

MSc & PhD Research Opportunities in Extractive Metallurgy & Geometallurgy

Host: ARM Geometallurgy Research Chair / Chemical Engineering Department

The ARM Geometallurgy Research Chair is seeking excellent Master's and PhD-level candidates to conduct research in extractive metallurgy applied to geometallurgy. These projects aim to advance mineral processing efficiency, sustainability, and value recovery in the mining industry.

We are seeking **motivated, analytical, and solution-driven candidates** with a passion for **extractive metallurgy and geometallurgy**. The ideal applicant thrives in a research-intensive environment, has strong problem-solving skills, and is eager to apply engineering principles to real-world mining challenges. Candidates must be willing to **spend time on-site at mining operations**, gaining hands-on experience.

Research Projects:

MEng Projects

- **Iron Ore Tailings Valorization:** Upgrading tailings for concentrate production, concentrate agglomeration, and developing rehabilitation strategies for low-grade tailings.
- **Iron Ore Geometallurgical Characterization & Process Optimization:** Evaluating ore characteristics and optimizing gravity separation processes for improved recovery.
- **Iron Ore Waste Stream Processing:** Metallurgical characterization of gravity separation plant discard and assessing potential for producing a saleable product.

MEng/PhD Project

- **Platinum Group Metals (PGMs) Applied Mineralogy & Geometallurgy:** Investigating mineralogical and metallurgical aspects to enhance processing efficiency and resource recovery.

Bursary

A bursary will be available for the relevant MEng/PhD registration.

Requirements

- A BEng/BScEng (for MSc applicants) or MScEng (for PhD applicants) in Chemical Engineering, Metallurgy, or related fields from an accredited institution.
- A strong academic record (preferably with an aggregate of >65%).
- Previous experience in mineral processing will be an advantage but is not required.
- Only South African citizens are eligible to apply.

Application

Interested candidates must submit:

- Cover letter
- CV
- Degree certificate(s)
- Complete academic transcript(s)
- Contact details of at least three academic references

Applications can be sent to mtadie@sun.ac.za before **14 March 2025**. Candidates may consider their application unsuccessful if they do not receive any feedback within four weeks of applying.

Stellenbosch University reserves the right not to fill the position(s).