



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

FACULTY OF NATURAL AND AGRICULTURAL SCIENCE

DEPARTMENT OF CHEMISTRY

POSTDOCTORAL RESEARCH FELLOWSHIP

The [Mineral Waste Beneficiation research group](#) of the Department of Chemistry, University of Pretoria invites highly motivated and research-driven researchers to apply for a full-time Postdoctoral Research Fellowship under the supervision of Prof Liezel van der Merwe. The responsibility of the postdoctoral researcher will be to conduct high-quality research which focuses on the modification, characterization and valorisation of South African industrial wastes, with specific emphasis on (but not limited to) the valorisation of Coal Fly Ash. Research projects should be aligned with the objectives of the research group and will include studies on solid-state thermochemical reactions, solid-liquid conversions, wet and dry surface modification techniques as well as a variety of leaching studies. He/she will be expected to generate new knowledge and to publish his/her work in high quality academic journals with co-authors from the research group. Other duties will include mentoring of postgraduate students, managing the day-to-day running of the laboratories and regular participation in group meetings.

MINIMUM REQUIREMENTS

- A recently earned PhD (not more than 4 years) in Chemistry, Chemical Engineering or Materials Sciences is preferred.
- Candidates who have not yet completed their PhD at the time of application should submit an official letter from their institution confirming that their doctoral qualification will be completed by December 2022. If this requirement is not met, the application for the fellowship will be disqualified.
- Candidates must not be over 40 years of age.
- Experience in using TGA, DSC, BET, pXRD, XRF, FESEM, TEM and FTIR will be advantageous.
- Ability to conduct independent research.
- Proven publication track record.
- Good verbal and written communication skills.

VALUE AND DURATION OF THE FELLOWSHIP

The value of the fellowship is R 200 000 per annum tax free, paid in the form of a monthly stipend. The fellowship is full-time, available for 1 year and may be renewed for a second year based on the Postdoctoral Fellow's performance. The position is available from 1 January 2023.

HOW TO APPLY

Interested and eligible candidates should e-mail their applications to Prof Liezel van der Merwe, liezel.vandermerwe@up.ac.za, using "Postdoctoral Research Fellowship" in the subject line. The application should include the following:

- One-page cover letter detailing how the candidate meets the minimum requirements.
- Curriculum Vitae including a list of research publications and other scholarly outputs, and the names and e-mail addresses of at least 3 referees.
- Copies of the applicant's detailed academic record and degree certificates.
- 2 journal articles which were authored (or co-authored) by the applicant, showcasing his/her ability to conduct and report research (if available).

The closing date for applications is **7 October 2022**.