REQUEST FOR PROPOSAL

Date of Request: 22/10/2026

Closing Date: 13/11/2026

Request: Supply and delivery of Spectrophotometer with microdrop capabilities for the Centre for Bioprocess Engineering Research, Department of Chemical Engineering, University of Cape Town (UCT) under the DSTI/KfW/SAMRC Support of development and production of vaccines in South Africa Project

RFQ Number: 225712 00 100

Please note we would like a proposal and quote as per the attached specification sheet.

Contact: Supply Chain Management

For submissions:scm@mrc.ac.za

For general queries: KfWprocurement@mrc.ac.za

For technical enquiries email: KfWprocurement@mrc.ac.za

REQUEST FOR PROPOSAL

SUPPLY AND DELIVERY OF SPECTROPHOTOMETER WITH MICRODROP CAPABILITIES FOR THE CENTRE FOR BIOPROCESS ENGINEERING RESEARCH, DEPARTMENT OF CHEMICAL ENGINEERING, UNIVERSITY OF CAPE TOWN (UCT) UNDER THE DSTI/KFW/SAMRC SUPPORT OF DEVELOPMENT AND PRODUCTION OF VACCINES IN SOUTH AFRICA PROJECT

Introduction

The Government of the Republic of South African through its Department of Science, Technology and Innovation ("DSTI") has received grant funding support from the Government of the Federal Republic of Germany through its KfW Development Bank ("KfW") for the DSTI/KfW/SAMRC Support of Development and Production of Vaccines in South Africa Project. The Project provides equipment and infrastructure (including construction and Information technology) support with the purpose of strengthening vaccine research, development, pre-clinical testing, pilot-scale production and regulation in South Africa.

The South African Medical Research Council (SAMRC) is a national public entity as listed in Schedule 3A of the Public Finance Management Act, 1999 (PFMA). The SAMRC has been established through the South African Medical Research Council Act, 1991. The SAMRC's mission is "to improve the nation's health and quality of life through promoting and conducting relevant and responsive health research". The SAMRC's head office is in Cape Town (Western Cape Province) and it is also represented in Gauteng and KwaZulu-Natal Provinces through regional offices. The SAMRC has seven campuses and several satellite research sites with diverse business activities i.e. offices, biochemistry and microbiology laboratories, health research clinics, animal research centres, and tenants renting space. Further information about SAMRC can be found on the webpage, www.mrc.ac.za.

One of the conditions of the grant is that all procurement under the Project will be implemented by the SAMRC in compliance with the South African and German public sector procurement frameworks with the fundamental principles of fair, equitable, transparent, competitive, and cost-effective procurement. In this regard, Bidders should note that the equipment and infrastructure will be procured by the SAMRC on behalf of Project Beneficiaries. Equipment and infrastructure contracts will be paid for directly by SAMRC to the suppliers / service providers.

The SAMRC commenced the implementation of the Project on 1 April 2024 and subsequently issued Request for Applications inviting role-players in the vaccine production, research and development, training and regulation industry to apply for equipment and infrastructure support under the Project. The RFA processes concluded in December 2024.

The SAMRC invites bids from suitably qualified, technically competent and experienced service providers for the **Supply and delivery of Spectrophotometer with microdrop capabilities under the DSTI/KfW/SAMRC Support of Development and Production of Vaccines in South Africa Project, to be placed at the Centre for Bioprocess Engineering Research, Department of Chemical Engineering, University of Cape Town (UCT)** which is the Project Beneficiary.

Scope of work

Beneficiary organisation and unit

- Organisation: University of Cape Town
- Department / unit: Centre for Bioprocess Engineering Research, Department of Chemical Engineering
- Site location (campus/building/area): Molecular laboratory (4th Floor, Chemical Engineering Building)
- Intended installation location (room / lab / area): Laboratory

Background for application of the system

Instrument/System: **Spectrophotometer with microdrop capabilities**

Purpose and use-case

- A spectrophotometer that can quantify DNA, RNA, and proteins on 1-2µl sample input and provides an assessment of the purity using the UV and visible (UV-vis) spectrum for research purposes.

Samples / materials / workload assumptions

- Sample type(s) and matrix: DNA/RNA/proteins in ultrapure water or physiological buffers
- Typical sample volume range: 1-2µl
- Expected throughput (per day/week/month): 20-80 samples per week
- Expected operating hours (e.g., 8/5, 24/7, occasional use): Daily use
- Users (number, skill level, training level): 3-5 users, low skill and training level required
- Regulatory or sponsor requirements that drive the use-case: Not applicable

Core functions

- The system shall allow quantification and purity assessment on sample volumes of 1-2µL.

