursera Certifications:

- a. Programming for Everybody (Getting Started with Python) – 99.17%
- b. Python Data Structures – 98.4%
- c. AI for Everyone – 93.13%
- d. Introduction to Engineering Mechanics – 100%
- e. Applications in Engineering Mechanics – 73.33%
- f. Mechanics of Materials: I – 86.67%
- g. Mechanics of Materials: II – 100%
- h. Mechanics of Materials: III – 93.33%
- i. Mechanics of Materials: IV – 83.33%
- j. Introduction to Basic Vibrations – 96.67%
- k. Introduction to Advanced Vibrations – 90.03%
- l. Introduction to Programming with MAT LAB – 99.40%
- m. Data Collection and Processing with Python – 100%
- n. Python Basics – 100%
- o. Python Functions, Files and Dictionaries – 100%
- p. Python Classes and Inheritance – 100%

## Awards and Reorganizations.

1. Selected as “**Member of Editorial Board**” for Journal of Experimental and Applied Mechanics” of STM Journals.
2. Acting as a **Member of BoS** for VVIT, Guntur, an Autonomous Institute.
3. Delivered a **Lecture as a resource person** in FDP on “Frontiers in Mechanical Engineering” organized by KKR & KSR, institute of Technology, Guntur on 11<sup>th</sup> June, 2020

4. Delivered a **Lecture as a resource person** in FDP on “Outcome Based Education” organized by NRI Institute of Technology, Agripalli on 10<sup>th</sup> June, 2020
5. Delivered a **Lecture** at SDMS Mahila Kalasala on new proforma of NAAC on 1<sup>st</sup> June, 2018
6. **Chaired a session in the International Multidisciplinary Conference** on “Knowledge sharing, Technological Advancements and Sustainable Development (IMC2k18) at PVPSIT, on 30<sup>th</sup> and 31<sup>st</sup> March 2018
7. Delivered **Guest Lecture** on “Design of Machine Elements – Emphasis on Recent Applications and Practical Design Scenarios” at Sai Aditya College of Engineering at Surampalem (Kakinada) on 1<sup>st</sup> March, 2018.
8. Received “**Jai Upadhaya Award**” by Lions Club of India.
9. Delivered **lecture as Resource person** in 5-day Faculty development program at VVIT. On 24<sup>th</sup> Oct, 2017
10. Delivered **Guest lecture** on “Gyroscopes” to students at KKR & KSR Institute of Technology, at Guntur.
11. Acted as Judge for National Level Student Paper contest “EPISTEMICON2K17” conducted Andhra Loyola Institute of technology and Engineering.
12. Acted as Judge for National Level Student Paper contest “LAKSHYA2K17” conducted by LakkireddyBalireddy College of Engineering.
13. Acted as Judge for National Level Student Paper contest “KITSYUVA-17” conducted by KKR & KSR Institute of Technology, Guntur..
14. Acted as Judge for National Level Student Paper contest “SARADHIFEST–15” conducted by SARADHI Institute of Technology,Nuzivedu.
15. Acted as Judge for National Level Student Paper contest “ANVESHANA–14” conducted by Sasi Institute of Technology, Velivenu.
16. Acted as Judge for National Level Student Paper contest “ANUSODHANA–13” conducted by Acharya Nagarjuna University, Guntur.
17. Acted as Judge for National Level Student Paper Contest “SRUJANA–12” Conducted by PACE Institute of Technology, Ongole.
18. Received **Best Teacher Award**at K L University for the Academic year 12-13
19. Received **Best Teacher Award**at K L University for the Academic year 11-12.
20. Received **Best Teacher Award**at K L University for the Academic Year 10-11

21. Co chaired International Conference on Multi Body Dynamics Conducted by K L University in 2011.

### **Events Organized:**

1. Conducted one day **National level Techno Cultural Fest- SITAR** (College Fest) as a Coordinator at PVPSIT, on 25<sup>th</sup> January, 2020
2. Conducted Two Day **National Conference** on “Recent Advances in Mechanical Engineering and Materials Characterization – 2019 (NCRAMEMC – 19) on 15<sup>th</sup> and 16<sup>th</sup> March, 2019
3. Conducted One day **National Conference** on “Recent Advances in Mechanical Engineering – 17 (NCRAME – 17) on 2<sup>nd</sup> December, 2017.
4. Conducted A two-day **Faculty Development Program** on “Powder Metallurgy and Particulate Materials – Fundamentals and Industrial applications” as a Convener on 10<sup>th</sup> and 11<sup>th</sup> November, 2016.
5. Conducted Two – day **National Seminar** on “Intelligent systems” as convener, sponsored by **SERB**. File No: SB/SS/157/15-16.
6. Convener for **Yantrik – 15** (Department level): A national level paper contest/workshops/spot events/quizzes for 3 days. (9<sup>th</sup> to 11<sup>th</sup> April, 15) at K L University
7. Co – convener for **SAMYAK – 15** (University Level): A national level paper contest/workshops/spot events/quizzes for 2 days. (27<sup>th</sup> to 28<sup>th</sup> Feb, 15) at K L University

### **Various Administrative Duties Performed**

#### **Central level duties**

1. **Head of Mechanical Engineering:** Acting as HoD – ME at PVP Siddhartha Institute of Technology since April, 2018.
2. **Coordinator NAAC:** Submitted NAAC SSR in new format in 2018. College got A+ on seven-point scale.
3. **Coordinator – Freshmen Engineering Department:** Responsible for handling of 3160 students, 5 departments and 150 faculty.



