


## *CURRICULUM VITAE*

<i>Name</i>	<i>Chethana KY</i>	
<i>Department</i>	<i>Aerospace Engineering</i>	
<i>Qualification</i>	<i>B.E., M.Tech.(Ph.D.)</i>	
<i>Area of specialization</i>	<i>Machine Design, Crashworthiness and Composite materials</i>	
<i>e-mail</i>	<i>chethanky@gmail.com</i>	
<i>No. of years of experience</i>	<i>Teaching:09 Years</i>	

### **Academic Qualifications:**

- *Ph.D. (Pursuing): Department of Mechanical Engineering, BMS College of Engineering -R&D Center, Bangalore, under VTU, Belgaum, India.*
- *M.Tech. (2015): Machine Design*
- *B.E. (2010): Mechanical Engineering*

### **Software or Tools Experience Details:**

- *Ansys;- Static structural, Modal Analysis, Explicit dynamics and Basic simulation on fluid flow analysis.*
- *Solid Edge;- Part drawing and Assembly.*
- *Solidworks :- Part drawing and Basic simulation.*
- *Mathlab;- Basic knowledge .*

### **Work Experience Details:**

- *Assistant Professor: Department of Aerospace Engineering, BMSCE, Bangalore, India (08/03/2021 – Till date).*
- *Assistant Professor: Department of Mechanical Engineering, VEMANAIT, Bangalore, India (01/02/2016 – 06/03/2021).*
- *Assistant Professor: Department of Mechanical Engineering, AMCEC, Bengaluru, India (01/08/2015 – 31/1/2016).*
- *Lecturer: Department of Mechanical Engineering, Coorg Institute of Technology, Ponnampet, South Kodagu, Karnataka, India (01/08/2010 – 31/09/2013).*

## **Subjects Taught:**

*Computer Aided Engineering Drawing , Computer Aided Machine Drawing, Mechanics of Composite materials, Dynamics of Machines, Design of Machine Elements –II , Elements of civil Engineering and Engineering Mechanics, Fracture Mechanics, Theory of Elasticity, Tribology, Fluid Power Systems and Experimental Stress Analysis.*

## **Research Experience Details:**

### **Ph.D:**

*Title: Synthesis and Analysis of Functionally Graded Materials for crashworthy Applications*

*Guide (s): Dr.Y.S. Rammohan and Dr.M.G.Patil*

*About the work: (Comprehensive viva completed) The work focused on investigation of crashworthy property of Fiber Reinforced polymer composites tube. The investigation is carried out using hand wrap fabrication technique, quasi static test, drop mass impact tower test and FEA Crash analysis.*

## **Academic Positions and other Responsibilities (Institute Level):**

- *Started (New setup) Material testing lab, Machine shop, Foundry forging lab, Metrology and Mechanical Measurement Lab during 2010 to 2013 by initiating and preparing the comparative statement of equipments from different industries.*
- *Departmental Test Coordinator, Coorg Institute of Technology, Ponnampet : 2011-12.*
- *Placement Coordinator, VEMANA IT, Bangalore:2016-17.*
- *Technical Seminar Coordinator, VEMANA IT, Bangalore:2017-19.*
- *Cluster Head, Materials and Simulation research cluster, VEMANA IT, Bangalore:2017-Till date.*
- *Cluster Member, Dynamic behavior of Materials research cluster, VEMANA IT, Bangalore:2017-Till date.*
- *Initiated and Started ANSYS Lab in 2018 by initiating the purchase and commissioning of Software.*
- *Initiated and taken in-charge for KSHIPRA FEA SIMULATION training program from 2018 to till date.*
- *Initiated and Started Composite materials R&D Lab at VEMANA IT Department of Mechanical Engineering in 2019.*
- *NBA Criteria- 2 Coordinator, VEMANA IT, Bangalore.*

- *CAD/CAM/CAE Lab in-charge, VEMANA IT, Bangalore: 2017 to Till date.*
- *Class teacher (Started new method of weak student's analysis and tutoring /Mentoring), VEMANA IT, Bangalore: 2019.*
- *Cultural coordinator (Departmental), VEMANA IT, Bangalore: 2019.*

### **Awards/ Achievements**

- *Best project of the year award under my guidance: 2018-19.*
- *A project selected for state level exhibition, KSCST: 2018-19.*

### **Research Publications:**

#### **I. International Journals**

*[1] Chethana K Y, Y S Rammohan and M G Patil, "Prediction Of Axial Load On Variable Graded Composite Tubes For Crashworthy Structure", Accepted, Materials Today (SCOPUS) (2019).*

*[2] Chethana K Y, Y S Rammohan and M G Patil, "Effect Of Collapse Trigger Mechanism On The Energy Absorption Capability Of GFRP Tubes", Accepted, American Institute of Physics (SCOPUS)(2019).*

*[3] Chethana K Y," Mechanical properties of density graded E-Glass reinforced CNT mixed polyester resin composites", IJIRAE (UGC),Vol. 6, issue 6(2019).*

*[4] Chethana K Y, M G Patil and Y S Rammohan , "Effect of fiber mat density and crushing mechanism on the energy absorption capacity of GFRP tubes", IJITEE(SCOPUS),Vol 8,9S3 (2019).*

*[5] Chethana K Y, Y S Rammohan , M G Patil and Lokesh G Reddy," Influence of MWCNT addition on mechanical properties of density graded E-glass fiber reinforced polyester resin composites", American Institute of Physics(SCOPUS),2057,issue 1(2019).*

*[6] Chethana K Y, Y S Rammohan , M G Patil and Lokesh G Reddy, "Drop Weight Impact Energy Absorption Capacity Of Elastomer Filled Aluminium Tubes", International Journal for Science and Advance Research In Technology,Vol 4 ,issue 1 (2018).*

*[7] Chethana K Y, M G Patil, Y S Rammohan and Lokesh G Reddy, "Quasi Static Energy Absorption Capacity of Polymer Filled Aluminium Tubes",*

*International Journal for Science and Advance Research In Technology*, Vol 4 ,issue 1 (2018).

