



**AFRICAN
BIOMANUFACTURING
Workforce Training
and Skills Development
Programme**



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



CSIR

Touching lives through innovation



The CSIR launched the African Bio-manufacturing Workforce Development and Training Programme in June 2023. The programme, aimed at developing a skilled and competent workforce in the biomanufacturing sector in Africa, is expected to run for three years. The first intake focused on biomanufacturing technologies (CSIR-BT-1A).

COURSE IN VACCINE PRODUCTION TECHNOLOGIES (CSIR-VP-1A)

Applications are now open for the next intake of the programme, which will focus on vaccine production technologies (CSIR-VP-1A). The course will run for four weeks, comprising two weeks of online sessions and two weeks of in-person training at the CSIR premises.

The aim of this course is to assist in growing and developing the vaccine production sector on the African continent through training and innovative bioprocess solutions.

WHO CAN APPLY?

The course is offered to African manufacturers, scientists and other key players in the development and scaling up of vaccine production processes and active pharmaceutical ingredients.

A key aspect of this course is providing hands-on training and skills development that will enable local manufacturing of recombinant vaccines. It is aligned to several other initiatives that are focused on establishing vibrant biomanufacturing industries on the African continent.

COURSE DESCRIPTION

The vaccine production course provides comprehensive competency-building and skills transfer across all aspects relating to vaccine production, including an in-depth look at the challenges and solutions for production and scale-up across various expression platforms, including fungal, yeast, bacterial, mammalian and plant systems.

This course will be delivered as a mixed model of applied and advanced knowledge transfer in the form of online-based lectures, industry tours and hands-on training (onsite at the CSIR).

KEY AREAS OF DEVELOPMENT INCLUDE:

- Vaccine production platforms
 - Platform-based manufacturing systems
 - Process unit operations
- Production stages
 - Upstreaming of bioprocess development for the production of vaccines
 - Downstream processing
 - Vaccine purification and formulation
 - Sterile filling
- Hands-on training across all unit operations using CHO-cell lines
 - Cell line storage and maintenance
 - Bench-scale production (flasks)
 - Downstream product recovery
 - Product purification and polishing
 - Fill and finish



COURSE DATE, DURATION AND VENUE

DATE: 2 TO 26 OCTOBER 2023

Duration: TWO WEEKS OF ONLINE LECTURES

(2 October to 12 October 2023) and two weeks of intensive in-person training (16 to 26 October 2023)

VENUE: MICROSOFT TEAMS and CSIR MAIN CAMPUS, PRETORIA, SOUTH AFRICA



COURSE DELIVERY

Online lectures will be conducted via Microsoft Teams and in-person lectures will take place at the CSIR, Pretoria, South Africa. This blended format of transferring advanced knowledge will include:

- Hands-on training;
- Online-based lectures; and
- Site visits/tours.

COST AND FINANCING

For South African candidates, the funding includes course fees.

For candidates from other African countries, the funding includes:

- Course fees;
- Visa fee reimbursement; and
- Documents to facilitate the visa application.

Sponsored travel

The travel for 10 people will be sponsored as follows:

- Five local; and
- Five international, based on the submitted motivations in the application.

This includes:

- Return air ticket; and
- Ground transport return from the airport to accommodation (x 1).

Accommodation and subsistence and travel allowance will not be covered. A list of accommodation in areas surrounding the CSIR can be provided on request.

Please note that a maximum of 25 candidates will be selected.

WHO SHOULD ATTEND?

Preference will be given to the following candidates:

- Current staff in the vaccine production sector who require skills expansion/upgrading;
- New or developing staff in the vaccine production sector;
- Staff from vaccine production facilities that are currently under construction that will require a skilled workforce.

A limited number of spaces will be reserved for candidates who have recently completed their PhDs (2019-2023) in a field related to bioprocessing of recombinant protein or biologics.

Applications from qualified persons from all African Union member states will be accepted. Young females are encouraged to apply. For enquiries, please email BIDC@CSIR.co.za

IMPORTANT DATES

- Deadline for the submission of applications: 19 July 2023
- Date of notification of selected candidates: (by) 4 August 2023

Applications should be submitted by filling in the application form available at this link:

Application forms- Course in Vaccine Production Technologies (CSIR-VP-1A)

