Name of Faculty Mr. K. GURUBRAHMAM Designation Assistant Professor Nature of Job/Appointment Regular Date of Joining 17 - 10 - 2016E-mail gurubrahmam\_mech@cbit.ac.in **Education Qualifications** Name of the Degree Class Ph. D Doctor of Philosophy (Mech) Pursuing M. E. (Machine Design) PG Distinction UG B. Tech. (Mechanical) Distinction **Work Experience** Teaching 5 Years Research Industry 02 years Others Mechanical Vibrations and Acoustics, Experimental Modal Analysis, Area of Specialization Smart Materials (PZT), condition monitoring, Digital Signal Processing. Professional Memberships Institute of Smart Structures and Systems (ISSS) Life Member Responsibilities held at Institution Level Responsibilities held at Department Member, Course Expert Group. Level Research Guidance Awards Received Mechanical Vibrations, Machine Drawing, Dynamics of Machines, Courses Handled at Under Graduate / Kinematics of Machines, Design of Machine Elements, Advanced Post Graduate Level. Vibrations and Acoustics. National Journals -International Journals - 11 No. of Papers Published National Conference -International Conference - 1 **Projects Carried out Patents Technology Transfer** Invited Speaker No. of Books/Chapter Published with details

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops.Other

(Attended

and/or

**Trainings** 

Organized).

 Participated in FDP on "Molecular Manufacturing" 2020-10-19 to 2020-10-23- One Week ALL INDIA COUNCIL FOR TECHNICAL EDUCATION-CBIT AICTE Training And Learning (ATAL) Academy

 HONOUR CODE CERTIFICATE-MOOCS 15 July 2020 to 15 December 2020.- 5 Months This course is offered by IITBombayX, an online learning initiative of Indian Institute of Technology Bombay Indian Institute of Technology Bombay

- short course on "Learn to Design your own Solar Home System Approximately 2 Weeks Energy Literacy Drive
- FDP ON Vibration and signal processing 14-12-2020 to 18-12-2020 & 21-12-2020 to 24-12-2020 & 26-12-2020 -One Week IIT-MADRAS
- 5. Faculty Development Program on "Recent Advan ces in Mechanical Engineering: A Research Perspective" 6-10 July,

- 2020- One Week Department of Mechanical Engineering (Mechatronics).-MGIT
- Faculty Development Programme- on Engineering Optimization 13/07/2020 to 17/07/2020-One Week Mechanical Engineering Department NITTTR, Chandigarh NATIONAL INSTITUTE OF TEACHERS TRAINING AND RESEARCH
- Faculty Development Program on "ADVANCED MATERIALS AND MANUFACTURING" 29/06/2020 to 03/07/2020-One Week Kakatiya INSTITUTE OF TECHNOLOGY & SCIENCE IIC
- 8. Short Term Training Program" on "Modeling and Analysis using MATLAB and Python for Mechanical Engineering Applications"3rd to 8thAugust 2020.-One Week VNR VIGNANA JYOTHI INSTITUTE OFENGINEERING AND TECHNOLOGYAICTE Sponsored
- Orientation/Refresher Programme on "Engineering Applications of Optimization" 03.05.2021 to 08.05.2021 - One Week Rajiv Gandhi Government Polytechnic College, Itanagar, Arunachal Pradesh. AICTE Sponsored
- 10. REFRESHER COURSE ON CHAITNAYAM 29-6-2020 TO 5-7-2020 8 Days CBIT
- 11. webinar on "Rotating Machinery Fault Diagnosis Using Vibration Analysis" 27.07.2020-One Day organized by Department of Mechanical Engineering, National Engineering College, kovil patti
- 12. "VIRTUAL LABS: HANDS-ON WORKSHOP" For the faculty of all Disciplines of Engineering 18th July 2020 One Day Organized by PVG's COET, Virtual Labs Regional Center (Pune) RCID 01 Jointly with AISSMS COE, Nodal Center in Coordination with BoS (E & TC) Savitribai Phule Pune University (SPPU) & Virtual Labs-Indian Institute of Technology Bombay, Mumbai
- 13. workshop on "SMART MANUFACTURING: CONNECTED FACTORIES"17th JUNE 2021, One Day Institution of Engineers(India), Telangana State Centre in Association with Department of Mechanical Engineering, CBIT,Hyderabad-75. Institution of Engineers (India), Telangana State Centre in Association with Department of Mechanical Engineering, CBIT,Hyderabad-75.
- 14. webinar on "Investigation of the effect of cracks on vibration parameters of a cantilever beam" 07.07.2020 One Day Department of Mechanical Engineering, Gharda Institute of Technology, Ratnagiri
- Workshop on copyrights in India 20 Nov 2020 One Day CPIP, CPIP
- Two day Webinar on "Recent Developments in Manufacturing 16th and 17th August 2020 Two Days Anurag University Anurag University
- 17. First Leadership Talk with Shri Shashi Shekhar (CEO- Prasar Bharti) Held on 11 July, 2020 One Day Chief Innovation Officer, MHRD's Innovation Cell by MHRD's Innovation Cell
- webinar on "VIBRATION CONTROL OF ROTARY MACHINES" 18.07.2020. One Day organized by the RIT Mech CAD Centre in association with RIT SAE India Southern Section, Department of Mechanical Engineering, Ramco Institute of Technology, Rajapalayam-626117
- Webinar on "Shape memory alloyes applications and research opprinunities. 7th july 2020 One Day Vignan institute of technology and science Vignan institute of technology and science
- Webinar on STATISTICAL ANALYSIS AS AN INTERFACE IN ENGINEERING PROBLEMS 13th July 2020. One Day organized by Department of Mathematics - CBIT
- 21. Participated FDP on "INDUSTRY 4.0 a vision of design and manufacturing" by CBIT, during 16-20 JUNE 2020
- 22. Participated FDP on "Recent innovation and technologies in electric vehicles" by GATES, hyd during 8-12 June 2020.
- Participated FDP on "Latex and technical report writing" by KU AND IIT-B during 25-30 May 2020.

