

**Dr. Chinka Tirumala Rao , M.Tech , Ph.D ,MBA**

**Assistant Professor**

**Department of Mechanical Engineering**

**Dr YSR ANU College of Engineering & Technology**

**Acharya Nagarjuna University**

**Nagarjuna Nagar, Guntur**

**Phone Number: 9866814097**

**Email id: [chinka1984@yahoo.com](mailto:chinka1984@yahoo.com), [tirumalarao.anu@gmail.com](mailto:tirumalarao.anu@gmail.com)**

**Academic Qualifications:**

**Ph.D-Mechanical Engineering, “Fabrication, characterization, wear and corrosion studies on AZ91D-COCKLE Shell Ash Powder Reinforced Metal-Matrix composites using Stir- Casting”, Acharya Nagarjuna University, 2021.**

**M. Tech - CAD/CAM, First Class & Distinction, JNTU-Kakinada, 2005-2007.**

**B.Tech - Mechanical Engineering, First Class, SCREC(JNTU-HYD), Guntur,2001-2005.**

**Previous Experience:**

1. Assistant Professor, Department of Mechanical Engineering, Loyola Institute of Engineering and Technology, Guntur, A.P., India, 8/2009 to 8/2010.
2. Assistant Professor, Department of Mechanical Engineering, ANU College of Engineering and Technology, Acharya Nagarjuna University, Guntur, 11/08/2010 to till date.

**Subjects Handled in the Department:**

- Engineering Mechanics
- Engineering Graphics
- Fluid Mechanics(Mechanical Engineering)
- FM&HM
- IC Engines & Gas Turbines
- Casting ,welding & Metal Forming Processes
- Elements of Mechanical Engineering(CE &EEE)
- Manufacturing Engineering

- Production Technology
- CAD
- Optimization Techniques

### **Research Interests:**

Metal Matrix Composites, FRC's, Manufacturing, IC Engines, High Entropy Alloys

### **Research Activities:**

No of journal papers published : 14

### **Journals:**

1. Ch.Tirumala Rao, D.Vineesha, "Design and Analysis of an Impeller of A Centrifugal Pump" *ISSN [ONLINE]: 2395-1052, IJSART - Volume 2 Issue 7 –JULY 2016.*
2. Tirumala Rao Chinka, Naresh Kolli, "Experimental Studies on EDM of Al 7075/B4c/Gr Hybrid Composite using RSM Box-Behnken Approach". *IJRASET, ISSN: 2321-9653, Volume 5 Issue VIII, August 2017.*
3. Ch. Tirumala Rao, Ch. Jyothsna Devi, Dr. P. C. Jain, Investigations on Deformation and Stress Pattern of Plates with Various Types of Stiffeners. "IJRASET, ISSN: 2321-9653, Volume 5 Issue VIII, August 2017.
4. Chinka Tirumalarao, Bangari Krishna chaitanya, Dynamic Analysis of Front Suspension System By CarSim, The International journal of analytical and experimental modal analysis, ISSN NO: 0886-9367, Volume XI, Issue IX, September/2019.
5. Ch. Tirumala Rao , Shaik Mahmad raffi, " Linear Free Vibration Analysis of Tapered Rectangular Cantilevered Timoshenko Beams using Energy Field Method". *International Journal of Engineering &Technology, 7 (4.24) (2018) 119-123.*
6. Rao Ch. Thirumala, Kaithepalli Divyasree, "Fabrication of wing assembly", *International Journal of Advance Research, Ideas and Innovations in Technology, ISSN: 2454-132X, Volume 5, Issue 4.*
7. Ch. Tirumala Rao, B Dhanaraju, "Modelling and analysis of submersible AUV pressure hull with sandwich materials using FEM". *International journal of Science and Engineering,ISSN:2456-3293,Volume5,Issue11,Nov-2020.*
8. Ch Tirumala Rao, Shaik Mohammad Iliyas, "Modeling And Analysis Of Pvc Mixture Blade".*International journal of Science and Engineering,ISSN:2456-93,Volume5,Issue11,Nov-2020.*
9. Ch.Tirumala Rao, C.Tarasasanka, V.Rama Koteswara Rao, K. Ravindra," Prediction of Transient Response of Isotropic and Laminated Cylindrical Shells Using Artificial Neural Networks". *IJTSA, Volume 1 Issue 1 (December 2012).*
10. Ch. Tirumala Rao, J. Suresh Kumar, "Vibration Analysis of Functionally Graded Materials Using Higher Order Theories", *ANU Journal of Engineering and Technology. Vol.III July-December, 2012.*
11. Tirumala Rao Ch, Ravindra K, "Fabrication, characterization and micro structures of AZ91D/Cockle shell powder composites using stir casting method". *Jour of Adv Research in Dynamical & Control Systems, Vol. 12, 02-Issue, 2020.*

