



BID DOCUMENT FOR SUPPLY OF TGA/DSC WITH KINETIC SOFTWARE

Reference No.	RFB-DUT-19/26
Item Description	TGA/DSC WITH KINETIC SOFTWARE
Closing Date & Time No Late, Hand Delivered submissions will be accepted	08 October 2026 by 11am
Bid submission details	Bids must be emailed to tenders@dut.ac.za
Procurement & General Enquiries	ernestd@dut.ac.za
Compulsory site visit / briefing session (if applicable)	N/A

1. INTRODUCTION

Durban University of Technology invites suitably qualified and compliant service providers to submit quotations for the supply / delivery (Installation) of **TGA/DSC WITH KINETIC SOFTWARE**. This procurement is undertaken in accordance with the approved DUT Procurement Policy.

2 SCOPE OF WORK

2.1 Purpose of the Scope

The purpose of this Scope of Work is to clearly define the goods required by the Durban University of Technology (DUT), the expected outputs, performance standards, and delivery requirements. The successful service provider shall be required to deliver the specified goods to the relevant DUT campus/site (in consultation with central stores unit) in accordance with the requirements outlined herein.

2.3 Scope Description

The appointed service provider/supplier shall be responsible for the full provision of the following:
The service provider shall:

1. Supply brand-new, unused goods that comply fully with the technical specifications detailed in Section 3.
2. Ensure that all goods meet applicable safety, regulatory, and compliance standards (SANS/ISO/OEM/SABS where applicable) with proof of certification.
3. Include all necessary components, accessories, and fittings required for full functionality.
4. Provide manufacturer warranties and product documentation.
5. Ensure safe packaging and transportation to prevent damage.
6. The scope includes, but is not limited to:
 - Site inspection
 - Delivery and installation;
 - Testing and commissioning
 - Training of DUT personnel
 - Removal of waste materials;
7. Where installation is required, the service provider must ensure:
 - Compliance with all statutory and safety regulations including competent personnel.
 - No disruption to academic or operational activities;

- Proper reinstatement of work areas after completion.
8. The successful bidder shall provide the following deliverables:
- Goods delivered in full and in working condition.
 - Installation and commissioning certificate
 - Warranty documentation.
 - Compliance certificates
 - Training manuals or user guides
 - Signed delivery note and handover documentation.

NB: Failure to meet deliverables may result in non-payment or remedial action.

2.4 Timeframes

The service provider shall:

- Deliver said goods within the stipulated timeframes as indicated in their documentation.
- Notify DUT immediately of any delays.

Time shall be considered of the essence unless otherwise agreed in writing.

2.5 Location

Delivery / installation of goods shall take place at:

Region	Durban
Campus name	Steve Biko Campus
Building/Department/floor/room number	S10 Level 5, Chemistry Department
Physical address	79 Steve Biko Road, Berea, Durban, 4001

2.6 Variations

No variation to this Scope of Work shall be permitted without:

- Written approval by the relevant delegated authority;

2.7 Non-Splitting Clause

The requirement described herein constitutes a single consolidated procurement requirement. Any attempt to split the scope to avoid procurement thresholds is prohibited and constitutes non-compliance.

3. TECHNICAL SPECIFICATIONS

N o.	Item Description	Specification Requirement	Bidder to indicate if they have complied with specification (DUT will require all the datasheets to confirm compliance) NB: Datasheets that are not in terms of DUTs specification 0 points will be awarded Functionality.
1.	Simultaneous TGA/DSC System with Model Free Kinetics Software Internal Microbalance	Simultaneous TGA/DSC System with parallel-guided single beam SDTA DSC sensor, a built-in gas controller, a motor driven horizontal furnace with maximum temperature of 1100 °C or higher. Must have a built-in microbalance with 1g or higher capacity and full range 1ug readability and a minimum weight of 0.19mg or lower at 1% relative standard deviation. Automatic internal adjustment with a minimum of 2 built-in ring weights and external calibration with certified weighs must be possible. A low minimum weight ensures that small samples close to the low end of the weighing range are also weighed accurately.	

