MAHESH PODISHETTY

I am a MHRD Ph.D. student at Indian Institute of Technology, Hyderabad; working with Dr.Ramji Manoharan and Dr. Viswaath Chinthapenta. My Phd research focused on static and fatigue damge analysis of composite laminates under multi-axial loading.

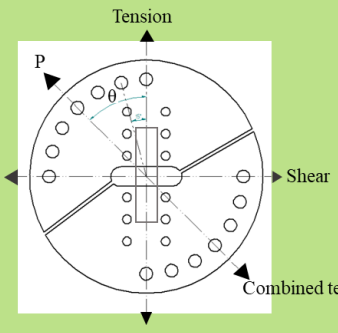
EDUCATIONAL DETAILS :

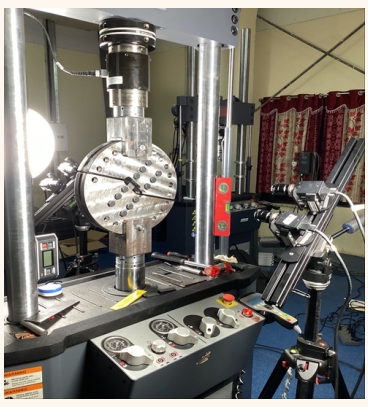
- PhD. in Mechanics and Design, Department of Mechanical and Aerospace Engineering, IIT Hyderabad, Telangana. (2020-Present)
- M.Tech in Computer Integrated Design and Manufacturing, Department of Mechanical Engineering, National Institute of Technology, Jamshedpur, Jharkhand. (2018-2020)
- B.Tech in Automobile Engineering, Department of Mechanical Engineering, M.V.S.R Engineering, Hyderabad, Telagana. (2013-2017)

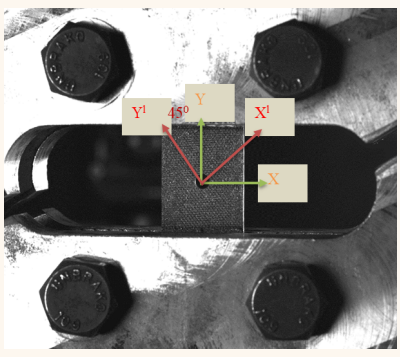
RESEARCH AREA

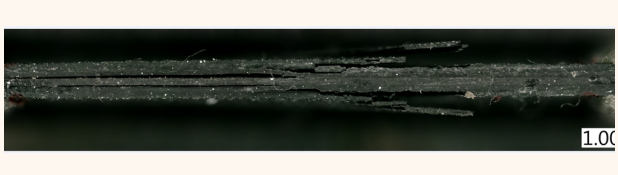
1 Experiments

Studying the damage initiation and propagation in composite laminates under multi-axial static and fatigue loading.

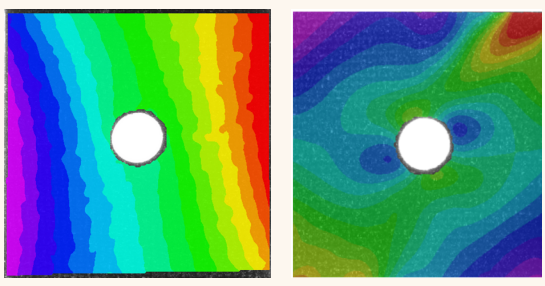




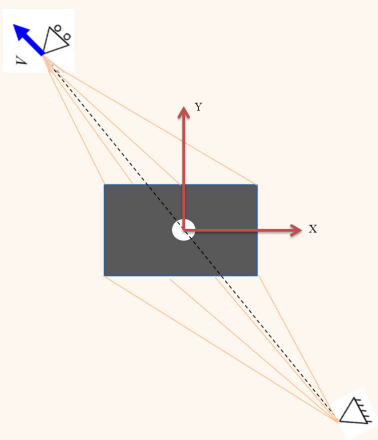




Digital microscope and IR-NDT images of open hole specimens subjected to tension-shear(45 degree) loading .

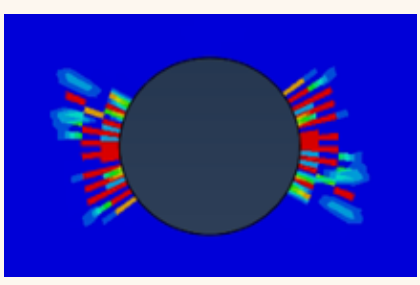


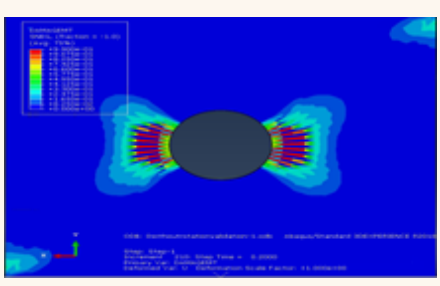
3D DIC Displacement and strain contours in open hole specimens subjected to tension-shear loading .

