

BIO-DATA

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Educational Qualifications :

Name of the Examination	Board/ University	Year of Passing	Subjects Studied	% of Marks
B.Tech.	J.N.T.U, Hyderabad	2000	Mechanical Engineering	77.7
M.Tech	IIT Madras	2003	Machine Design	83.5
<u>Ph.D (pursuing) NIT Warangal</u>				

Professional Experience:

1. Lecturer in the Department of Mechanical Engineering, V.R. Siddhartha College of Engineering, Vijayawada, July,2003 to April, 2007.
2. Team Leader in software testing division of V.J. Core Soft Private Ltd., Pune from April2007 to July, 2009.
3. Associate Professor in the Department of Mechanical Engineering, P.V.P. Siddhartha Institute of Technology, Vijayawada, Aug 2009 to till date.

No. of Projects guided: 10 M.Tech and 20 B.Tech projects

Subjects handled for UG and PG Students: Robotics, Mechanical Vibrations, Finite Element methods, Design of Machine Elements, Mechanics of Materials, Dynamics of machines

Publications:

INTERNATIONAL JOURNALS:

4. **U. Koteswara Rao**, V. Bala Krishna Murthy, and V. Anurupa, “Modal Analysis of Thin FRP Skew Symmetric Cross-Ply Laminate With Elliptical Cutout”, International Journal of Applied Engineering Research, Volume 5, number 2,2010, pp.361-366.

5. P. Phani Prashanthi, Dr. V. Bala Krishna Murthy **U. Koteswara Rao** and Dr. K. Mohana Rao, "Effect of Mismatch in Poisson's Ratio on Micromechanical Behaviour of FRP Composites under Longitudinal Loading" International Journal of Materials Science, ISSN 0973-4589 Volume 5, Number 4 (2010), pp. 503-509
6. Nagaraju Cherukuri, **U. Koteswara Rao**, K. Mallikarjuna Rao and K.V. Ramana "Development of Micro Electro Mechanical Sensor for Rotor Bearing System" International Journal of Materials Science, ISSN 0973-4589 Volume 6, Number 2 (2011), pp. 191-196
7. S. Azeezul Rehman, **U. Koteswara Rao and Dr. V. Bala Krishna Murthy**, " Geometric Nonlinear Analysis of Cross-Ply FRP Circular Plate with Circular Cutout" International Journal of Applied Engineering Research ISSN 0973-4562 Volume 6, Number 17 (2011) pp. 2019-2026.
8. A. Deepa Reddy and **U. Koteswara Rao** "Analysis of Piezoelectric Materials using Finite Element Method" Global J. of Mech., Engg. & Comp. Sciences ISSN 2277-6664 Volume 2, Number 4 (2012) pp. 164-167
9. Sankararao Vinjavarapu, **Unnam Koteswara Rao** and V. Lakshmi Narayana" Design Optimization of Tipper Truck Body" International Journal of Engineering Research and Development e-ISSN: 2278-067X, p-ISSN: 2278-800X Volume 4, Issue 9 (November 2012), PP. 11-20.
10. N. Siva Naga Raju, **U. Koteswara Rao**, M.V.H. Satish Kumar "Modeling and Analysis of an Innova Car chassis frame by varying cross section" International Journal of Engineering Research & Technology, Vol. 2 Issue 12, December-2013, ISSN: 2278-0181, PP. 186-188.
11. P. Vinod, **U. Koteswara Rao**, Ch. Kishore Reddy" Analysis of Railway Wheel to Study the Stress Variations" International Journal of Engineering Research & Technology, Vol. 3 Issue 2, February- 2014, ISSN: 2278-0181, PP. 1286-1291.
12. P. Murali Krishna, **U. Koteswara Rao**, R. Vijaya Kumar " Design Optimization of Rotor Craft Horizontal Tail Plane using FEA " International Journal of Engineering Research & Technology, Vol. 3 Issue 12, December- 2014, ISSN: 2278-0181, PP. 165-172.
13. K. Mahesh Babu, Dr. K. Sivaji Babu, **U. Koteswara Rao**, " Repair of notched cantilever beam by piezoelectric material" International Journal of Research in Mechanical Engineering & Technology, Vol. 5 Issue 2, May- 2015, ISSN: 2249-5770, PP. 38-43.
14. G. Rajendra, **U. Koteswara Rao**, " Experimental Investigation of Damping Performance of Mixed particle-viscous damper", International Journal of Advanced Research in Engineering & Management, Vol. 02 Issue 01, January- 2016, , PP. 10-15.
15. Parasaram Sarath Chandra, Dr. K. Sivaji Babu and **U. Koteswara Rao** "Design and Analysis of an Axial Fan applicable for Kiln Shell Cooling" International Journal of Engineering Development and Research, Volume 4, Issue 4 | ISSN: 2321-9939, Dec-2016, pp 887-893
16. Rakesh Potluri and **U. Koteswara Rao** "Determination of Elastic Properties of Reverted Hexagonal Honeycomb Core: FEM Approach" Materials Today: Proceedings 4, October 2017, pp8645-8653
17. Sai Ashok .M, and **U. Koteswara Rao** "Failure Analysis of Unidirectional Composite Pinned-Joints" International Journal of Engineering Development and Research, Volume 5, Issue 4 | ISSN: 2321-9939, October 2017, pp139-147.

