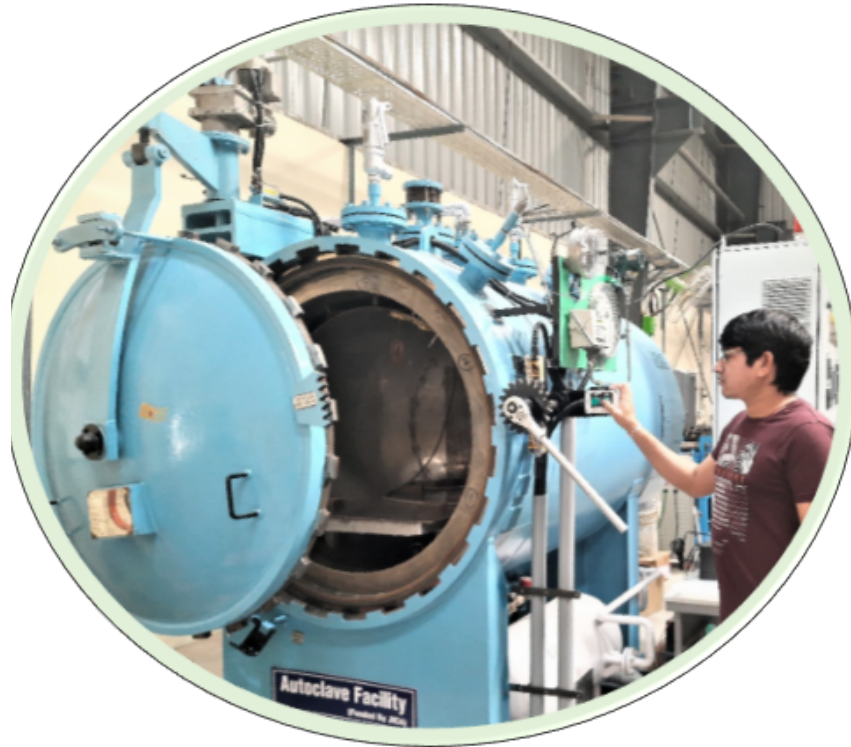


Hetram Sonwani

PHD SCHOLAR



RESEARCH PROFILE

Adhesive bonding is one of the most suitable joint techniques in terms of light-weight structure and mechanical performance when compared to other traditional joint techniques such as bolted, rivet, welded, and hybrid joints which are used in various industries like aeronautics, aerospace, automotive and marine. It is a process of joining between two components using an adhesive layer.

EDUCATION

M.Tech (Aerospace Engg) 2018-2020

Indian Institute of Space Science and Technology (IIST),
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B.E. (Aeronautical Engg) 2012-2016

MATS University, Raipur,
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PROFESSIONAL CAREER

**2020 - Present | Ph.D. Scholar
(Mechanics and Design)**

**Department of Mechanical and Aerospace
Engg, IIT Hyderabad, Telangana**

- Adhesively bonded joint: scarf and stepped
- CFRP laminated composites
- Analytical, FE and experimental analysis

