



Postdoctoral Research Fellowship

Institute for Microbial Biotechnology and Metagenomics

University of the Western Cape (UWC)



The IMBM is recognised as one of the leading research units at the UWC. The Institute focuses on recent advances in (meta)genomics and bioinformatics for the identification of genes or biosynthetic pathways and their heterologous expression to produce natural and novel high-value biochemicals. As one of the five Nodes of the CSIR/TIA/DSI Industrial Biocatalysis Hub, the IMBM develops selected technologies in biocatalysis for potential industrial assimilation.

The IMBM invites applications for a one-year Postdoctoral Fellowship to advance one of the selected technologies i.e. further process development for the production of two patented biosurfactants, a lyso-ornithine lipid (LOL) which is produced in *E. coli* and a ornithine lipid (OL) which is produced in *P. putida*. The position is available for 2024.

Project Description:

The project will focus on the further improvement of the LOL and OL production strains through e.g. further genetic modification and/or co-expression of selected genes that may relieve metabolic bottlenecks, assessing fermentation parameters that may influence production, as well as optimisation of down-stream processing at laboratory scale.

Minimum Criteria:

- A PhD degree in a foundational discipline relevant to the topic, complete in the past five years,
 - a minimum of 2 years post-PhD experience in (bio)chemistry with a focus on metabolism, strong project management and trouble-shooting skills, and
 - a South African citizen.
- ♦ Experience in cloning, heterologous expression and other genetic engineering strategies, and a strong publication record will be considered as advantages.

Application Submission:

The candidate will be under the supervision of Prof. Marla Trindade. Applicants are to submit their CV and covering letter to alburger@uwc.ac.za. Shortlisted applicants will be contacted for an interview.