Name : Dr.Sujith Bobba

B.E., M.Tech., Ph.D.

Designation : Assistnt Professor
Department : Mechanical Engineering
Mail.I.D : sujith\_b@vnrvjiet.in

Experience (in years): Teaching: 7 Years Research: 1 Year Industrial: 00

## 1. Educational / Technical qualifications:

S. No.	Level (UG / PG / Ph.D.)	Year of passing	Specialization
1	BE	2012	Mechanical Engineering
2	M.Tech.	2014	Automotive Mechatronics
3	Ph.D.	2019	Mechanical and Manufacturing systems

# 2. Teaching and Learning:

a. Teaching Interests:

Automobile Engineering, Design of Machine Element, Automation in manufacturing. Manufacturing Planning and Control , Mechatronics, Mechanics and statics, Engineering drawing, Metallurgy, Metrology , Manufacturing Systems and Computer Programming in 'C'.

- b. Novel Teaching & Learning Techniques adopted:
  - a) PPT and Video b) Wit and Will c) POGIL d) Seminars

#### 3. Co-curricular and Extra-Curricular Activities

- 3.1. Interests and Hobbies:
  - a) To promote work efficiency and good attitude towards work, in organizations.
  - b) Social service and playing a few games.
- 3.2 Counseling and Mentoring Activity:
- Conducting counseling and mentoring activities every year for Diploma Students
- Conducted class review meetings with student representatives

## 4. Conference / Workshop / Seminar / Guest Lectures:

4.1 Attended: 06

### 5. Academic Contribution and Research & Consultancy:

- 5.1. Invited Lectures: Nil
- 5.2. Articles / Chapters published in Books: one
- 5.3. Books published as single author or as editor:

#### 5.4. Projects Guided:

- a) UG: 06
- b) PG: 01
- 5.5. Research Interests: Manufacturing Processes
- 5.6. Ph.D students:

a) Enrolled: Nil

b) Submitted: Nil

c) Awarded: Nil

## **5.7. Papers published in reviewed International Journals:**

#### **International/National Journals:**

- 1. Bobba, S., Babu, B.H. Finite Element Analysis on Kenaf and Kevlar Natural Fiber Reinforced Rings Using Split-Disk Tests. J. Inst. Eng. India Ser. E (2024). https://doi.org/10.1007/s40034-024-00293-z
- 2. Bobba, S., Malyadri, T., Leman, Z. et al. Mechancial Behaviour of Silver and Copper Nanoparticles When Incorporated With Poly-Lactic Acid Nanoparticles. J. Inst. Eng. India Ser. D (2024). https://doi.org/10.1007/s40033-024-00767-9
- 3. Selvamuthukumar, M., Bobba, S., Padmanabhan, S. et al. Analysis of Glass and Carbon FiberReinforced Aluminum-Sandwiched Composites in Automotive Applications. J. Inst. Eng. India Ser. D (2023). https://doi.org/10.1007/s40033-023-00504-8.
- 4. Bachina Harish Babu, Sujith Bobba, T.C.H. Anil Kumar, NB. Prakash Tiruveedula, Talluri Srinivasarao, Optimization of dead metal zone to reduce cutting forces in micro milling of Inconel 718 using RSM, Materials Today: Proceedings, 2023, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2023.04.302.
- 5. Sujith Bobba, Bachina Harish Babu, Mukkollu Sambasiva Rao, Z. Leman, The consequences of hotdeformation and control cooling on the microstructure of medium carbon microalloyed steel 38MnSiVS5 grade, Materials Today: Proceedings, 2023, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2023.04.290.
- 6. Sujith Bobba, B Harish Babu & N Narayan Rao (2023). Impact of metal mould vibration on the mechanical properties of aluminium 6082 t6 alloy, Advances in Materials and Processing Technologies, DOI: 10.1080/2374068X.2023.2190672.
- 7. Bobba, S., Selvamuthukumar M., Harishbabu, B., & Leman, Z. (2022). Solar-Based Mosquito Trap for Household Purposes. International Journal of Social Ecology and Sustainable Development (IJSESD), 13(1), 1-10. http://doi.org/10.4018/IJSESD.288536.
- 8. BOBBA, S., LEMAN, Z., & BABU, B. H. (2021). Environmental effects on the mechanical properties of E-glass and S-glass fiber epoxy composite ring specimens used in aircraft fuel pipes. INCAS Bulletin, 13(4).
- 9. Bobba, S., Sambasiva Rao M., Leman, Z., Harish, B. (2021). Experimental Investigation on the Effect Due to Mould Vibrations on Mechanical and Metallurgical Properties of Aluminum Alloy (A-1050), International Journal of Surface Engineering and Interdisciplinary Materials Science (IJSEIMS): Volume 9, Issue 1, Article 5.

