


BIO – DATA

Name of the candidate	Dr. B. Raghu Kumar	
Father's Name	B. Nageswara Rao	
Date of Birth	31 – 03 – 1975	
Address for correspondence	Door No. 3-85/3 Sri Nilaya Enclave Syndicate Bank Colony Ramavarappadu Vijayawada – 521 108 Phone: +919866925051 Email: braghu5051@gmail.com	

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 – 2019	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**
- **Strength of Materials (International Edition)** – CRC Press – Taylor and Francis Group with **ISBN NO: 978-1-032-28838-3, July 2022. (Scopus Indexed)**
DOI:10.201/9781003298748

Patents:

Sl.No	Application Number	Name of the Patent	Status
1	319157-001	Mixer Grinder	Granted
2	351814-001	Sea Water Sea Water Desalination Apparatus Using Solar Energy	Granted
3	335950-001	Acoustic Device For Agriculture Fields To Keep Away The Birds And Rats	Granted
4	2021101399	An Agricultural Smart Robot Device	Granted
5	202141039924	Electro Mechanical Central Stand For Automatic Scooters	Published
6	202041040749	Locust Prevention In The Crop Fields By Sounds Generating Machine	Published
7	202041030824	Backpack Frame To Carry School/Travel Bag With Less Effort	Published
8	377181-001	Wet Rice Grains Dehumidifier	Filed
9	386083-001	Tricycle For Disabled Persons	Granted

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 Ch. Kishor Babu	JNTU, Kakinada	Awarded
5	Mr. G. Bala Krishna	JNTU, Kakinada	Continuing
6	Mrs. Naga Divya	K L University	Continuing
7	Sri K. Abhijith Hanuman Kekan	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 : 35 + 1 (SM Book)**
- **Total Number of SCI Indexed Journals : 12**

	No. of Papers
International Journals	60
National Journals	4
International Conferences	13
National Conferences	7
Total	84

International Journals

1. Ravi Prakash Babu Kocharla, **Raghu Kumar Bandlamudi**, Abdul Ahad Mirza, Murahari Kolli, Ragavanantham Shanmugam, Muralimohan Cheepu, “INVESTIGATION ON THE MECHANICAL AND THERMAL PROPERTIES OF JUTE/CARBON FIBER HYBRID COMPOSITES WITH THE INCLUSION OF CRAB SHELL POWDER”, Journal of Composites Science, ISSN: 2504-477X, Publisher: Multidisciplinary Digital Publishing Institute (MDPI), Volume–8, Issue–296. August-2024, DOI: [https:// doi.org/10.3390/jcs8080296](https://doi.org/10.3390/jcs8080296) (ESCI/Scopus Indexed), pp 1 – 16
2. Ch Raghavendra Siva Kumar , **B Raghu Kumar**, “DESIGN OF PARABOLIC TROUGH COLLECTOR AND COMPARISON WITH NUMERICAL STUDIES TO EXAMINE THE IMPACT OF NANOFLUIDS ON THE THERMAL PERFORMANCE”, Journal of Emerging Technologies and Innovative Research (JETIR), July 2024, Volume 11, Issue 7, ISSN-2349-5162, Pg: i396-i407, DOI: 10.6084/m9.jetir.JETIR2407838 (Others)
3. Balakrishna Gogulamudi, **Raghu Kumar Bandlamudi**, Balakrishna Bhanavathu, Venkata Sarath Kumar Guttula, “EFFECT OF WELDING SPEED ON BUTT JOINT QUALITY OF LASER POWDER BED FUSION ALSI10MG PARTS WELDED USING ND:YAG LASER” **International Journal of Materials Research** , Vol 114 Issue 2, 2023, (SCI and Scopus Indexed), <https://doi.org/10.1515/ijmr-2022-0230> ISSN: 2195-8556, pp 879 – 892
4. Kothuri Chenchu Kishor Kumar, **Bandlamudi Raghu Kumar**, Nalluri Mohan Rao,