[8] Chethana K Y ,Naveen Kumar R , Lokesh G reddy, “Investigation on Grinding Process Parameters for Machining of EN31 Steel of Different Hardness”, *International Journal of Innovative Research in Advanced Engineering* 4 (4), 4 (2017).

[9] Chethana K Y , Lokesh G Reddy, Kiran kumar N, “Investigation of Vibration, Stress and Temperature during Drilling of Aluminium 6061 Alloy with Silicon Nitride Reinforcement”, *International Journal of Innovative Research in Advanced Engineering* 4 (4), 4 (2017).

[10] Madhusudhan.S.V , Kiran Kumar.N and Chethana K Y, “Experimental study on fatigue behavior of Glass/vinyl ester Composite”, *International Journal of Innovative Research in Advanced Engineering* 4 (4), 4 (2017).

[11] Vinod B, Srinivasarao J, Chethana.K.Y, “Design and Modal Analysis of Composite Leaf Spring Suspension System for Light Weight Vehicles”, *International Journal for Scientific Research & Development*| 3 (11), 3 (2016).

[12] Chethan K Y, “Computational Static and Dynamic Analysis of Sandwich Panel”, *International Journal of Engineering Development and Research*, Volume 4 issue 2 june 2016.

[13] Chethan K Y, “Computational Static and Dynamic Analysis of Leafspring (Using Cellulor Solids Structure)”, *International Journal of Engineering Development and Research*, Volume 4 issue 2 june 2016.

[14] Chethana K Y, Y.S. Rammohan, M.R. Srinivasa, G.Ugrasen , "Effect of Thrus Force, Vibration and Temperature on Drilling of Aluminium Alloy with Silicon Nitride Reinforcement", *Proceedings of Copen* 9 (2015).

[15] M.R. Srinivasa, Y.S. Rammohan,H.V. Ravindra , G.Ugrasen, Chethana K Y, “"Process Parameter Optimization in Drilling of Epoxy Resin Reinforced with Carbon Fibers and Silicon Nitride",", *Proceedings of Copen* 9 (2015).

[16] Raviteja B, Srinivas Prasad S, P.S Subrahmanyam, N.V.S.Anil Babu Javaji and chethana K Y , “ Design and Analysis of Nose Landing Gear Supportive Bracket by Varying Stress Concentration Area, Based on ANSYS”, *International Journal for Scientific Research & Development*| 3 (10), 3 (2015).

[17] Chethan K Y, "Impact Analysis of Bullet on Different Bullet Proof Materials", *International Journal of Mechanical and Industrial Technology*, Vol. 3, Issue 1, pp: (303- 310), September 2015.

## **II. Papers Presented in Conferences**

- [1] *International Conference on Precision, Meso, Micro and Nano Engineering*. December 10-12, 2015. IIT, Bombay.
- [2] *Recent Trends In Mechanical Engineering*, VEMANA IT, Bengaluru -2017.
- [3] *2nd International Conference on Polymer Composites*, Department Of Mechanical Engineering, National Institute Of Technology Karnataka, Surathkal -2018 .
- [4] *2nd International Conference On Emerging Trends In Engineering, Sciences & Management -2018*, Rajeev Gandhi Memorial College Of Engineering & Technology (RGM CET), Nandyal, Andhra Pradesh, India(2018).
- [5] *Recent Trends In Mechanical Engineering*, VEMANA IT ,Bangalore -2019 .
- [6] *International conference on Design, Materials & Manufacturing ICEDEM*, Department Of Mechanical Engineering, National Institute Of Technology Karnataka, Surathkal 2019.
- [7] *Recent Trends In Metallurgy, Materials Science And Manufacturing*, Department Of Metallurgical and Materials Engineering, National Institute Of Technology , Tiruchirapalli 2019.
- [8] *International Conference On Thermo-Fluids And Energy Systems*, BNMIT Bangalore, Department of Mechanical Engineering (Co-Author) 2019.

## **Participation in Training courses/Seminars/Workshops**

- [1] *Research Methodology workshop by VTUCPGS at VTU Muddhenahalli*, 2018.
- [2] *Digitalization of Library by National Digital Library of India at Bangalore university on 14th June 2019*.
- [3] *Faculty Development by TDEC KRJS at VEMANA IT Bengaluru on 31st July 2019*.
- [4] *Automation Technology in Manufacturing by FESTO at IMTMA, Bengaluru , 24th to 27th Oct.2019*.

## **Personal Details:**

- *Date of Birth: 25-05-1989; Sex: Male.*
- *Family Details: Wife and a son*

- *Address: #21 ,BELADHINGALU,1st B Main Road, Behind SVS Kalyana Mantapa, Sanjeevini nagara,Mudalapalya,Bengaluru-560072.*
- *Mobile Number: 9449149352*

**16<sup>th</sup> APRIL 2021**

**CHETHANA K.Y.**