4. **Director – Academic Registration:** Responsible for registering all the students at the beginning of each semester.
5. **Associate Director – Academic Registration:** Responsible for registering all the students at the beginning of each semester.
6. **Alternate HOD – Mechanical Engineering Department, K L University.**
7. **Professor In – charge Boys Hostel:** Responsible to look after all the activities that are involved in Hostels.
8. **Professor In – charge Principal Office:** Responsible to look after all the documents to maintain and communicate to various authorities internally as well as externally.
9. Actively involved in the works related to various accreditation authorities' visits at central level like **NBA, NAAC.**
10. **Internal Core committee member** for NAAC.
11. **Associate coordinator** for Aerospace and Energy Research Center.
12. Member of **Board of Management, K L E F University.**
13. Member of BOS of Mechanical Engineering and Academic Council of K L University.

#### **Department level duties**

1. Program Coordinator for UG Course.
2. In charge for Internal examinations, Monthly Reports
3. In charge for Time – Tables
4. In charge for Student association activities
5. In charge for NBA, NAAC works
6. In charge for Student Projects

#### **Memberships**

1. Life Member of Indian Society for Technical Education(**ISTE**) – LM 37543
2. Life Member of Condition Monitoring Society of India(**CMSI**) – LM 0600055
3. Life Member of International Association of Engineers (**IAENG**) – LM196456

#### **Work Shops/Conferences/FDPs Attended**

<b>S.NO</b>	<b>Title</b>	<b>Institution</b>	<b>Duration</b>
<b>1</b>	NPTEL – AICTE Faculty Development Program Problem Solving Through Programming in C (1.1/2 FDP)	IIT Madras	January – April 2020

2	Mechanics of Human Movement with 76% (1.1/2 FDP)	IIT Madras	July – October 2018
3	One week FDP on Fatigue Failure of Engineering Materials	PVPSIT	18 <sup>th</sup> to 23 <sup>rd</sup> February, 2019
4	One week FDP on Computational Fluid Dynamics	VVIT, Guntur	29 <sup>th</sup> April to 3 <sup>rd</sup> May 2018
5	One week FDP on Research Skills Development	PVPSIT	9 <sup>th</sup> to 13 <sup>th</sup> April, 2018
6	STPP on Intelligent computing And Deep Learning	PVPSIT	20 <sup>th</sup> to 25 <sup>th</sup> Nov. 2017
7	Finite Element Analysis of Structures Software (FEAST)	ISRO & PVPSIT	3 <sup>rd</sup> and 4 <sup>th</sup> August, 2017
8	The Faculty Knowledge Program	ICFAI Business School	20 <sup>th</sup> July, 2017
9	One day national Workshop on Recent Advances in Mechanical Engineering	JNTUCE, Kakinada	30 <sup>th</sup> June, 2017
10	Jeevan Vidya (Human Values)	KLU	19 <sup>th</sup> to 24 <sup>th</sup> Mar 2014
11	STTP on Lining and optimization of Multi Body Dynamics	ALTAIR & KLU	6 <sup>th</sup> to 10 <sup>th</sup> Oct 2010
12	High impact Skills	WIPRO	26 <sup>th</sup> , 27 <sup>th</sup> Oct. 2009
13	Quality Management Systems	PQMC	13 <sup>th</sup> , Oct, 2009
14	Advanced Composites & Nano	JNTUK	21 <sup>st</sup> , March, 2009
15	Recent Advances in experimental Fluid Mechanics	KLCE	3 <sup>rd</sup> – 6 <sup>th</sup> March, 2008
16	SDP on Design for Manufacture and Assembly	Amrita University	23 <sup>rd</sup> April to 4 <sup>th</sup> May, 2007
17	Applications of Condition Monitoring	KLCE	23 <sup>rd</sup> September, 2006
18	Applications of Optimization Techniques in Industrial Engineering	KLCE	10 <sup>th</sup> December, 2005

<b>19</b>	Gas Dynamics and Its Applications	KLCE	7 <sup>th</sup> – 8 <sup>th</sup> November, 2005
<b>20</b>	Teaching Methodology	NITTR, Chennai	16 <sup>th</sup> to 21 <sup>st</sup> May, 2005
<b>21</b>	Advances in Finite Element Methods	JNTUK	3 <sup>rd</sup> to 7 <sup>th</sup> January, 2005.
<b>22</b>	Enhanced Properties of Thermoplastic Composites and their Applications	India Composites	29 <sup>th</sup> November, 2009

**Subjects taught**

<b>Sl.No.</b>	<b>Subject</b>
<b>1.</b>	Engineering Mechanics
<b>2.</b>	Kinematics of Machines
<b>3.</b>	Dynamics of Machines
<b>4.</b>	Mechanical Vibrations
<b>5</b>	Strength of Materials
<b>6.</b>	Advanced Strength of Materials
<b>7</b>	Applied Mechanics
<b>8</b>	Finite Element Method
<b>9</b>	Design of Machine Elements
<b>10</b>	Design of Transmission Elements
<b>11</b>	Robotics