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	Built-in gas flow control Gas Switching Capabilities Temperature Data Data Acquisition and Processing Software	To allow to investigate samples in defined atmospheres. Program-controlled gas switching lets you automatically switch from inert to reactive gases to analyse both pyrolysis and oxidation behaviours in a single run. Temperature ranges from room temperature to 1100 °C, temperature accuracy ± 0.25 K, temperature precision ± 0.15 K and furnace temperature resolution 0.01K. Heating time 5 min (room temp to 1100 °C), Cooling time 20 min (1100 to 100 °C). A computer for both the server and client must be included, which must meet the thermal analysis software manufacturer specifications. Model Free Kinetics Software Analysis capable of performing advanced calculations on data generated by the Simultaneous TGA/DSC System,	

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	Installation and Training Uninterruptible Power Supply (UPS) Calibration and Maintenance	determining kinetics parameters, including, Activation Energy, Pre-Exponential Factor, Half Life and Rate Constant. The supplier must provide full installation services, including setup and calibration at our research facility. Comprehensive on-site training for staff and students in operation, maintenance, and data analysis of the TGA/DSC and Kinetic Free Software must be included. Must be supplied with a compatible Uninterruptible Power Supply (UPS) to cover during power failures/load-shedding. The system must include an automatic calibration system to ensure high mass accuracy. Maintenance and calibration protocols should be straightforward and supported by the manufacturer. Instrument Control: Computer workstation with the necessary	

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	Can be upgraded for add on practical accessories Environmental and Power Requirements	hardware and software installed for instrument control and data analysis. Automated TGA-FTIR, TGA-MS and TGA-GC/MS systems – to perform accurate evolved gas analyses using FTIR and MS in future. Operating Environment: System must operate effectively under standard laboratory conditions (temperature: 20°C to 25°C, humidity: 40%-60%). Power Supply: Compatible with local power standards (specify voltage and frequency requirements as per local standards). Must have a Power-save function to adhere to current needs to reduce Carbon Footprints.	
2.	Warranty period	Minimum 1-year warranty on all components, including software updates during the warranty period.	
3.	Defects liability period (if applicable):	Not applicable	

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4.	5-year service and maintenance which will be paid each year on the anniversary of the commencement of the service contract (this should include parts, material, labour) – Year 1 should be included in the equipment pricing. Bidder to advise on exclusions.	Maintenance Contract: Option for an extended service and maintenance contract after the warranty period. Lifetime support for maintenance with a 24hour response time and application problems. Availability of spare parts 10 years after the instrument becomes obsolete.	
5	Free software updates for 5 years		

5. EVALUATION CRITERIA

5.1 COMPULSORY DOCUMENTS (Phase I)

Failure to submit compulsory documentation and compliance with specification will result in disqualification and bidders **will not proceed** to Phase 2 (in case of Joint Ventures both JV partners must submit and sign ALL the below requirements in section 5.1 and 5.2.

Suppliers **must** submit:

- I. Valid Tax Compliance Status PIN (TCS PIN)

2. Signed Form of Offer (# 6)
3. Signed Standard bidding documents (Refer Annexure A to D – page 12 to 17)
4. Proof of Authorised Reseller Agreement / Partnership Certificate
5. Company registration documents
6. A complete set of the latest compiled, audited or reviewed annual financial statements (with comparative figures), which should comprise the signed Directors' Report, the signed Auditor's/Independent Reviewer's Report, and with accompanying notes, as per the requirements of the companies act 71 of 2008. (Not more than 2 years old).

