

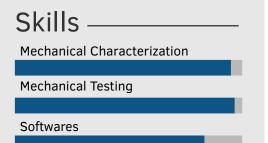
# Litton Bhandari

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(\*)[The skill scale is from 0 (Fundamental Awareness) to 6 (Expert).]

# Interests

Mechanical Testing, Fatigue, Fracture Mechanics, Materials Characterization.

# Education

- 2020- Ph.D. candidate in Mechanical Engineering IIT Roorkee Investigation of creep and fatigue behavior of additively manufactured Ti-6AI-4V alloys.
- 2017-2019 M.Tech in Materials Science and Engineeering IIT Gandhinagar Variability in fatigue life of near-alpha Titanium alloy.
- 2012-2016 B.Tech in Mechanical Engineering BTKIT, Dwarahat Tensile test on pine needles and crack analysis of pine needles short reinforced composites.

# Publications

- 2024 Pandey, A., Bhandari, L. and Gaur, V., 2024. Identification and optimization of material constitutive equations using genetic algorithms. Engineering Applications of Artificial Intelligence, 128 p.107534.https://doi.org/10.1016/j.engappai.2023.107534
- 2023 Bhandari, L. and Gaur, V., 2023. Different post-processing methods to improve fatigue properties of additively built Ti-6Al-4V alloy. International Journal of Fatigue, p.107850.https://doi.org/10.1016/j.ijfatigue.2023.107850
- 2023 Bhandari, L. and Gaur, V., 2023. A study on dwell-fatigue behavior of additively manufactured Ti-alloy. Engineering Failure Analysis, p.107423.https://doi.org/10.1016/j.engfailanal.2023.107423
- 2022 Bhandari, L. and Gaur, V., 2022. On study of process induced defects-based fatigue performance of additively manufactured Ti6Al4V alloy. Additive Manufacturing, 60, p.103227https://doi.org/10.1016/j.addma.2022.103227
- 2021 Bhandari, L., Kumar, J., Balasundar, I. and Arora, A., 2021. Variability in Fatigue Life of Near-alpha Titanium Alloy IMI 834. Transactions of the Indian Institute of Metals, 74, pp.979-989.https://doi.org/10.1007/s12666-021-02210-z

### Awards and Fellowships

- 2023 Best poster award in Research Scholar's Day 2023, IIT Roorkee.
- 2022 Best poster award in International Conference AMPCO'22.
- 2017-19 Ministry of Education, Government of India Fellowship.

#### Experience

- 2018-19 Defence Metallurgical Research Laboratory Project Fellow Worked in the field of mechanical behavior of materials and materials characterization.
- 2020-23 IIT Roorkee (DRDO Project) Research Fellow Investigated the fatigue and creep behavior of additively manufactured alloy.

# Professional Skills

- Mechanical Testing Tensile Test, Compression Test, Hardness Test, Bend Test, Impact Test, Corrosion Test, Fatigue and Fracture Test.
- Mechanical Characterization Optical Microscopy, Scanning Electron Microscopy (SEM), Electron Back Scattered Diffraction (EBSD), Chemical Composition.
- Softwares AutoCAD, SolidWorks, Ansys, ABAQUS, MATLAB, MS-Office, Origin.