# Shiva Reddy

Curriculum Vitae



I am currently a Ph.D. student in the Department of Civil Engineering, Indian Institute of Technology Hyderabad. My research interests are Phase-field modeling for microstructure evolution and fracture, Mechanics of Laminated Composites. I am currently working on phase-field modeling of hydrogen assisted fracture and hydride microstructre evolution in zirconium

# Career Objective

- To obtain a long time career with an organization which has a strong background that provides a good opportunity for enhancement of professional and personal status. To contribute for the development of organization which hired me.

## Education

- 2019- Indian Institute of Technology Hyderabad, Ph.D., Civil Engineering, GPA:9.54/10.
- 2013–2018 **Jawaharlal Nehru Technological University, Hyderabad**, *M.Tech*, Civil Engineering, Structures, *Marks secured:* 85.56 %.
- 2013–2018 **Jawaharlal Nehru Technological University, College of Engineering Hyderabad**, *B.Tech*, Civil Engineering, *Marks secured: 85.94* %.
- 2011–2013 Narayana Junior College, Hyderabad, Inter, MPC, Marks secured: 96.66 %.

# Internship and Participations

- **Conference**, *MAMM*, *Oral presentation: Nonlocal buckling analysis of Nanoplates considering surface stress effects*, IIT Hyderabad, 03 -05 December, 2022.
- **Symposium**, *NMAMLD*, *Nonlocal Mechanics Approaches for Modeling Localized Deformations*, IIT Hyderabad, 7-8 June, 2022.
- **Workshop**, SEISMIC, Computational Modeling of Damage and Seismic Vulnerability Assement during Earthquakes in Building Systems, IIT Hyderabad, 12-13 May, 2022.
- **Symposium**, *NMAMLD*, *Nonlocal Mechanics Approaches for Modeling Localized Deformations*, IIT Hyderabad, 19-21 February, 2020.
- **Conference**, *ICCMS*, *Oral presentation: Buckling Analysis of Laminated Composite Plates considering Nonlocal and Surface Stress effects*, IIT Mandi, 11-13 December, 2019.
- Workshop, NCAMM, Poster presentation: Buckling Analysis of Laminated Composite Plates considering Nonlocal and Surface Stress effects, IISC Bangalore, 9-11 July, 2019.
- Conference, ARMS, Aerospace and Related Mechanism, JNTU Hyderabad, 16-17 November, 2018.
- Workshop, SDDRCB, Seismic Design and Detailing of Reinforced Concrete Buildings, JNTU Hyderabad, December, 2017.
- **Intern**, *IVRCL Limited*, Chitrapuri Project, Hyderabad, *Building Execution and Quality Control of High Raised Building*, *May June*, *2016*.
- Workshop, Ground Improvement and Geosynthetics, JNTU Hyderabad, 29 August, 2015.

# **Projects and Publications**

- M.Tech Project, Analytical Solutions for Buckling Analysis of Laminated Composite Plates considering non-Local and Surface stress effects, under the guidance of Dr. Amirtham Rajagopal, Professor, IIT Hyderabd.
- **B.Tech Project**, Analysis and Design of steel truss bridge for single track Railway bridge, under the guidance of Dr. P. Srinivasa Rao, Professor, JNTUHCEH.
- **Publication**, K Shiva, P. Raghu, A. Rajagopal, J.N. Reddy, Nonlocal buckling analysis of laminated composite plates considering surface stress effects, Composite Structures, Volume 226, 2019.
- **Publication**, P. Aurojyoti, K. Shiva, P. Raghu, A. Rajagopal, A nonlocal strain gradient model for buckling analysis of laminated composite nanoplates using CLPT and TSDT, Meccanica, 2023 (Accepted for publication).

## Courses

## PhD.

Finite Element Analysis, Analysis and Design of Composite structures, Introduction to Computational Methods in Materials Science, Applied Elasticity and Plasticity, Linear Theory of Plates

#### M.Tech

Theory of Elasticity and Plasticity, Advanced RCC Design, Advanced Structural Analysis, Computer Oriented Numerical Methods, CAD - Lab, Structural Dynamics, Advanced Concrete Technology, Advance Concrete - Lab, Analysis of Plates and Shells, Eqrthquake Resistant Design of Buildings, Design of Prestressed Concrete, Principles of Bridge Engineering

# Software Skills and Programming Language

- Matlab, Abaqus, Autocad, Staad, Etabs, C and Fortran Language

## Personal Information

- Date of Birth: 24-01-1995

- Address: Plot No. 49, Priyadarshini Colony, Kuntloor road, Hayathnagar, Rangareddy, Hyderabad 501505

## References

## Dr. Amirtham Rajagopal

Professor

## Dr. Raghu Piska

Assiatant Professor,
Department of Civil Engineering
BITS Pilani Hyderabad

★ +(040) 6630 3773

□ raghupiska@hyderabad.bits-pilani.ac.in
Institute Webpage