18. Karun Kumar R, and U. Koteswara Rao “Vibration control of a simply Supported beam using piezoelectric Materials” Journal of Emerging Technologies and Innovative Research (JETIR), Volume 5, Issue 6 | ISSN: 2349-5162, June 2018, pp432-440.
19. U. Koteswara Rao “Numerical analysis and performance Studies of active repair of cracked Aluminum panel using piezoelectric Patches” Journal of Emerging Technologies and Innovative Research (JETIR), Volume 6, Issue 1 | ISSN: 2349-5162, January 2019, pp388-395.
20. P Bharathi, U Koteswara Rao, Ch Lakshmikanth, Ch Vidya, and T J Prasanna Kumar “Multi Regression Analysis of Wire Electrical Discharge Machining Based on Taguchi Method” Journal of Emerging Technologies and Innovative Research (JETIR), Volume 6, Issue 4 | ISSN: 2349-5162, April 2019, pp606-612.

INTERNATIONAL CONFERENCES:

1. A.V. Sudhakar, M.S.R. Niranjan Kumar and **U. Koteswara Rao**, “Features of finite element software– ANSYS and its application for a Structural problem”, International conference on current trends of Information of Technology (MERC-2005), organized by S.R.K.R. Engineering College, Bhimavaram, Oct. 1-3, 2005, pp 250-252.
2. V. Bala Krishna Murthy, V.S. Shivakar, A.V. Sudhakar, and **U. Koteswara Rao**, “Finite Element Modeling and Simulation for the *Shear and Thermal behavior of FRP lamina*”, International Conference on Emerging Adoptive Systems and Technologies (EAST-2005), organized by Noorul Islam College of Engineering, Kumaracoil, Tamilnadu, Dec. 16-17, 2005, pp 966-975.
3. Y.V.D Rao, V. Bala Krishna Murthy, **U. Koteswara Rao**, and M.S.R. Niranjan Kumar, “*Free Vibration Analysis of Three Layered C-P Sandwich Beam*”, International Conference on Resource Utilization and Intelligent Systems (INCRUIS-2006), organized by Kongu Engineering College, Tamilnadu, Jan. 4-6, 2006, pp 197-201
4. V. Bal Krishna Murthy, V. S. Shivakar, **U. Koteswara Rao** and Dr. K. M. Rao, “Prediction of Shear and Thermal properties of GFRP Laminates”, International Conference on Total Engineering, Analysis & Manufacturing Technologies (TEAM TECH2006), IISc Bangalore, Feb28th -March2nd 2006, pp 18-19.
5. M.S.R. Niranjan Kumar, K.M. Rao, V. Bal Krishna Murthy and **U. Koteswara Rao**, “Finite Element Analysis of FRP Laminated Cantilever Beam”, International Conference on Total Engineering, Analysis & Manufacturing Technologies (TEAM TECH2006), IISc Bangalore, Feb28th -March2nd 2006, pp 100.
6. V. Bala Krishna Murthy, V. S. Shivakar, **U. Koteswara Rao** and Dr. K. M. Rao, “Prediction of Mechanical Properties of FRP Laminates Using Finite Element Method”, International Conference on **Global Manufacturing and Innovation (GMI)**, being by Coimbatore Institute of Technology jointly with University of Massachusetts, U.S.A., Coimbatore during 27-29 July 2006, pp171.
7. M.S.R. Niranjan Kumar, K. Mohana Rao, V. Bala Krishna Murthy and **U. Koteswara Rao**, “Finite Element Analysis of FRP Laminated Indeterminate Beam”, International Conference on Advances in Materials

