



## INTERNSHIP OPPORTUNITY

CSIR-NCRST Innovation and Industrial Development Programme

**4 x Internship:**

**at the Biomanufacturing Industrial Development Centre (BIDC) -  
at the CSIR's main campus in Pretoria, South Africa**

### INTRODUCTION

The National Commission on Research, Science and Technology (NCRST) and The Centre for Scientific Industrial Research (CSIR) have collaboratively developed a programme to strengthen and support the Namibian national innovation ecosystem. The NCRST was established in terms of section 4 of the Research, Science and Technology Act, 2004 (Act no. 23 of 2004) with a primary purpose of promoting, coordinating, and developing Research, Science, Technology, and Innovation in Namibia. CSIR is a world-class African research and development organisation established through the South African Act of Parliament in 1945, which seeks to undertake directed, multidisciplinary research and technological innovation that contributes to the improved quality of life of South Africans.

Both NCRST and CSIR have agreed to invite applications from qualified individuals to apply as interns for this collaborative programme. The programme is aimed towards the development of manufacturing skills for the 4th Industrial Revolution.

**Primary Purpose of Internship:** BIDC offers technical support to Small Medium and Micro-enterprises (SMMEs) and entrepreneurs in the development of cosmetics, foods/nutraceuticals, and specialty chemicals. During product and process development, the BIDC assists SMMEs to take their product concepts to market-ready products and supports them up to pilot-scale production.

### The BIDC has capabilities to

- High-end analytical capabilities - mass spectrometry, nuclear magnetic resonance spectroscopy (NMR), gas chromatography (GC), high performance liquid chromatography (HPLC);

- The extraction and formulation of natural ingredients for cosmeceuticals, nutraceuticals, food and the complimentary medicines' sector utilising a variety of distillation set-ups/reactors;
- Product formulation capabilities such as; tea-bagging, sachets, tube and bottle filling, capsuling, tableting and extrusion;
- Protein purification capabilities from lab to preparative scale (enzyme, metabolites, antibodies, antigens, virus-like-particles (VLP's), bio-similar's etc.)
- A team with expertise and a track record in a wide range of downstream processing and development. These range from crude cell separation via centrifugation or filtration to more complex chromatographic purification, solvent extraction, and various drying process options (oven drying, fluidised bed drying, freeze drying, spray drying); and
- A complete bioprocessing facility to allow the development and production of bio-based technologies using wild-type and genetically modified microorganisms.

### **Eligible criteria**

- Namibian citizen with a valid Passport and No Criminal Record
- Unemployed Graduate or Self-Employed Graduate/Innovator with sound background/technical training or certifications of the subject matter.
- Good understanding of Technology Transfer, Good Laboratory/Manufacturing Practices as well as Project Management principles.

### **Minimum Educational Qualifications and Experience:**

- An Honours in biotechnology, microbiology or chemical engineering.
- Computer literacy in MS Office Package;
- Must be able and willing to work shifts (morning, afternoon or night)
- Must have a 'hands on' approach with respect to equipment operation, and working in the laboratory and pilot facility;
- Excellent communication skills (verbal and written);
- The following skills are required;
  - Self-motivated and a team player;
  - Analytical, methodical, innovative and results driven;
  - Willingness to learn and work under pressure;
  - Pro-active and focused;
  - Strong analytical and problem-solving skills;
- Ability to prioritise and have a good sense of urgency and accuracy.

**Conditions of Internship:**

- This is a 6-month internship at the Biomanufacturing Industrial Development Centre (BIDC), at the CSIR's main campus in Pretoria, South Africa.
- Upon successful completion of the internship the candidates will receive a certificate of completion for the respective programme attended.
- The incumbents at the end of their stay are expected to develop a Concept Note on how their internship experience can be contextualized to the Namibian setting and operationalized to enhance the socio-economic competitive edge within the STI sphere.

**Expected outcomes:**

- Knowledge and experience in Biomanufacturing

**Enquiries may be directed to:**

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**Closing Date of Application:** Friday 26 August 2022

Should you meet the above requirements, please email your CV to [CSIR@ncrst.na](mailto:CSIR@ncrst.na) with your name and surname and position title in the subject line, (e.g., John Smith: Job title:)

For more information, please visit NCRST website [www.ncrst.na](http://www.ncrst.na) or call +264 61 431 7000 (reception).