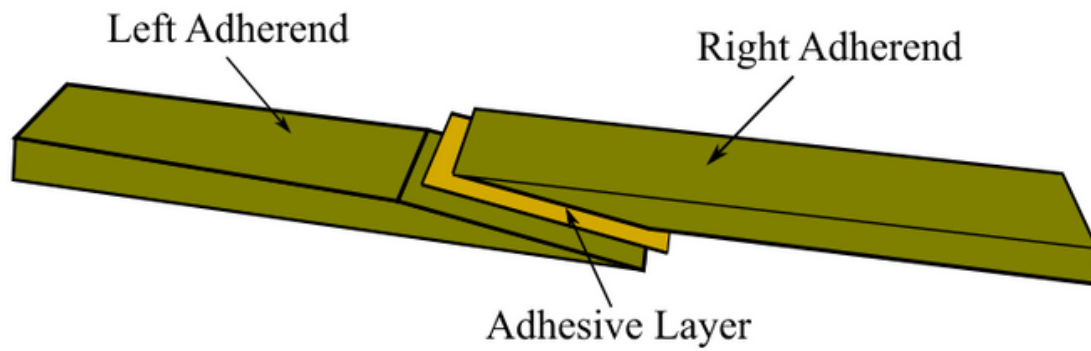


Fig: Single scarf joint

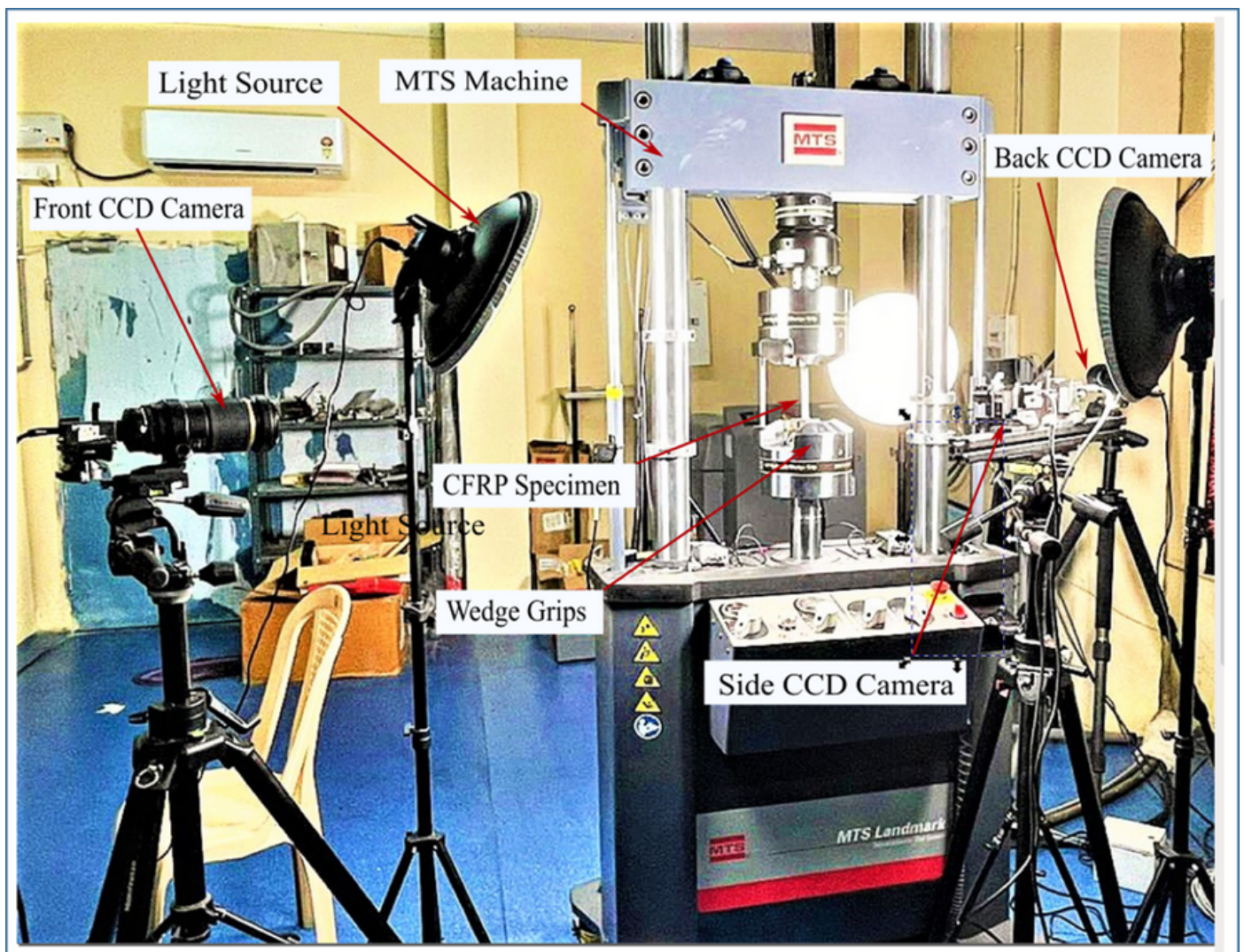


Fig: Experimental setup for the tensile testing of the adhesive bond scarf jointed CFRP specimen.