12. Ch Tirumala Rao, Vijay Kumar Bommala, Mallarapu Gopi Krishna, "Magnesium matrix composites for biomedical applications: A review". *Journal of Magnesium and alloys* 7(2019) 72-79.
13. Ch Tirumala Rao , "Design And Analysis Of Machine For Separating Kernal from corn Cob", *ANU Journal Of Engineering & Technology*, ISSN: 0976-3414 Vo-1 Anucet 111.
14. Ch.Tirumala Rao, SNSP Ramya Harini. "Boiler tubes overheating failures and actions to control them", *ISSN Online: 2319-8753, International Journal of Innovative Research in science, Engineering and Technology(IJIRSET) Volume5, Issue7, July 2016, pp.1111–1115.*

### **Workshops/Seminars and Conferences Organised/ attended:**

1. Organizing Committee member and Treasurer for National seminar on "Advances In Metal Matrix Nano Composites" held during 11<sup>th</sup> -12<sup>th</sup> December, 2015 at Department Of Mechanical Engineering, University College of Engineering & Technology, Acharya Nagarjuna University, Guntur, sponsored by UGC.
2. Organizing Committee member and Treasurer for National seminar on "Advances In Metal Matrix Composites" held during 28<sup>th</sup> -29<sup>th</sup> march 2014 at Department Of Mechanical Engineering, University College of Engineering & Technology, Acharya Nagarjuna University, Guntur, sponsored by UGC.
3. Organising Member and Treasurer for International Conference-ICAMME-2018 on 22-24 Jan 2018 at Department Of Mechanical Engineering, University College of Engineering & Technology, Acharya Nagarjuna University, Guntur, sponsored by UGC.
4. Participated in "International Conference on Navigational Systems & Signal Processing Application" (NSSP-2013) held During 13<sup>th</sup> & 14<sup>th</sup> December, 2013 organized by University college of engineering & Technology, Acharya Nagarjuna University, Guntur.
5. Participated in Workshop on " E-Content Development" held during 14<sup>th</sup> & 15<sup>th</sup>, February, 2014 organized by Dept of Commerce & Business Administration and Centre for Distance Education, Acharya Nagarjuna University, Guntur, Sponsored by UGC.
6. Participated in National Seminar on "Development of Tools Using Biomaterials for Medical Applications" held during 18<sup>th</sup>-19<sup>th</sup> September, 2015 at RVR & JC College of Engineering, Guntur sponsored by Department of Science & Technology, Govt. of India, New Delhi.
7. Participated in 21 days training program on "GEO Spatial Technologies" held during 14<sup>th</sup> October to 3<sup>rd</sup> November, 2015 at University college of engineering & Technology, Acharya Nagarjuna University, Guntur, Sponsored by DST.
8. Participated in One week FDP "Teaching Methodology for Classical Thermodynamics" held during 23<sup>rd</sup> to 28<sup>th</sup> November, organized by Department of Mechanical & Aerospace Engineering, LBRCE, Mylavaram, Krishna Dist.,
- 9 . Participated in National Seminar on CHARACTERATION TECHNIQUES OF MATERIALS held on 28<sup>th</sup> -29<sup>th</sup> of March 2016 at Department of Nanotechnology, Acharya Nagarjuna University, Guntur.
10. Participated in National Seminar on March to Make in India through Engineering Advancements (MMIEA) held on 29<sup>th</sup> -30<sup>th</sup> of September 2016 at Acharya Nagarjuna University, Guntur.

11. Attended a five day online FDP on IOT with Machine Learning and AI towards advanced applications conducted by NIT-Warangal and Dept Of ECE,DNR college of Engineering &Technology from 6-12-2021 to 10-12-2021.
12. Attended five day seminar on Emerging trends in Intelligent Computing on 14/3/22 to 18/3/22, Organised by SCOPE, VIT-AP.
13. Organizing member for One week FDP on Recent advances in metal matrix composites from 21-25, January,2019 at Acharya Nagarjuna University sponsored by UGC