

MPhil Studentship

Department of Civil Engineering
Faculty of Engineering
University of Peradeniya

Project title: Development of Sustainable Construction Materials with Enhanced Characteristics using Blended Alum Sludge.

Duration: Two years, Full-time (Rs 70,000/= monthly stipend as per NRC approved rates).

Nature of Work: The selected research student will work on a project focused on developing sustainable construction materials using alum sludge, a byproduct of water treatment processes. The central research question investigates whether blending alum sludge with supplementary materials (e.g., cement, fly ash, aggregates) can yield structurally sound, environmentally sustainable construction materials with improved mechanical and durability properties. The research will be strongly experimental, involving laboratory testing under structural/material engineering frameworks. The student will also participate in optimizing mix designs, analyzing results using statistical tools, and contributing to academic publications. The research primarily aligns with structural engineering, with secondary input from environmental engineering

Qualifications: This postgraduate studentship leading to Degree of Master of Philosophy (MPhil) is open to a qualified candidate specialized in Civil Engineering. A strong undergraduate record with a minimum of Second Class (Upper Division) is essential. A related postgraduate qualification will be considered as an added advantage. Furthermore, Undergraduate/ postgraduate research projects focusing on the above mentioned areas and publications (Journal/ Conference/ Book Chapter etc.) will be an added advantage.

Applications: A curriculum vitae, certified true copies of academic transcripts and degree certificates, and copies of any publications should be submitted via the following link:

<https://forms.gle/U3CQ8Ag37FATn9hN9> on or before **15th June 2025**.

Only shortlisted candidates will be called for interviews. The final selection will be based on the decision of the interview panel.

For further inquiries, please contact the Principal Investigator.

Dr. Lashitha Rathnayake
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