5.2 QUALITY AND FUNCTIONALITY

5.2.1 Minimum three (3) signed customer references with corresponding Purchase Orders or contracts were delivery and/or installation of similar goods have been concluded – 30 points

Each reference will be evaluated according to following criteria:

- a) Signed customer references with corresponding Purchase orders/ contracts/ tax invoices – 3 points each reference
- b) Successful supply, installation and commissioning of equipment – 3 points each reference
- c) Successful service and maintenance of equipment – 3 points each reference
- d) Not older than 5 years – 1 point each reference

5.2.2. Compliance to technical specification must include:

- (a) **Warranty,**
- (b) **guarantee,**
- (c) **datasheets-**
- (d) Compliance certificates
- (e) Training manuals/user guides

The service provider must provide supporting documentation (e.g. datasheets or OEM certificates) confirming compliance with the specifications in Section 3, above (Section 3 must be completed) including all Warranty documentation, Compliance certificates, Training manuals or user guides - 30 points

NB: non-compliance with specification documents required will lead to zero points being awarded.

5.2.3. Methodology for supply, delivery, installation, commissioning, training of equipment considering Health, safety, risks and DUT environment – 30 points

- a) Supply and delivery with Gantt chart or similar with timelines, critical milestones – 5 points
- b) Installation and commissioning including Testing – 5 points
- c) Training on equipment to DUT staff – 5 points
- d) Health and safety risks during installation – taking care no DUT stakeholders' safety is compromised – 5 points
- e) Warranty process – 5 points
- f) Service and maintenance process including frequency – 5 points

5.2.4 Calculation of financial ratios (based on the average of both comparative figures in the Financial statements)

Review of Annual Financial Statements (Financial Statements which were submitted in Phase one will be utilized for these calculations based on the average of the financials)	ii. Liquidity “Current ratio”(Current Assets to Current Liabilities :		5	Latest Set of Financial Statements with comparative figures NB: The points will be allocated utilizing the average of ratios from the latest two sets of figures depicted in the last set of financials In the case of JV's: - A combined AFS will be utilized for ratio calculations. or - In the case were there is no combined AFS, All JV Partners AFS will be utilized to calculate the ratios and an average points between both parties will be scored accordingly.
	If ratio > than 2:1	5		
	If ratio = 2:1	4		
	If ratio < 2:1 but not < 1	2		
	If ratio < 1	0		
	ii. Operating Cash Flow Ratio (Operating Cash Flow to Current Liabilities)		5	
	If the ratio is > 1.00	5		
	If the ratio is > 0.75 and ≤ 1.00	4		
	If the ratio is > 0.50 ≤ and ≤ 0.74	3		
	If the ratio is > 0.25 and ≤ 0.49	2		
	If the ratio is < 0.25	0		

Maximum total points for Quality and Functionality	100 Points
Bidders must obtain a minimum of 75 points to proceed to Phase three	

NB: The University will only consider service providers with proven relevant experience, capacity, and technical expertise in the required goods/services; general dealers or intermediaries without demonstrable capability and direct knowledge of the transaction will not be considered.

5.2 PRICE / PREFERENCE - 80/20 System:

Bidders must submit a valid B-BBEE Certificate or non-submission will result in 0 points being awarded for B-BBEE

Criteria	Points
Price	80
DUT Specific Goals / B-BBEE	20

DUT specific goals for B-BBEE points

Specific Goal		80/20	
		Sub-points	Total Points
	Exempted Micro Enterprise (EME) or Qualifying Small Enterprise (QSE)	3	3
Black-owned Enterprises	100% Black owned enterprise	3	3
	Minimum 51% black-owned enterprise	2	
	Minimum 25% black-owned enterprise	1	
Black Women owned Enterprise	100% Black Women owned enterprise	5	5
	Minimum 51% black women-owned enterprise	4	
	Minimum 25% black women-owned enterprise	3	
	Less than 25% of black women-owned enterprises but not less than 10%	2	
Enterprise owned by Youth	100% Black Youth owned enterprise	5	5
	Minimum 51% black Youth owned enterprise	4	
	Minimum 25% black Youth owned enterprise	3	
	Below 25% black youth owned enterprises but not less than 10%	2	
Enterprises owned by people with disabilities	Minimum of 51% owned by people with disabilities	2	2
	Minimum of 10% owned by people with disabilities	1	
Additional Specific goals	An entity which is at least 51% owned by black people living in rural or underdeveloped areas or townships	1	1
	A cooperative which is at least 51% owned by black people	1	1
			20