- 10. Bobba, S., Leman, Z., Zainuddin, E., & Sapuan, S. (2021). Impact and internal pressure failure of Eglass and S-glass epoxy composite elbow pipe joints influenced by sea water. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. <a href="https://doi.org/10.1177/0954408920948177">https://doi.org/10.1177/0954408920948177</a>.
- 11. Bobba, S., Sambasiva Rao M., Harish, B., Leman, Z (2021). Effect on the Mechanical Properties of Grey Cast Iron with Variation of Molybdenum and AS Cast Alloying Elements, Universal Journal of Mechanical Engineering ,8(6): 298-304, 2020. doi: 10.13189/ujme.2020.080602.
- 12. Bobba, S. Z. Leman, E.S. Zainuddin, S.M. Sapuan., (2020), Low velocity impact and internal pressure behaviors of unaged E- glass and S-glass/epoxy composite elbow pipe joints, Journal Pipeline Systems Engineering and Practice, Vol. 11, Issue 4 10.1061/(ASCE)PS.1949- 1204.0000493.
- 13. Bobba, S. Z. Leman, E.S. Zainuddin, S.M. Sapuan., Characterisation of the tensile and fracture properties of filament wound natural fibre rings, 2020, AIP Conference Proceedings,020015, 2284(1), doi: 10.1063/5.0027248
- 14. Bobba, S. Z. Leman, E.S. Zainudin, S.M. Sapuan. Hoop tensile strength behaviour between different thicknesses E-glass and S-glass FRP rings. AIMS Materials Science, 2019, 6(3): 315- 327. doi: 10.3934/matersci.2019.3.315.
- 15. Bobba, S., Leman, Z., Sapuan, S., & Zainudin, E. (2019). Analysis on the Impact Behaviorsof E and S-glass Composite Elbow Pipe Joints Exposed to Impact Loading Followed by AxialCompression: Analysis on Impact and Compression of Elbow Joints. International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME), 9(3), 14-25. doi:10.4018/IJMMME.2019070102
- 16. 16. Bobba, S. Z. Leman, E.S. Zainudin, S.M. Sapuan, (2019), "Effects of ageing on the mechanical and structural properties of glass/epoxy composite pipes in seawater", JEC composites magazine, JulyAugust 2019.
- 17. Bobba, S., Abrar, S., Rehman, S.M. "Probability Study on the Thermal Stress Distribution in Thick HK40 Stainless Steel Pipe using Finite Element Method". Designs 2019, 3(1),9; https://doi.org/10.3390/designs3010009.
- 18. Sujith Bobba, Z. Leman, E.S. Zainuddin, S.M. Sapuan, Study of Interior Temperature Distribution and Implementation of Smart Materials in the Truck Cabin during Summer Conditions, Materials Today: Proceedings, Volume 18, Part 1, 2019, Pages 361-374, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2019.06.313.
- 19. Bobba, S., Z. Leman, E. S. Zainudin, and S. M. Sapuan. 2019. Fluid flow and static structural analysis of E-glass versus S-glass fibre/epoxy reinforced composite pipe joints. Agricultural Engineering International: CIGR Journal, 21(4): 56–63
- 20. Bobba, S., Leman, Z., Zainudin, E.S., Sapuan, S.M. (2017), Failures Analysis of E-Glass Fibre Reinforced Pipes in Oil and Gas Industry: A Review, IOP Conference Series: Materials Science and Engineering, 217 (1), 012004, DOI: 10.1088/1757-899X/217/1/012004.
- 21. Bobba, S., Leman, Z., Zainudin, E.S., Sapuan, S.M., (2018), Fluid flow analysis of Eglass fiber reinforced pipe joints in oil and gas industry, AIP Conference Proceedings, Volume 1952, 24 April 2018, Article number 020018, DOI: 10.1063/1.5031980.
- 22. Sujith Bobba , P. Rajesh , Heat Energy Recovery System from Internal Combustion Engineby Using Thermo Electric Generator, International Journal of Mechanical and

Industrial Technology ,Vol. 3, Issue 2, pp: (23-32), October 2015 - March 2016 , ISSN 2348-7593.

### **Chapter in Books:**

- 1. Sujith Bobba, Z. Leman, E.S. Zainudin and S.M. Sapuan, Finite Element Analysis of E-Glass and S-Glass Fiber Reinforced Polymer Rings Using Split Disk Test, Case Studyon material engineering and applied sciences: UPM and KU 2019, pp.73-85, eISBN: 978-983-2408-68-0.
- Sambasiva Rao Mukkollu, Amitesh Kumar, Sujith Bobba, Semi solid processing of Aluminium alloys by slope casting process: A Review, Abstracts of National Conference on Research and Developments in Material Processing, Modelling and Characterization 2020, AIJR Abstracts, AIJR Publishers, ISBN-978-81-947843-2-6,https://doi.org/10.21467/abstracts.108.

## **Worshops and Seminars:**

- 1. Attended a one-week training program "Generative AI for Engineering Applications" organized by VNR Vignana Jyothi Institute of Engineering and Technology from 1 st -7 th July 2024.
- 2. Attended a one-week training program "Vibration based product quality and condition motioning systems in advanced manufacturing" organized by Gitam University and Vignan's Foundation for Science, Technology & Research from 18th -25th April 2022.
- 3. Participated in a Five Day Online Faculty Development Programme (FDP) on "Advances in Automotive Mechatronics", Organized by RV-Mercedes Benz Centre for Automotive Mechatronics, Department of Mechanical Engineering and Department of Electronics &Instrumentation Engineering, Bengaluru during 27 31 of July, 2020
- 4. Workshop on "Design, Manufacturing, Testing & Certification aspects of small Gas Turbine Engines", conducted under the aegis of multi-centric gas turbine enabling technology (GATET) initiative on 15th 16th June 2015 at Gas Turbine Research Establishment, Bangalore.
- 5. Participated and Won 2nd price in "Innovative projects" held by National institute of Engineers conference held from 20 December 2013 to 23 December 2013 in Chennai.
- 6. Three-Day National Workshop on "Friction Stir Welding, NDT and Optimization" during9 11th January, 2014 sponsored by TEQIP-II 7. Participated in Simcomvec (SAE) conference in Chennai trade Centre from 4th December 2013 to 7th December 2013.
- 7. Presented paper on "I.C Engines development and up gradation" held in Velammal engineering collage, Chennai on March 2013

#### **Motto:**

To produce citizens with human values and right attitude towards their profession