- 24. Participated FDP on "OUTCOME BASED EDUCATION: A STEP TOWARDS EXCELLENCE" by Government College of Engineering, Karad during 11-15 May 2020.
- Participated FDP on "Research Methodology" by Shri Chatrapati Shivajiraje College of Engineering, during 20-25 May 2020.
- 26. Participated FDP on "Modeling and Simulation using MATLAB " by NITTTR, Chandigarh during 18-22 May 2020.
- 27. Participated FDP on "SCILAB programing" by iit-b, during 25-30 May 2020.
- Participated FDP on "Effective and Efficient Online Teaching in the Age of Corona, A Hands On Workshop" by iit-b, during 14-16 May 2020.
- 29. Participated FDP on "finite element methods for engineers" by Chakra University, during 20-24 April 2020.
- Participated FDP on "outcome based education and NBA accreditation Process-(UG)" by CBIT, during 28-05 to 01-06 2020.
- 31. Participated FDP on "NPTEL course NBA Accreditation and Teaching Learning in Engineering (NATE) (12 Weeks) on the SWAYAM platform (swayam.gov.in), during the Jan-Apr 2020 semester".
- 32. Completed courses offered by Coursera
  - a. Al For Everyone from deeplearning.ai
  - b. Fundamentals of waves and vibrations from École Polytechnique
  - c. Introduction to Acoustics (Part 2) from Korea
    Advanced Institute of Science and
    Technology(KAIST)
  - d. COVID-19: What You Need to Know (CME Eligible) from Osmosis
  - e. Intro to Acoustics (Part 1) from Korea Advanced Institute of Science and Technology(KAIST)
  - Introduction to Basic Vibrations from Korea Advanced Institute of Science and Technology(KAIST)
  - g. Fundamentals of Fluid-Solid Interactions from École Polytechnique During july 2019 to june 2020.
- Attended Webinar on "Use of ICT in Good Governance" Organized by Rajkiya Engineering College Banda on 07-june-2020.
- 34. Attended Webinar on "Nano-materials and Detection Technique of COVID-19" Organized by Babu Shivnath Agrawal (P.G.) College, Mathura (U.P.) India on 07-june-2020.
- 35. Attended Webinar on "NextGen Solutions Amidst COVID-19" Organized by Anurag Group of Institutions, Ghatkesar (M), India on 24-May-2020.
- 36. Attended Webinar on "Essential for matlab" Organized by Data Tech, India on 29 to 30-May-2020.
- 37. Attended Webinar on "digital transformation" Organized by storm oversees on 12-May-2020.
- 38. Attended Webinar on "cyber security" Organized by storm oversees on 16-May-2020.
- Participated Short-Term Training on "Engineering research methodology" by OU-HYD, during the dec 09 to 13 Dec 2019".
- Presented a poster and a oral paper on Research day organized by CBIT, during 23 Aug 2019
- 41. Participated in one day symposium on "significance of Sanskrit for technological research, organized by cbit-hyd on 8<sup>th</sup> sep
- Participated in the AICTE Sponsored 2day National seminar on "Machinery Vibration Analysis (MVA-2017) by CBIT, HYD during 5-6<sup>th</sup> October 2017.
- Participated one week FDP on" Emerging Trend in Composite Materials and Industrial Applications" –(TEQIP-II) Organized by CBIT(A) during march 20-25,2017
- Participated one week FDP on Finite Element Application in Mechanical and civil Engineering –(TEQIP-II) Organized by CBIT(A) during Jan 23-28,2017
- Participated FDP on "Meeting Challenges of teacher in modern Engineering education" by ITC, CBIT, hyd during 12-17 june 2017.