- The system shall have a wide dynamic range that allows the accurate quantification of samples containing 10-2000 ng/µL DNA/RNA or 10-750 mg/mL bovine serum albumin without requiring dilution.
- The system shall be capable of measuring the UV and the visible (UV-vis) spectrum (190-850 nm) and report the concentration and purity ratios (OD260/280 and OD260/230).
- The system shall have software with pre-configured methods for the use of full-spectrum data for DNA/RNA/protein quantification, impurity detection (e.g., DNA in RNA samples, protein in RNA samples, phenol etc.), and the correction of quantification results based on impurity detection as demonstrated by the manufacturer.
- The system must preferably be a standalone unit. If PC-controlled, the computer shall be included with the spectrophotometer.

Performance / capacity requirements

- Capacity (e.g., number of samples / lanes / runs / storage positions): Rapid quantification (< 10 seconds) to allow the rapid processing of high sample numbers
- Performance targets (e.g., sensitivity, accuracy, precision, resolution, throughput): Sensitivity: Accurately detect as little as 10 ng/µL DNA/RNA and 1 mg/ml protein.
  Wavelength accuracy: ±1 nm
  Absorbance accuracy: < 5% tested under conditions specified by the manufacturer
- Environmental performance requirements (ambient range, humidity, vibration tolerance if relevant): Ambient temperature; 20-80% humidity (non-condensing)
- Uptime/availability requirement (if relevant): Not applicable

System architecture / components

- Required modules/components (if genuinely required): Any modules/components required to allow the system to fulfil its core functions as outlined in Core Functions (2.5.).
- Consumables compatibility requirements (if relevant and non-brand-specific): Not applicable
- Required accessories / included items: Any accessories required to allow the system to fulfil its core functions as outlined in Core Functions (2.5.).

Materials, construction, and compliance

- Materials in contact with samples (if relevant): Pedestal shall be composed of materials that are durable.
- Cleanability / decontamination requirements: Pedestal shall be composed of materials that allow easy cleaning and reconditioning.
- Noise/heat output limits (if relevant): Not applicable

Documentation deliverables

- Manuals (user/service): User guide
- Calibration certificates (if applicable): Factory calibration report issued by the manufacturer.

- Validation support documents (if applicable): Certificate of conformance (CoC), installation qualification (IQ) and operational qualification (OQ) at installation as recommended by the manufacturer.

Data integrity and electronic records (if applicable)

- User access control (roles, password policy, audit trail): Not applicable
- Audit trail requirements (events captured, tamper evidence, exportability): Yes
- Data export formats and long-term retention expectations: PDF
- Time sync / timestamp integrity (if relevant): Yes
- Backup/restore expectations: Not applicable

Factory Acceptance Test (FAT) / pre-shipment checks

- FAT required: Yes
  Factory calibration report issued by the manufacturer; The system shall pass all criteria as recommended by the manufacturer, including software verification.

Site Acceptance Test (SAT) / Commissioning

- SAT required: Yes
- Standard solutions of RNA/DNA/proteins will be evaluated at concentrations that are within the dynamic range to ensure reliable, linear quantification within the reported dynamic range of the system by the laboratory.

Qualification / validation support (only if applicable)

- IQ/OQ support required: Yes

Expected deliverables and responsibilities: For IQ, documentation, system configuration, environmental setup, connection, and calibration checks are required.
For OQ, functional testing as per the manufacturer's recommendations.
The signed IQ/OQ protocols, results of all functional tests, deviation reports and corrective actions (if necessary), and calibration certificates must be provided.

Acceptance criteria summary

- Minimum “must pass” criteria for acceptance: Pass factory calibration (factory calibration report), site acceptance test performed by the laboratory (accurate, linear quantification of standards within the dynamic range of the instrument), and all IQ/OQ protocols as outlined by the manufacturer to confirm that the system is fit for purpose.

IT, cybersecurity, and connectivity

- Local/offline operation possible: Yes
- Network connection required: No

Conditions and commercial/operational requirements

Training

- Training required (initial + refresher): Initial training
- Number of trainees: 2-4
- Training location (on-site / supplier site / hybrid): On-site
- Training materials required: Supplied by the laboratory
- Delivery location: South Lane, Chemical Engineering Building, Upper Campus, University of Cape Town, Rondebosch, 7700
- Installation required: Yes
- Target timeline / constraints: 4-6 weeks from date of award
- Any constraints on working hours / access to site: 08:00-16:00

Warranty and maintenance

- Warranty period required: 12-24 months
- Preventive maintenance expectations: Include 5-year maintenance/service plan or provision of appropriate preventative maintenance kits that allows the end user to perform preventative maintenance for 5 years.
- Response time requirements (e.g., remote response within X hours; on-site within Y days): Remote within 4-7 days; On-site 7-14 days
- Availability of local support (if required): Yes
- Spares and consumables support expectations: Must be available for purchase to allow preventative maintenance and limited downtime

Handover package

- Handover checklist items (documentation, training sign-off, SAT sign-off, etc.): Instrument and any additional modules/components/accessories required to the specifications outlined in *Core Functions*, documentation deliverables as outlined in *Documentation*, training as outlined in *Training*, and completion of all relevant acceptance and verification requirements as set out by the manufacturer as outlined in *Acceptance criteria summary*, and warranty and maintenance certificates or preventative maintenance kits as outlined in *Warranty and maintenance*.

