Curriculum Vitae

P. RAMESH BABU

Professor

Design Engineering, Composite Materials, Finite Element Method



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Department of Mechanical Engineering, University College of Engineering, Osmania University, Hyderabad, Telangana

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Education

- PhD (Thermoelastic analyses of interlaminar delamination growth behaviour emanating from free and pin-loaded holes in laminated FRP composites), Januarry 2008, Indian Institute of Technology (IIT) Kharagpur
- 2. M.Tech (CAD/CAM), December, 2001, JNTU Hyderabad.
- 3. B.E (Mechancial Engineering), July, 1994, Andhra Univerersity.
- 4. DME (Mechanical Engineering), July, 1991, Jawaharlal Nehru Government Polytechnic (JNGP), Ramanthapur, Hyderabad

Work Experience

- 1. July 1994 January 1996, Assistant Manager, MEDCHL Chemicals, Hyderabad, India.
- 2. February 1996 August 1997, Assistant Manager, NSL, Zahirabad, India...
- 3. August 1997 August 2007, Assistant Professor, Department of Mechanical Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad-500007.
- 4. July 2004 July 2007, Research Scholar, Department of Mechanical Engineering, Indian Institute of Technology Kharagpur, West Bengal, India.
- 5. July 2007- 2013: Associate Professor, Dept. of Mechanical Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad-500007.
- 6. August 2013- Till Date: Professor, Dept. of Mechanical Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad-500007.

Research

Ph.D. Scholars under my Guidance

1. Jeevan Kumar, N Delamination Damage Propagation Studies Of Laminated Frp Composite Bonded

- Joints (2018).
- 2. Garimella Sridhar, Distortion Analysis and Minimization Stratagem for Machining Monolithic Thin Walled Components- (2019).
- 3. Shankarachar, S Vibration and Instability studies of Elastically restrained pipe and carbon nanotube conveying fluid- (2019).

Seminars Organized

- 1. Organized Indian Society of Theoretical and Applied Mechanics-An International Meet, during 27-30 December 2008 at University College of Engineering, Osmania University, Hyderabad.
- 2. "NanoSPD6 International Conference", during 30th June 4th July 2014 at Metz, France.
- 3. "3 Days Advanced Training Programme on Shodhganga" during 29th 31st January 2014 held at INFLIBNET Centre, Gandhinagar, Gujarat.
- 4. Organized 3-day workshop on Application of Numerical Methods in Science and Engineering during 21-23 October 2016.
- 5. Organized an International Conference on *Advances in Materials and Manufacturing* during 8-10 December 2016 at Leonia Convention Center, Hyderabad.
- 6. Organised 62nd Congress of Indian Society of Theoretical and Applied Mechanics, during 15th 18th, December 2017 at University College of Engineering, Osmania University.

Trainings and Other Programs Attended

- 1. 2-week AICTE Sponsored Faculty Development Program on "Finite Element Analysis And Practices Through Ansys" during 17th to 29th March 2014 at CBIT, Hyderabad.
- 2. Keynote Lecture at a 2-day National Workshop on "Advances in Composite Materials" at JNTU Kakinada.
- 3. AICTE sponsored Faculty Development Program on "Finite Element Applications in Civil Engineering" at VNRVJIET during 3rd June 15th June 2013.
- 4. Two- day National level workshop on Advanced Composite Materials to be conducted at the institute premises on February 6th and 7th 2017 at Department, Mechanical Engineering CMR Institute of Technology.
- 5. Delivered lecture on Design of Composites Structures in a Five-days continuing education program on the Missile Structural Design and Testing at DRDL during 20-24 September 2016.

List of Publications

Peer-Reviewed Papers

- 1. Garimella Sridhar, Ramesh Babu, P., "Effect of cutting parameters on machining induced distortion in thin wall thin floor parts" Journal of Mechanical Engineering, 2019, 17-27.
- 2. Jeevan Kumar, N. and **Ramesh Babu, P** "Analysis of Mode I and Mode II Crack Growth Arrest Mechanism with Z-Fibre Pins in Composite Laminated Joint" Applied Composite Materials (2018) 25:365–379
- 3. Jeevan Kumar, N. and **Ramesh Babu, P.**" Impact analysis of embedded delamination growth in stiffener of hybrid laminated composite stiffened panel" International Journal of Computational Materials Science and Engineering, Vol. 6, No. 1 (2017) 1750001
- 4. Jeevan Kumar Naini and **Ramesh Babu, P.**," Impact Analysis of Embedded Delamination Location in Hybrid Curved Laminated Composite Stiffened Panel" Applied Composite Materials, Vol .23 No 1

(2016)