6. FORM OF OFFER AND ACCEPTANCE

PART A – OFFER

6.1. OFFER

The Bidder, identified in the signature block below, hereby offers to supply and deliver the goods and/or render the services described in section 2 and 3 above:

Bid No: _____

Description: _____

to the **Durban University of Technology (DUT)** in accordance with:

- The RFQ document;
- The Scope of Work and Technical Specifications;
- The General Conditions of Contract (Annexures E)

6.2. OFFERED CONTRACT PRICE

PRICE SCHEDULE (to be completed in by the bidder)

No.	Item Description	Qty	Unit Price	Amount
	Service and maintenance – year 1	Should be included in the equipment pricing.		
	Service and maintenance – year 2			
	Service and maintenance – year 3			
	Service and maintenance – year 4			
	Service and maintenance – year 5			
Total Excl. VAT				
VAT (15%)				
Total Incl. VAT				

The offered price includes all supply and delivery, packaging, insurance, duties, installation, incidental costs and is fixed for the duration of the validity period. Remains valid for **120 days** from RFQ closing date.

6.3.1 COMPLIANCE DECLARATION

The Bidder certifies that:

- The information provided is true and correct.
- The Bidder is not listed on the National Treasury Restricted Supplier Database or has not previously been blacklisted or failed to supply DUT on a previous contract.
- The Bidder has not engaged in collusive practices.
- The Bidder accepts the General Conditions of Contract.
- No contract exists until an official DUT Purchase Order is issued.

The Bidder acknowledges that:

- This RFQ constitutes a single consolidated procurement requirement.
- Splitting of procurement to avoid threshold controls is prohibited.
- DUT reserves the right to cancel the RFQ if threshold irregularities are detected.

The Bidder confirms that DUT is authorised to verify:

- I. Supplier registration status prior to award and prior to payment.
 - II. Banking details
 - III. Tax compliance status
 - IV. Restriction status
- The Bidder acknowledges that an inactive or non-compliant status may result in disqualification.

In accordance with the Protection of Personal Information Act (POPIA) the Bidder confirms that:

- All personal information submitted is lawfully obtained.
- Appropriate consent has been secured.
- The Bidder shall:
 - I. Safeguard personal data received from DUT;
 - II. Implement reasonable technical and organisational measures;
 - III. Notify DUT of any data breach.

The Bidder indemnifies DUT against loss arising from unlawful data processing attributable to the Bidder.

6.3.2 SIGNATURE OF BIDDER FOR COMPLIANCE TO SPECIFICATION, DECLARATIONS AND OFFER

Name of Bidder	
Email address	
Contact numbers:	
Company Registration Number	
VAT Number (If applicable)	
Authorised Representative Name	
Capacity	
Central Supplier Database Reg No (If Applicable)	MAAA..... CSD UNIQUE NUMBER (36 digits)
Authorised signatory	
Date	

6.4 PART B – ACCEPTANCE (To be completed by DUT only if form of offer and bid is accepted)

By signing this Form of Acceptance, DUT accepts the Bidder's Offer subject to:

- Budget confirmation;
- Verification of compliance documents;
- Issuance of an official Purchase Order.

Acceptance is conditional upon:

- No material deviation;
- Confirmation of tax compliance;
- Compliance with DUT governance frameworks.

Accepted on behalf of:

Durban University of Technology

Name: _____

Designation: _____

Signature: _____

Date: _____

RFQ No: _____

Purchase Order No (to be issued): _____

ANNEXURES- DURBAN UNIVERSITY OF TECHNOLOGY

PURPOSE OF THIS ANNEXURE PACK

This Governance Annexure forms an integral part of all DUT RFQs issued.

