

RODDA KIRAN KUMAR REDDY | RESUME

- Status: Pursuing Ph.D. in Mechanical Engineering in National Institute of Technology, Tiruchirappalli
- Skills: Experimental and analytical research
- Interests: Buckling and Vibration, Vibro-acoustics, Metallic foam structures, Functionally Graded Materials, Sandwich Structures, Micro perforated panels, Sonic Crystal



➤➤➤ Awards and Medals

- Awarded with Hon'ble President's Silver Medal for Academic achievement in M.Tech-Machine Design during X Convocation held on 23rd December, 2020.

➤➤➤ Membership

- Student Member of the "Institute of Acoustics" upto 20/04/2023.

➤➤➤ Research Experience

08/2020-now	Ongoing Projects	National Institute of Technology Tiruchirappalli
	<ul style="list-style-type: none">➤ Experimental investigation on vibro-acoustic behaviour of GFRP Cylindrical structures subjected to mechanical excitation under Thermal Environment➤ Analytical studies on Vibro-acoustic Characteristics of porous core with Carbon Nanotubes (CNT) Reinforced Functionally Graded Face sheet Cylindrical Sandwich Structures➤ An effective analytical approach to predict the Vibro-acoustic Characteristics of Doubly-Curved Sandwich Panels: Effect of shell Geometry➤ Experimental investigation on vibro-acoustic characteristics of doubly-curved plates under hygro➤ Numerical Simulation of Vibro-acoustic Characteristics of structural elements➤ Studies on Vibro-acoustic Characteristics of Arbitrarily Varying Thickness Structures	
07/2018-05/2020	M.Tech Thesis	Koneru Lakshmaiah Education Foundation, Vaddeswaram
	<ul style="list-style-type: none">➤ Vibro-acoustic Characteristics of Visco-elastic Sandwich Panel: Effect of Inherent Material Damping➤ Analytical Evaluation of Vibration and Acoustic Response of Al-SiC Composite Plate Subjected to Thermal Environment➤ Analytical studies on Vibro-acoustic characteristics of functionally graded flat sandwich plates	
08/2014-05/2018	B.Tech Thesis	Rajiv Gandhi University of Knowledge Technologies, Andhra Pradesh
	<ul style="list-style-type: none">➤ Design and Development of Biomass Cooking Stove➤ Design of Double Leaf Jig for Drilling Machine	

➤➤➤ Education

2020 - now	Pursuing Ph.D. in Mechanical Engineering	National Institute of Technology Tiruchirappalli
	<ul style="list-style-type: none">➤ Completed course work with a CGPA of 8.75/10	
2018 - 2020	M-Tech in Machine Design	Koneru Lakshmaiah Education Foundation, Vaddeswaram
	<ul style="list-style-type: none">➤ Completed with a CGPA of 9.13/10	
2014 - 2018	B-Tech in Mechanical Engineering	Rajiv Gandhi University of Knowledge Technologies, Andhra Pradesh

» Completed with a CGPA of 8.72/10

»»» Software skills

CAD MODELING: AUTOCAD, CATIA, SOLIDWORKS
FEM: ANSYS APDL, ANSYS WORKBENCH
LANGUAGES: MAPLE, MATHEMATICA, MATLAB
DOCUMENTATION: LATEX
OPERATING SYSTEM: Windows

»»» Languages

- » English(Fluent)
- » Telugu(Fluent)
- » Hindi(Intermediate)

»»» Publications

- » **R Kiran Kumar Reddy**, M P Arunkumar, Vinod Bhagat and M B S Sreekara Reddy (2021)."Vibro-acoustic characteristics of viscoelastic sandwich panel: effect of inherent damping", published in **International Journal of Dynamics and Control**, vol 9, No 1, Pages 33-43,Spinger Publications
- » Kammuluri Baburaja, K Venkata Subbaiah , M P Arunkumar, Vinod S Bhagat and **R Kiran Kumar Reddy** (2020)."Vibration and Acoustic Characteristics of Aluminium Silicon Carbide Metal Matrix Composite Under Uniform and Non Uniform Thermal Environment", published in **Silicon**, Spinger Publications

»»» Conferences

- » M B S Sreekara Reddy, M Sreekanth and **R Kiran Kumar Reddy** , Free Vibration Analysis of Sandwich Panels: Effect of Core Topology, is accepted for publication in **IOP Journal of Physics**

»»» Journals under Review

- » Bimal Oommen John, Fuad Umar Hassan, Nivish George, Tony Chacko, Vinod Bhagat, P Jeyaraj and **R Kiran Kumar Reddy**, Thermal Buckling and Vibro-acoustic Behaviour of Heated Functionally Graded Graphene Polymer Layered Composites is under review in **Part L: Journal of Materials: Design and Applications**
- » M B S Sreekara Reddy and **R Kiran Kumar Reddy** , Sound Absorption Characteristics of DL-MPP with Non-Circular Perforations using Electro- Acoustical Model is under review in **Materials today proceedings**

»»» Journals to be Communicated

- » Vinod Bhagat, M P Arunkumar and **R Kiran Kumar Reddy**, Analytical Analysis on Vibro-Acoustic Response of Hybrid Honeycomb Core Sandwich Structure with Functionally Graded Carbon Nanotube Reinforced Composite Face Sheets
- » Vinod Bhagat, M P Arunkumar and **R Kiran Kumar Reddy** Thermal Buckling and Vibrational Characteristics of Graphene Reinforced Polymer Composite Facesheet Sandwich Panel with Temperature Dependent Properties Under Thermal Environment
- » M P Arunkumar, Vinod Bhagat, **R Kiran Kumar Reddy**, Qian Geng, Jingfeng Ning and Yueming Li. Identification of Acoustic Characteristics of Hybrid Honeycomb Core Sandwich Structure on Different Conditions

»»» Workshops

- » Attended in the TEQIP III sponsored online short-term course on "**Noise and Vibration Monitoring of Mechanical Systems**" in the Department of Mechanical Engineering from 29 October, 2020 to 31 October, 2020 at IIT Indore
- » Attended two-day project-based training program on "**RC Aircraft Design**" Organized by Skyfi labs at RGUKT, AP-IIT R.K. Valley in 2017

»»» Declaration

I hereby declare that the above cited information is true to the best of my knowledge and belief, if given a chance, I can prove myself.