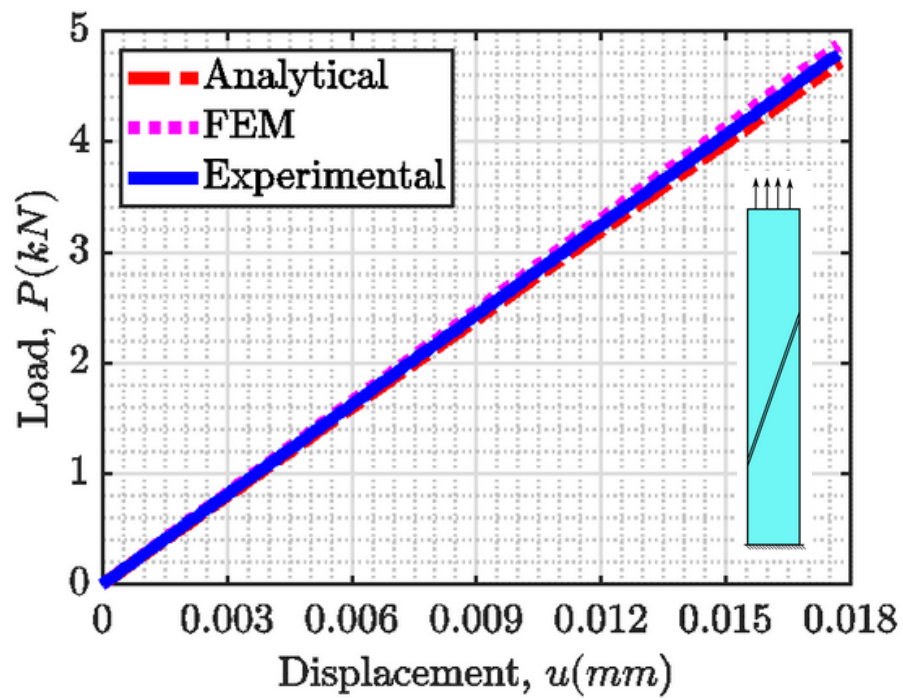


Fig: Comparative load-displacement curves for the single scarf joint UD-layup specimen

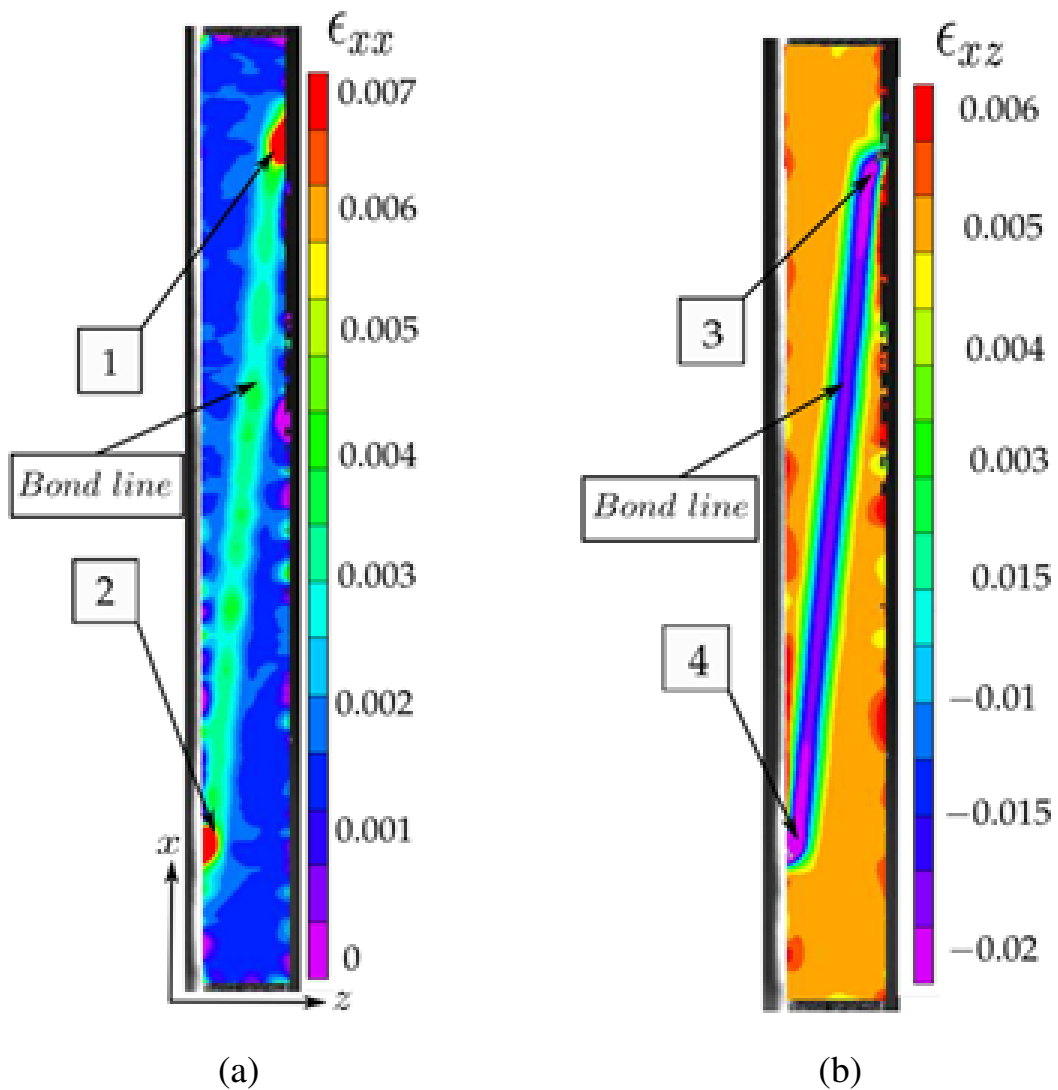


Fig: DIC contour plots of the strain distribution for the single scarf joint UD-layup specimen: (a) axial strain (b) shear strain.