- “ARTIFICIAL NEURAL NETWORK MODELING OF TRIBOLOGICAL PARAMETERS OPTIMIZATION OF AZ31-SiC METAL MATRIX COMPOSITE”, **Applied Engineering Letters**, Vol: 8, Issue 3, 2023, (SCI and Scopus Indexed), ISSN: 2466-4677, pp 111-120, <https://doi.org/10.18485/aeletters.2023.8.3.3>
5. **Raghu Kumar Bandlamudi**, Lakshmana Rao Muppa, Sasidhar Muttunenic, Chirnajivi Paritala, A Machine Learning Based Approach to Study Effect Of Various Parameters On Tomato Crop Yield, *Industrial Engineering Journal* ISSN: 0970-2555 Volume: 52, Issue 11, No. 2,Pg: 162-168, November : 2023(**Others**)
 6. Lakshmana Rao Muppa, **Raghu Kumar Bandlamudi**, G. Harinath Gowd, P Gangisetty, Optimization Of Transportation Cost Through Data Science Using Python, *Industrial Engineering Journal* ISSN: 0970-2555 Volume: 52, Issue 11, No. 2,Pg: 105-112, November : 2023(**Others**)
 7. Ravi Prakash Babu Kocharla, **Raghu Kumar Bandlamudi**, Devaraju Aruri, Murahari Kolli, Satyanarayana Kosaraju & G. Sai Kumar, “FINITE ELEMENT MODELING ASPECTS IN THE FRACTURE ASSESSMENT OF ALOW PRESSURE STEAM TURBINE BLADE”, **International Journal on Interactive Design and Manufacturing**. 4th October, 2022. Springer, (SCI and Scopus Indexed), ISSN: 1955 – 2513, <https://doi.org/10.1007/s12008-022-01045-2>
 8. Kothuri Chenchu Kishor Kumar, **Bandlamudi Raghu Kumar**, Nalluri Mohan Rao, “TRIBOLOGICAL PARAMETERS OPTIMIZATION OF AZ31-SiC COMPOSITE USING WHALE OPTIMIZATION ALGORITHM”, **Journal of Materials Engineering and Performance**, Vol: 32, Issue 6, Springer, (SCI and Scopus Indexed), ISSN: 1059-9495, pp 2735 – 2748
 9. Balakrishna Gogulamudi, **Raghu Kumar Bandlamudi**, Balakrishna Bhanavathu, Venkata Sarath Kumar Guttula, “A PREDICTION MODEL FOR ADDITIVE MANUFACTURING OF ALSI10MG ALLOY”, **Transactions of the Indian Institute of Metals**, Vol 76 Issue 2, 2023, Springer, (SCI and Scopus Indexed), <https://doi.org/10.1007/s12666-022-02676-5>, ISSN: 0972–2815, eISSN: 0975- 1645, pp 571 – 579
 10. 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**, Vol 14, Issue 9, 2022, Springer, (SCI and Scopus Indexed), ISSN: 1876–990X, eISSN: 1876–9918, pp 5017 – 5027 <https://doi.org/10.1007/s12633->

11. Shaik subhni, Phani Prasanthi, **Bandlamudi Raghu Kumar**, “AN EXPERIMENTAL STUDY ON MILLING OF SISAL AND STARCH MIXED POLYMER MATRIX COMPOSITES”, **Levant Journal**, Vol: 20, Issue 8, August, 21, pp 104–118, ISSN: 1756-3801.
12. Kothuri Chenchu Kishor Kumar, **Bandlamudi Raghu Kumar**, Nalluri Mohan Rao, “FABRICATION AND CORROSION CHARACTERIZATION OF AZ31 MG ALLOY SIC REINFORCED COMPOSITES”, **Design Engineering**, 2021(5), 2556–2570, Oct, 2021. ISSN: 0011–9342.
13. Balakrishna G, **Raghu Kumar B**, Balakrishna B, “MULTI OBJECTIVE PREDICTION AND OPTIMIZATION OF CONTROL PARAMETERS OF FRICTION STIR WELDING ON CASTED ALSI10MG PLATES WITH TAGUCHI – GRAY RELATIONAL ANALYSIS”, 2nd July, 2021, **Global Journal of Engineering and Technology Advances**, 08(1), Page: 001 – 009, eISSN: 2582–5003, : <https://doi.org/10.30574/gjeta.2021.8.1.0095>
14. Abhijeet H. Kekan, **B. Raghu Kumar**, “ARTIFICIAL NEURAL NETWORK AND FINITE ELEMENT INVESTIGATION OF CRACKED ROTOR SHAFT”, **Turkish Journal of Computer and Mathematics Education**, Volume 12, Issue 7, May 2021, pp 1311–1319, ISSN: 1309–4653.
15. 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
16. 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.
17. Makkena Veeranjanyulu., **Dr. B Raghu Kumar**, Dr. Anay Jain., “PREDICTION OF INPUT PARAMETERS BY OPTIMIZATION OF RESPONSE VARIABLES IN UNIVERSAL VERTICAL MILLING OF AL6063 -T6 ALLOY”, **International Journal of Advanced Research in Education & Technology (IJARET)**, Vol 8, Issue 2, June 2021, pp 60–65, ISSN: 2394–2975.
18. 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.