Details of Journal Publications/ Conferences (National and International)

## International/National Journals from the Year 2017

- 1. M. Baburam, Dheeraj k gara, K. Damodhar & K.Gurubrahmam( Dec 2019)," A review on process parameters associated with constitutive modelling of shape memory alloys-2", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD),ISSN(P): 2249–6890; Vol. 9,Issue 6,pp. 149–160.
- K Gurubrahmam, M. Baburam, A. Venkata sai kumar & dheeraj k gara, (Aug 2019.), "A short review on constitutive modelling of the shape memory alloys-1", international journal of mechanical and production engineering research and development (ijmperd)., ISSN (p): 2249-6890; ISSN (e): 2249-8001 vol. 9, issue 4, pp. 849-858.
- 3. P. Kiran kumar,k. Gurubrahmam & j. V. Subrahmanyam(jun 2018)," Analysis of base excited stainless steel cylindrical shell subjected to horizontal acceleration", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), ISSN(p): 22249-6890,issn:2249-8001,special issue, ,pp. 14-21.
- 4. Effect Of Frequency On Cantilever Beam with Different Locations of Smart Patch. K.Gurubrahmam, T.N.Aditya, Dr M.D. Aleem Pasha, A. Chandrakanth. International Research Journal of Engineering and Technology (IRJET), Volume Volume: 09 Issue: 06 Jun 2022, Year 2022, Pages 2920-292.
- 5. Experimental Studies on Estimation of Damping: Cantilever Beam. K. Guru Brahmam. International Journal of Scientific Research in Science and Technology, Volume Volume 9 Issue 3, Year 2022, Pages pp. 653-659.
- 6. Design of Novel Planetary Transmission System Integrated with Differential for Automatic Transmission in Automobiles, Aditya T.N, Gurubrahmam, Chandrakanth ,Dr. Aleem Pasha, article International Research Journal of Engineering and Technology (IRJET), Volume Volume: 09 Issue: 06 | , Year 2022, Pages 2746-2757
- 7. Optimization of EDM Process Parameters for Machining SS310, A. Chandrakanth, Dr. Md. Aleem pasha, T.N. Aditya, K. Gurubrahmam, article Research Journal of Engineering and Technology (IRJET), Volume Volume 9, Issue 6, June 2022, Year 2022, Pages 3269-3273
- Tensile and Wear Property Analysis of Friction Stir processed Metal Matrix Composite of AA7075, Dr. Md. Aleem Pasha, A. Chandrakanth, K. Gurubrahmam, T. N. Aditya, International Research Journal of Engineering and Technology (IRJET), Volume Volume 9, Issue 6, June 2022, Year 2022, Pages 3024-3028
- 9. Investigating Various Modal Analysis Extraction Techniques to Estimate Damping Ratio K. Gurubrahmam, A. Chandrakanth, T.N. Aditya, Dr. Md. Aleem Pasha, article Journal of Xi'an University of Architecture & Technology, Volume Volume XIII, Issue 6, 2021, Year 2021, Pages 353-361.
- Development of 3D printed model using medical CT scan data with optimum build time K. Gurubrahmam, A. Chandrakanth, T.N. Aditya, Dr. Md. Aleem Pasha article Journal of Xi'an University of Architecture & Technology, Volume Volume XIII, Issue 6, 2021, Year 2021, Pages 341-345.
- Friction Stir Welded Joint Efficiency of Aluminium Alloy 6061-T6 K. Gurubrahmam, A. Chandrakanth, T.N. Aditya, Dr. Md. Aleem Pasha article Journal of Xi'an University of Architecture & Technology, Volume Volume XIII, Issue 6, 2021, Year 2021, Pages 186-191
- Experimental Investigation on Influence of Process Parameters for Machining AISI 310 on EDM, K. Gurubrahmam, A. Chandrakanth, T.N. Aditya, Dr. Md. Aleem Pasha, article Journal of Xi'an University of Architecture & Technology, Volume Volume XIII, Issue 6, 2021, Year 2021, Pages 791-796