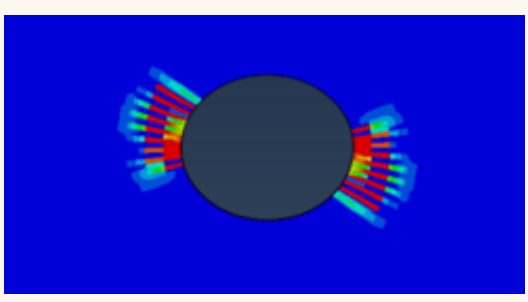


2 Numerical Simulations

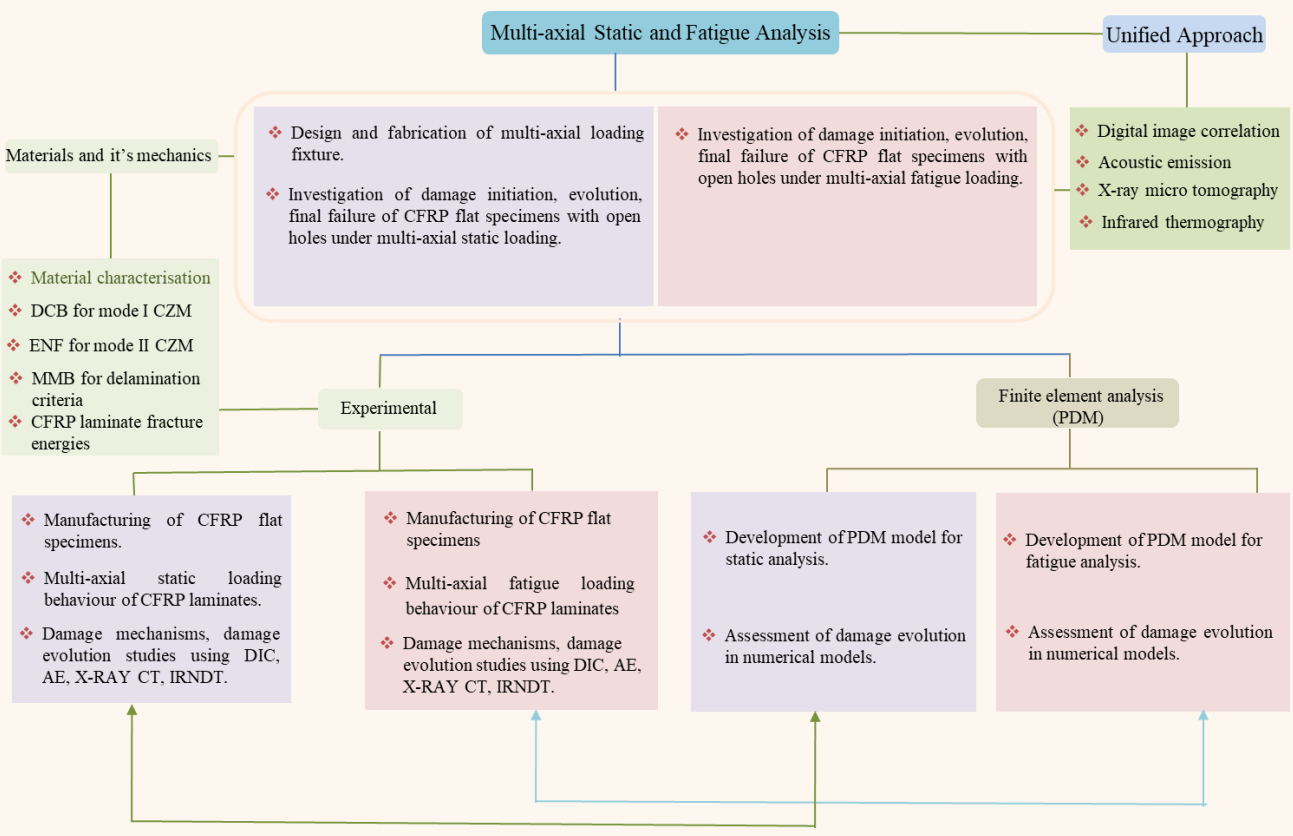
Developing a generic PDM for simulating the damage evolution and failure mechanism in the composite laminates under multi-axial static and fatigue loading.







OVER ALL SCOPE



RESEARCH INTERESTS

- Finite Element Analysis
- Composite Structures
- damage Mechanics
- Non-Destructive testing