19. 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, ISSN: 2347 – 3983
20. 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.
21. 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.
22. 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) ISSN 1974-9821
23. 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
24. Abhijeet H. Kekani, **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
25. Arun Babu, I., **B. 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: 22783075, pp 1728–1732.
26. 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), Vol. 10, Issue 06, June 2019, ISSN Print: 0976-6340 and Online: 0976-6359, pp 232 – 240
27. 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. pp2646 – 2650.
28. 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.
29. Abhijeet H. Kekan, **B. Raghu Kumar**, “CRACK DEPTH AND CRACK LOCATION IDENTIFICATION USING ARTIFICIAL NEURAL NETWORK”, **International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)** (Scopus Indexed).; ISSN (P): 2249–6890; ISSN (E): 2249–8001; Vol. 9, Issue 2, April 2019, 685 – 694
30. 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/jmerd.01.2019.89.93>
31. 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, EISSN: 2348 – 1269, P-ISSN:2349 – 5138, pp: 290 – 295.
32. 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.
33. 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.
34. AVS Ram Prasad, Koonam Ramji, **B. Raghu Kumar**, “STUDY OF WIRE- ELECTRICAL 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)
35. 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)
36. 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.
37. 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
38. 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
39. 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

40. 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”, **ARPJ Journal of Engineering and Applied Sciences**, (Scopus Indexed), Vol: 11, Issue:15, August 2016, pp: 9171 – 9176, ISSN: 1819 – 6608.
41. K.Ravi Prakash Babu, **B Raghu Kumar**, K Mallikharjuna 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
42. K.Ravi Prakash Babu, **B Raghu Kumar**, K L Narayana, K Mallikharjuna Rao, “MULTIPLE CRACK DETECTION IN BEAMS FROM THE DIFFERENCES IN CURVATURE MODE SHAPES”, **ARPJ Journal of Engineering and Applied Sciences**,(Scopus Indexed), Vol: 10, Issue:4, 2015, pp: 1701 – 1710, ISSN: 1819 – 6608.
43. 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.
44. 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.
45. 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.
46. 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.
47. 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
48. 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
49. 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
50. 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.
51. 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.
52. 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.
53. **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.
54. 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
55. **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.
56. 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 BOILERFEED 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.