1. Submissions

Submissions must include the following:

Requirements (For eligibility assessment)

1. Valid tax clearance or PIN
2. CSD registration
3. Company registration documents
4. BBBEE status
5. COIDA certificate

2. Additional Requirements (Scored)

Proposal with clear outline of the equipment required for delivery addressing the required scope of work, delivery timelines and summary of relevant expertise and experience of the company, and technical team together with:

- Company Profile and Compliance documents
- CVs and qualifications of technical team
- References: Portfolio of at least 3 contactable references with a similar supply and delivery of similar equipment. Full contact details including relevant contact person, nature of service and period (start and end dates).
- Price quotation valid for 30 days.

Submissions meeting the minimum requirements for functionality will be evaluated on price and special goal points.

The closing date for submission is 13/11/2026

Table 1. Evaluation / selection guidance criteria

Criteria	Ref No.	Description	Weight (%)	Min pre-qualification percentage	Preference points system
Functionality (Total= 100%)	1	Company Profile indicating core business in supply and delivery of the required items as per the scope of work of the bid document. • Years' experience in supply and delivery of referred items • Organogram • Location Based • Accreditations such as SANS,ISO,etc.	25	70%	
	2	Specialized experience and technical competence of the company in offering the goods/service required in this bid or similar	25		
	3	Ability of the company to deliver the goods/services to the various Project Beneficiary sites in relation to this equipment within the required time.	20		
	4	References: Portfolio of past supply and delivery of goods/services of a similar scope. Portfolio should include full contact details of at least 3 or more client references (including relevant contact person, nature of service, contract amount and/or period, commencement date, telephone number and email addresses)	30		
Price					80
Specific goals					20
					100

Table 2. Rating guideline for functionality criteria

No.	Criteria	Scoring Guideline (Points)
1.	Company Profile	**20-25:** Information supplied indicated excellent proof of core business and accreditation certification submitted Greater than 10 years in business
		15–19: Information supplied indicated satisfactory proof of core business and accreditation certification submitted. 6 - 8 years in business
		10–14: Information supplied indicated average proof of core business and no accreditation certification. 3- 5 years in business
		5–9: Information supplied indicated poor/limited proof of core business and no accreditation certification. Less than 3 years in business
		0–4: Insufficient or no information provided.
2.	Specialized experience and technical competence	**20-25:** Information supplied indicate excellent experience and technical competence of the company in offering the service required in this bid
		15-19: Information supplied indicate good experience and technical competence of the company in offering the service required in this bid
		10-14: Information supplied indicate satisfactory experience and technical competence of the company in offering the service required in this bid
		5–9: Information supplied indicates poor experience and technical competence of the company in offering the service required in this bid
		0-4: No information supplied. OR Information supplied indicates no experience and technical competence of the company in offering the service required in this proposal.

3.	Delivery Lead Time	**18–20:** Lead time for delivery less than 4 weeks
		14–17: Lead time for delivery 4 to 6 weeks
		10–13: Lead time for delivery 6 to 8weeks
		5–9: Lead time for delivery 8 to 10 weeks
		1-4: Lead time for delivery 10 to 12 weeks
		0: Lead time for delivery greater than 12 weeks
4.	Contactable References	**23-30:** Three or more relevant and recent references provided with full contact details.
		15-22: Two references provided with some relevance.
		14-19: One or more references with some relevance
		6-13: One references/ or incomplete details.
		0–5: No references

NB: Where the rating guideline above does not provide for the information provided by the bidder, the evaluator reserves the right to allocate closest or any score as he/she sees fit.

Pricing Schedule

Spectrophotometer with microdrop capabilities

Description	**QTY**	**Amount (ZAR)**
Spectrophotometer with microdrop capabilities, including all standard accessories and software required for operation, in accordance with the specifications	**1**	
Shipping and Delivery expenses; and import taxes (if applicable)	**1**	
Installation, commissioning and on-site training provided by a Technical Specialist, covering software and general system applications.	**1**	
Maintenance Plan for up to 5 years	**1**	
VAT (15%)		
Total Quotation Amount (Including VAT)		