Processing and Characterization (AMPC 2006), organized by College of Engineering, Guindy, Anna University during 28-30 August 2006, pp709-715.

8. M.S.R. Niranjana Kumar, V. Bala Krishna Murthy and **U. Koteswara Rao**, “Thermoelastic Analysis of Skew Angle-Ply Laminated Composite Plate with a Circular Cutout”, International Conference on Advanced Design and Manufacturing (ICADM-2007), organized by Department of Mechanical Engineering and Department of Production Engineering, Sethu Institute of Technology, Pulloor, Tamilnadu, India during 9-11 August 2007.
9. P. Phani Prasanthi, Dr. V. Bala Krishna Murthy, and **U. Koteswara Rao**, “Effect of Mismatch in Young’s modulus on Micro Mechanical Behavior of FRP Composites Under Transverse Loading” of a Circular Plate using Finite Element Analysis”, International Conference on Total Engineering, Analysis & Manufacturing Technologies (TEAM TECH2009), Bangalore, 2009, pp. 29.
10. Nagaraju Ch, Harikrishna Ch, **Koteswara Rao U**, “Vibration Analysis of Structural Element by employing Spectrum Analyzer”, **International Conference on Emerging Materials and Processes (ICEMP-2014)**, Organized by CSIR-Institute of Minerals and Materials Technology, Bhubaneswar, during 26th - 28th February 2014.
11. Koteswara Rao U, Dr. P. Bangaru Babu, Dr. Nagaraju C, “Active Repair of Engineering Structures Using Piezoelectric patches”, 17th ISME Conference Organized by IIT Delhi, New Delhi, during 3rd - 4th October 2015.
12. Rakesh Potluri and U. Koteswara Rao, “Determination of Elastic Properties of Reverted Hexagonal Honeycomb Core: FEM approach” International Conference on Advances in aero mechanical Materials for manufacturing (ICAAMM-2016), 28-26 June 2016.

NATIONAL CONFERENCES:

1. **U. Koteswara Rao**, K. Sivaji Babu, A.V. Sudhakar and V. Bala Krishna Murthy, “*Static Analysis of thin FRP Clamped Circular Plates*”, National Conference on Mechanical Engineering Research (NCMER 2005), 28th Feb. 2005, Mechanical Engineering Department, Bharath Institute of Higher Education and Research, Chennai, pp. 26-33.
2. **U. Koteswara Rao**, V. Bala Krishna Murthy and YVD Rao “*Static Analysis of thin FRP Clamped Circular Plates with circular cutouts*”, National Symposium on Recent Trends in Mechanical Engineering (*TECHNOHEIGHTS-2005*), 12th March 2005, Mechanical Engineering Department, Vignan Institute of Technology and Science, Deshmukhi, Nalgonda, pp. 2.
3. **U. Koteswara Rao**, K. Sivaji Babu, A.V. Sudhakar and V. Bala Krishna Murthy, “*Static Analysis of thin FRP Clamped Circular Plates with Square cutouts*”, National Conference on Recent Trends in Design and Manufacturing technologies, (*RTDMT-2005*), March 17-18, 2005. Mechanical Engineering Department, Kumaraguru College of Technology, Coimbatore, pp. 54.
4. V. Bala Krishna Murthy, **U. Koteswara Rao**, A.V. Sudhakar and V. Rama Chandra Raju, “*Static Analysis of thin FRP Trapezoidal Laminates*”, National Conference on Composite Materials (nccm 2005), March 18-19, 2005, Department of Mechanical Engineering, IET, Bhaddal, pp. 110-114.