The purpose is to:

- Strengthen procurement integrity
- Ensure compliance with DUT policy and DHET governance framework
- Protect the institution from unauthorised commitments
- Support UIFW prevention
- Enhance transparency and ethical procurement conduct

These Annexures is mandatory and non-negotiable.

ANNEXURE A - CERTIFICATE OF INDEPENDENT BID DETERMINATION

The Bidder certifies that:

1. The quotation has been independently determined.
2. No agreement exists with any competitor regarding:
 - Price
 - Market allocation
 - Submission or non-submission of quotation
3. The Bidder has not engaged in collusive or anti-competitive conduct.
4. The Bidder complies with the Competition Act 89 of 1998.

The Bidder acknowledges that false declaration may result in:

- Disqualification
- Contract termination
- Restriction from future procurement participation

Signature: _____

Date: _____

ANNEXURE B - UIFW (UNAUTHORISED, IRREGULAR, FRUITLESS & WASTEFUL EXPENDITURE) ACKNOWLEDGEMENT

The Bidder acknowledges DUT's internal financial governance framework aimed at preventing:

- Unauthorised expenditure

- Irregular expenditure
- Fruitless and wasteful expenditure

The Bidder confirms:

1. No work shall commence without a valid DUT Purchase Order.
2. No variation shall be implemented without written approval aligned to Delegation of Authority.
3. Services rendered without authorisation may not be paid.
4. The Bidder shall not rely on verbal instructions.

DUT shall not be liable for commitments made outside approved procurement processes.

Signature: _____

Date: _____

ANNEXURE C _ PROCUREMENT ETHICS AND CONDUCT DECLARATION

The Bidder confirms that:

- Neither the entity nor its directors are listed on any restricted supplier database.

- No director has been convicted of fraud or corruption related to procurement.
- The entity complies with ethical procurement practices.
- No attempt has been made to improperly influence DUT officials.

The Bidder acknowledges that DUT reserves the right to conduct due diligence screening.

Signature: _____

Date: _____

ANNEXURE D _ DUT CONFLICT OF INTEREST DECLARATION

RFQ No: _____

1. PURPOSE

To ensure transparency and compliance with Section 217 of the Constitution and DUT's governance frameworks, all bidders must declare any relationship or conflict of interest.

2. BIDDER DETAILS

Full Name of Bidder / Company: _____

Company Registration Number: _____

VAT Registration Number: _____

CSD Number: _____

Physical Address: _____

Contact Person: _____

Telephone: _____ Email: _____

3. EMPLOYMENT BY THE DUT OR THE STATE (SOUTH AFRICAN GOVERNMENT)

Are you or any person connected with the bidder:

3.1 Employed by the State?

☐ YES ☐ NO

3.2 Employed by DUT?

☐ YES ☐ NO

If YES, provide details:

4. RELATIONSHIP WITH DUT EMPLOYEES OR COUNCIL MEMBERS

Do you or any director/shareholder/member have:

- Any family relationship with DUT employee?
☐ YES ☐ NO

- Any relationship with a person involved in evaluation of this process?
☐ YES ☐ NO

If YES, provide details:

5. PRIOR BUSINESS WITH DUT

Have you or your directors conducted business with DUT in the past 12 months?

☐ YES ☐ NO

If YES, provide details:

6. DIRECTORS / SHAREHOLDERS DETAILS

Full Name	ID Number	Tax Number	Employee Number (if applicable)

(Attach additional page if necessary)

7. DECLARATION

I, the undersigned, hereby declare that:

- The information furnished above is true and correct.

- I understand that failure to disclose conflicts may result in:
 - Disqualification;
 - Contract cancellation;
 - Recovery of damages;
 - Reporting to National Treasury.

Signature: _____

Name: _____

Position: _____

Date: _____