- 5. Jeevan Kumar, **Ramesh Babu, P.** "Analysis of Embedded Delamination Growth in Hybrid Laminated Curved Composite Stiffened Panels" International Journal of Composite Materials 2016, 6(4): 100-120
- 6. Shankarachar Sutar, Radhakrishna Madabhushi and **Ramesh Babu, P.**, Finite Element Analysis of Piping Vibration with Guided Supports, Int. J. Mech. Eng. Autom. Vol. 3, (2016), 96-106
- 7. Shankarachar, S., Radhakrishna, M. and **Ramesh Babu, P.**, Fluid Induced Piping Vibration with Elastically Restrained Different End Supports, International Journal of Engineering Research & Technology, Vol. 4 (2015), 423-429.
- 8. Garimella Sridhar, **Ramesh Babu**, **P.**, "Volume of Material Removal on Distortion in Machining Thin Wall Thin Floor Components" International Journal of Mechanical Engineering and Applications, 2015, 3(5), 86-93.
- 1. Garimella Sridhar, **Ramesh Babu, P.**, "Effect of a milling cutter diameter on distortion due rot the machining of thin wall thin floor components" Advances in Production Engineering & Management Jounal, Vol. 10 (3), (2015), 140-152.
- 2. **Ramesh Babu, P.** "Evaluation of Flexural and Tensile Properties of Short Kenaf Fiber Reinforced Green Composites" International Journal of Advanced Mechanical Engineering. ISSN 2250-3234 Vol. 4,(2014), 371-3880.
- 3. Garimella Sridhar, **Ramesh Babu, P.**" Cutting Parameter Optimisation for minimizing machining distortion of thin wall thin floor avionic components using Taguchi Techniques", International Journal of Mechanical Engineering and Technology, Vol. 4 (4), (2013), 71-78.
- 4. Jeevan Kumar, N., Ramesh Babu, P. & Ratnakar Pandu "Investigation on Buckling Behaviour of laminated curved composite stiffened panels" Applied Composite Materials, vol 20. (2013)
- 5. Garimella Sridhar, Ramesh Babu, P. "Understanding the challenges in machining thin walled thin floored Avionics components", Int. Journal of Applied Sciences and Engineering Research, Vol. 2, (2013), 93-100.
- 6. **Ramesh Babu, P.** and Pradhan, B. "Thermoelastic effects on mixed-mode delamination growth emanating from circular holes in laminated FRP composites", *Struct.*, **82**(1) (2008), 50-60.
- 7. Pradhan, B. **Ramesh Babu, P**. Influence of ply sequence and thermoelastic stress field on asymmetric delamination growth behaviour emanating from elliptical holes in laminated FRP composites. *ASME J. Eng. Mater. Tech.*, **130**(1) (2008).
- 8. Pradhan, B. and Ramesh Babu, P " Assessment of beneficial effects of interference-fit in pin-loaded FRP composites". *Reinf. Plast. Compos.*, **26(**8), (2007), 771-788.
- 9. **Ramesh Babu, P.** and Pradhan, B., "Effect of damage levels and curing stresses on delamination growth behaviour emanating from circular holes in laminated FRP composites". *Composites Part-A-Applied Science and Manufacturing.*,,**28**(12) (2007), 2412-2421.

Conferences

- Ramesh Babu, C. Sharada Prabhakar, (2013) Fracture studies of Angle ply Polymeric Composites 9th International Conference on Fracture & Strength of Solids, June 9-13, , Jeju, Korea.
- Ramesh Babu, P. and Pradhan, B. (2004). Delamination onset prediction and failure analysis of mechanically fastened joints in Composite laminates. *49th Congress of ISTAM*, NIT Rourkela., December 27-30, p. 49
- Ramesh Babu, P., Panigrahi, S.K. and Pradhan, B. (2005). Debond damage analyses of laminated FRP

- composite using SERR approach. 50th Congress of ISTAM, IIT Kharagpur, December 14-17., pp.208-217.
- Ramesh Babu, P., and Pradhan, B. (2005). A 3D finite element stress analysis to study the effect of interference fit in pin/bolted joints in FRP composite laminates. 50th Congress of ISTAM, IIT Kharagpur, December 14-17, p. 88
- Ramesh Babu, P. and Pradhan, B. (2006). Effect of anisotropy on mixed-mode delamination growth emanating from circular holes in laminated FRP composites. *51*st *Congress of ISTAM*, Andhra University, Visakhapatnam, December 18-21, pp.223-231.
- Ramesh Babu, P. and Pradhan, B. (2006). Analysis of thermoelastic effects on delamination growth emanating from notches in laminated FRP composites. *51*st *Congress of ISTAM*, Andhra University, Visakhapatnam, December 18-21, p. 51.
- Ramesh Babu, P. and Pradhan, B. (2007). Characterization of curing stress effects on fracture behaviour of FRP composite laminate with elliptical cutouts. *ICCM-16*, July 8-13, Kyoto, Japan, pp. 1332-1333.
- Ramesh Babu, P. and Pradhan, B. (2007). Thermoelastic effects on delamination growth behaviour emanating from elliptical holes in transversely loaded graphite/epoxy composite laminates. 52nd Congress of ISTAM, BNMIT, Bangalore, December 14-17.
- Jeevan Kumar, P.Ramesh Babu "Impact Analysis of Embedded Multiple Delaminations Growth in Hybrid Laminated Curved Composite Stiffened Panel", International conference on Advances in Materials and Manufacturing(ICAMM-2016) Jointly organized by University College of Engg, Department of Mechanical Engineering, Osmania University& Defense ResearchDevelopmentLaboratory(DRDL),Hyderabad,Telangana,India,December8-10, 2016,Proceedings,Vol1,PP:451-457
- Jeevan Kumar, Dr.P.Ramesh Babu, Dr.N.V.Srinivasulu, Bharat Kumar "Investigation on buckling behaviour of composite stiffened panel "National Conference on Advances in Mechanical Engineering& Renewable Energy(AMERE-2013),Organized by Department of Mechanical Engineering, Chaitnya Bharathi Institute of Technology,Gandipet,Hyderabad,25-26 March,2013,Proceedings:PP:13-20

Visits and Guest lecturers delivered

- 1. 2-week AICTE Sponsored Faculty Development Program on "Finite Element Analysis And Practices Through Ansys" during 17th to 29th March 2014 at CBIT, Hyderabad.
- 2. Keynote Lecture at a 2-day National Workshop on "Advances in Composite Materials" at JNTU Kakinada.
- 3. AICTE sponsored Faculty Development Program on "Finite Element Applications in Civil Engineering" at VNRVJIET during 3rd June 15th June 2013.
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Place : Hyderbad Date : 24-06-2019

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