5. **U. Koteswara Rao**, K. Sivaji Babu, A.V. Sudhakar and V. Bala Krishna Murthy, “*Static Analysis of three layered cross – ply thin FRP Trapezoidal laminates*”, National Conference on Advances in Mechanical Engineering (AIM-2005), May 13-14, 2005. Mechanical Engineering Department, Vasavi College of Engineering, Hyderabad, pp. D101-D103.
6. Y.V.D Rao, V. Bala Krishna Murthy, **U. Koteswara Rao**, and V. Rama Chandra Raju, “Free Vibration Analysis of Three Layered C-C Sandwich Beam”, National Conference on Composite Component Construction (NCCCC2K5), organized by JNTU College of Engineering, Kakinada, A.P. during 12-13th September 2005, pp 104-108.
7. V. Bala Krishna Murthy, G. Samba Siva Rao and **U. Koteswara Rao**, “Finite Element Simulation of Micro-Thermoelastic Behaviour of GFRP Lamina using Square Array Model”, National Conference on Technological Advancements in Mechanical Engineering (TAME-2005), Organized by Department of Mechanical Engineering, Sreenidhi Institute of Science & Technology, Hyderabad, Andhra Pradesh during December 2-3, 2005, pp 253-256.
8. M.S.R. Niranjan Kumar, K. Mohana Rao, V. Bala Krishna Murthy and **U. Koteswara Rao**, “Static Analysis of FRP Laminated Composite Beams”, National Conference on Technological Advancements in Mechanical Engineering (TAME-2005), Organized by Department of Mechanical Engineering, Sreenidhi Institute of Science & Technology, Hyderabad, Andhra Pradesh during December 2-3, 2005, pp 257-262.
9. A. Gogulu Kumar, L.G. Kiran Kumar, V. Bala Krishna Murthy and **U. Koteswara Rao**, “Static Analysis of Simply Supported Thick Circular Plates”, National Conference on Computer Applications in Mechanical Engineering, (CAME-2005), Organized by Department of Mechanical Engineering, J.N.T.U. College of Engineering, Anaparthi, Andhra Pradesh during December 2-3, 2005, pp 35-38.
10. M.S.R. Niranjan Kumar, **U. Koteswara Rao**, V. Bala Krishna Murthy and K. Sivaji Babu, “Static Analysis of Fixed FRP Laminated Composite Beams”, National Conference on Computer Applications in Mechanical Engineering, (CAME-2005), Organized by Department of Mechanical Engineering, J.N.T.U. College of Engineering, Anaparthi, Andhra Pradesh during December 2-3, 2005, pp 10-14.
11. K. Sainath, D. Madan Mohan Reddy, V. Bala Krishna Murthy and **U. Koteswara Rao**, “Static Analysis of Thick Circular Plates”, National Conference on Advances in Mechanical Engineering (AIME-2006), Organized by Department of Mechanical Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi during January 20-21, 2006.
12. V. Bala Krishna Murthy, **U. Koteswara Rao**, K. Sivaji Babu and M. S. R. Niranjan Kumar, “Static Analysis of Composite Skew Plates with a Circular Cutout”, National Conference on Advances in Mechanical Engineering (AIME-2006), Organized by Department of Mechanical Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi during January 20-21, 2006.
13. V. Bala Krishna Murthy G. Sambasiva Rao and **U. Koteswara Rao**, “Effect of Fiber Volume Fraction on Micro-Thermoelastic Behaviour of GFRP Lamina Using Square Array Model”, National Conference on Emerging Trends in Mechanical Engineering (ETIME-2006), Organized by Department of Mechanical Engineering, B.M.S. College of Engineering, Bangalore during 10-11, February 2006, pp 86.
14. T. Ramesh Babu, K. Sainath, **U. Koteswara Rao** and V. Bala Krishna Murthy, “Free Vibration Analysis of an Airplane Wing Made of Composite Material Using FEM”, National Conference on Advances in

CAD/CAM, Organized by Department of Mechanical Engineering, J.N.T.U. College of Engineering, Kakinada, Andhra Pradesh during 27th - 28th February 2006, pp 39-42.