BITS Pilani
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Research & Innovation

ONE PhD Scholar Position

Design and development of machine learning assisted in situ adaptive strategy to control the anomalies and properties during additive manufacturing of nickel based super alloys

Hyderabad Campus | Joining: At the earliest

Date: 05 April 2025

Applications are invited for **ONE** position of PhD Scholar on project, "***Design and development of machine learning assisted in situ adaptive strategy to control the anomalies and properties during additive manufacturing of nickel based super alloys***" under the supervision of **Prof. Ravi Shanker Vidyarthy** and **Prof. Rajib Ranjan Maiti**.

The project is an interdisciplinary in nature that would help to develop skills across the disciplines of **Mechanical Engineering** and **Computer Science and Engineering**, in particular additive manufacturing and AI/ML based anomaly detection.

Scope of work	Essential Qualification	Desirable Qualification
• Deposition of the nickel alloy using WAAM. • Study and analysis of the process parameters effect on deposited bead qualities. • Implementation of the ML approach to print the material with predefined properties.	BE/BTech/M.E./M.Tech or equivalent degree in Mechanical Engineering or Computer Science and Engineering or allied branches with minimum 60% marks / First division in highest qualification	• Basic knowledge of Wire Arc Additive Manufacturing process • Basic Knowledge in AI/ML • Highly motivated to work in a multi- disciplinary project

Fellowship: ₹37,000 - ₹42,000 per month (based on the year of PhD and performance)
Duration: As per BITS Pilani norms (http://www.bitsadmission.com/phmain.aspx)
Place of work: BITS Pilani, Hyderabad Campus, Hyderabad, Telangana 500078

Application process: Please apply using the following Google Form

- Google form link: https://forms.gle/ac3VVV1qLZJxVuRAA
- Deadline: 20th May 2025

Shortlisted candidates will be informed through e-mail for interview (Online). For more details, please contact via email with **Subject: CDRF …**

Prof Ravi Shanker Vidyarthy	**Prof. Rajib Ranjan Maiti**
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