57. **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.
58. **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
59. **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
60. **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), 26th and 27th 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), 26th and 27th March, 2021, PVPSIT, Vijayawada, pp 163 – 169
3. K. Ravi Prakash Bab, **B. Raghu Kumar**. (2020) "Condition Monitoring of TurbineBlades 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](https://doi.org/10.1007/978-981-15-1307-7_23) (SCI and Scopus Indexed) ISBN: 978-981-15-1306-0
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., Gopisetti, 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 CROSS ACCUMULATIVE 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, 22nd 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 – 2017
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, 29th and 30th 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. 2nd 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 MACHINING” 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. Programming, Algorithms, Data Structures using Python with 63% in July – September 2024 (8 Weeks Course)
- b. Data Science for Engineers with 80% in July – September 2023 (8 weeks course)
- c. Problem Solving Through Programming in C with 85% in January April 2020 (12 weeks course)
- d. Mechanics of Human Movement with 76% in July – October 2018 (12 weeks course)
- e. 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. Delivered a **Lecture as a resource person** in FDP on “Recent Advances in Mechanical Engineering” organized by Nadimpalli Satyanaraya institute of Technology, Vizag on 06thJune, 2023
2. Delivered a **Guest Lecture** on Outcome Based Education organized by Vahini institute of Technology, Tiruvuru on 15thJune, 2023
3. Received certificate from Ministry of Educative Innovative cell and AICTE for exceptional contribution as a **Primary Evaluator in Toycathon, 2021**
4. Selected as “**Member of Editorial Board**” for Journal of Experimental and Applied Mechanics” of STM Journals.
5. Acting as a **Member of BoS** for VVIT, Guntur, an Autonomous Institute.
6. Delivered a **Lecture as a resource person** in FDP on “Frontiers in Mechanical Engineering” organized by KKR & KSR, institute of Technology, Guntur on 11thJune, 2020
7. Delivered a **Lecture as a resource person** in FDP on “Outcome Based Education” organized by NRI Institute of Technology, Agripalli on 10th June, 2020
8. Delivered a **Lecture** at SDMS Mahila Kalasala on new proforma of NAAC on 1st June, 2018

9. **Chaired a session in the International Multidisciplinary Conference** on “Knowledge sharing, Technological Advancements and Sustainable Development (IMC2k18) at PVPSIT, on 30th and 31st March 2018
10. 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 1st March, 2018.
11. Received “**Jai Upadhaya Award**” by Lions Club of India.
12. Delivered **lecture as Resource person** in 5-day Faculty development program at VVIT. On 24th Oct, 2017
13. Delivered **Guest lecture** on “Gyroscopes” to students at KKR & KSR Institute of Technology, at Guntur.
14. Acted as Judge for National Level Student Paper contest “EPISTEMICON2K17” conducted Andhra Loyola Institute of technology and Engineering.
15. Acted as Judge for National Level Student Paper contest “LAKSHYA2K17” conducted by LakkireddyBalireddy College of Engineering.
16. Acted as Judge for National Level Student Paper contest “KITSYUVA-17” conducted by KKR & KSR Institute of Technology, Guntur..
17. Acted as Judge for National Level Student Paper contest “SARADHIFEST–15” conducted by SARADHI Institute of Technology,Nuzivedu.
18. Acted as Judge for National Level Student Paper contest “ANVESHANA–14” conducted by Sasi Institute of Technology, Velivenu.
19. Acted as Judge for National Level Student Paper contest “ANUSODHANA–13” conducted by Acharya Nagarjuna University, Guntur.
20. Acted as Judge for National Level Student Paper Contest “SRUJANA–12”Conducted by PACE Institute of Technology, Ongole.
21. Received **Best Teacher Award**at K L University for the Academic year 12-13
22. Received **Best Teacher Award** at K L University for the Academic year 11-12.
23. Received **Best Teacher Award** at K L University for the Academic Year 10-11
24. Co-chaired International Conference on Multi Body Dynamics Conducted by K L University in 2011.

Events Organized – Govt. Sponsored

1. Conducted Two – day **National Seminar** on “Intelligent systems” as convener, sponsored by **SERB**. File No: SB/SS/157/15-16.

2. Conducted Two-week Faculty Development Program (FDP) on “Applications of IoT in Mechanical Engineering” sponsored by ATAL. Application number: 1650886666. File No: AICTE/SCRO/ATAL FDP/2022-23/656 from 14th Nov. 2022 to 25th Nov. 2022.

Events Organized – College Sponsored

1. Conducted Two day **ONLINE – National level Techno Cultural Fest- SITAR** (College Fest) as a Coordinator at PVPSIT, on 25th and 26th March, 2022
2. Conducted one day **National level Techno Cultural Fest- SITAR** (College Fest) as a Coordinator at PVPSIT, on 25th January, 2020
3. Conducted Two Day **National Conference** on “Recent Advances in Mechanical Engineering and Materials Characterization – 2019 (NCRAMEMC – 19) on 15th and 16th March, 2019
4. Conducted One day **National Conference** on “Recent Advances in Mechanical Engineering – 17 (NCRAME – 17) on 2nd December, 2017.
5. Conducted A two-day **Faculty Development Program** on “Powder Metallurgy and Particulate Materials – Fundamentals and Industrial applications” as a Convener on 10th and 11th November, 2016.
6. Convener for **Yantrik – 15** (Department level): A national level paper contest/workshops/spot events/quizzes for 3 days. (9th to 11th 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. (27th to 28th 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, 2019.
2. **Coordinator IQAC:** Submitted NAAC SSR in new format in 2023. College got A+ on seven-point scale.
3. **Coordinator NAAC:** Submitted NAAC SSR in new format in 2018. College got A+ on seven-point scale.
4. **Coordinator – Freshmen Engineering Department:** Responsible for handling of 3160 students, 5 departments and 150 faculty.
5. **Director – Academic Registration:** Responsible for registering all the students at the beginning of each semester.
6. **Associate Director – Academic Registration:** Responsible for registering all the students at the beginning of each semester.
7. **Alternate HOD – Mechanical Engineering Department, K L University.**

8. **Professor In – charge Boys Hostel:** Responsible to look after all the activities that are involved in Hostels.
9. **Professor In – charge Principal Office:** Responsible to look after all the documents to maintain and communicate to various authorities internally as well as externally.
10. Actively involved in the works related to various accreditation authorities' visits at central level like **NBA, NAAC, Autonomous** status and **Deemed to be University** status.
11. **Internal Core committee member** for NAAC.
12. **Associate coordinator** for Aerospace and Energy Research Center.
13. Member of **Board of Management, K L E F University.**
14. 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 Material Research Society of India (**MRSI**) – LMB3776
4. Life Member of International Association of Engineers (**IAENG**) – LM196456

Work Shops/Conferences/FDPs Attended

S.NO	Title	Institution	Duration
1	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 th to 23 rd February, 2019
4	One week FDP on Computational Fluid Dynamics	VVIT, Guntur	29 th April to 3 rd May 2018
5	One week FDP on Research Skills Development	PVPSIT	9 th to 13 th April, 2018
6	STPP on Intelligent computing And Deep Learning	PVPSIT	20 th to 25 th Nov. 2017
7	Finite Element Analysis of Structures Software (FEAST)	ISRO & PVPSIT	3 rd and 4 th August, 2017

8	The Faculty Knowledge Program	ICFAI Business School	20 th July, 2017
9	One day national Workshop on Recent Advances in Mechanical Engineering	JNTUCE, Kakinada	30 th June, 2017
10	Jeevan Vidya (Human Values)	KLU	19 th to 24 th Mar 2014
11	STTP on Lifting and optimization of Multi Body Dynamics	ALTAIR & KLU	6 th to 10 th Oct 2010
12	High impact Skills	WIPRO	26 th , 27 th Oct. 2009
13	Quality Management Systems	PQMC	13 th , Oct, 2009
14	Advanced Composites & Nano	JNTUK	21 st , March, 2009
15	Recent Advances in experimental Fluid Mechanics	KLCE	3 rd – 6 th March, 2008
16	SDP on Design for Manufacture and Assembly	Amrita University	23 rd April to 4 th May, 2007
17	Applications of Condition Monitoring	KLCE	23 rd September, 2006
18	Applications of Optimization Techniques in Industrial Engineering	KLCE	10 th December, 2005
19	Gas Dynamics and Its Applications	KLCE	7 th – 8 th November, 2005
20	Teaching Methodology	NITTR, Chennai	16 th to 21 st May, 2005
21	Advances in Finite Element Methods	JNTUK	3 rd to 7 th January, 2005.
22	Enhanced Properties of Thermoplastic Composites and their Applications	India Composites	29 th November, 2009

Subjects taught

Sl.No.	Subject
1.	Engineering Mechanics
2.	Kinematics of Machines
3.	Dynamics of Machines
4.	Mechanical Vibrations
5	Strength of Materials
6.	Advanced Strength of Materials
7	Applied Mechanics
8	Finite Element Method
9	Design of Machine Elements

10	Design of Transmission Elements
11	C – Language
12	Robotics