INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

GT ROAD, KALYANPUR, KANPUR – 208016

UTTAR PRADESH, INDIA

Global Tender Enquiry Ref. No.: IITK/34

TENDER REFERENCE NO.: IITK/BSBE/AP/2021-2022/NC-18

BID SUBMISSION END DATE- 21.01.2022

TENDER DOCUMENTS

For

“Purchase of Multi Micromanipulator System”

BID DOCUMENT

The Indian Institute of Technology Kanpur ("the IITK") invites Bids ("Bids") from eligible, qualified and capable companies for the supply and delivery of "the Goods" and provision of associated services ("Associated Services") according to the requirements as defined in the Tender document.

Name of Work	Purchase of Multi Micromanipulator System
Date of Publishing	24.12.2022 (16.00 hrs)
Clarification Start Date and Time	24.12.2022 (16.00 hrs)
Clarification End Date and Time	21.01.2022 (16.00 hrs)
Queries (if any)	No queries will be entertained after clarification end date and time
Bid Submission Start Date	24.12.2022 (16.00 hrs)
Last Date and time of uploading of Bids	21.01.2022 (16.00 hrs)
Last Date and time of **submitting**, EMD and other documents at IIT Kanpur (if any)	NA
Date and time of opening of Technical Bids	24.01.2022 (10.00 hrs)
Date and time of opening of Financial Bids	Will be separately notified for Technically shortlisted/qualified bidders

Interested parties may view and download the tender document containing the detailed terms & conditions from the website http://eprocure.gov.in/epublish/app

Tender document

Department of Biological Sciences & Bioengineering
Indian Institute of Technology Kanpur
Kanpur (UP) 208016 India

Enquiry date: **December 24th, 2021**

Enquiry No: **IITK/BSBE/AP/2021-22/NC-18**

Sealed quotations are invited for **Multi Micromanipulator System**. The detailed specification is described below.

Specifications of the Multi Micromanipulator System:

Sutter MPC 365 – Multi Micromanipulator system

Tender heading: **Multi Micromanipulator system**

Specification:

- A single controller capable of running a manipulator for precision EP studies and should allow future add-ons to work up to four manipulators using single optical encoder.
- Electronics should be optimized for single channel recording
- Should be easily configurable for virtual 4th axis set without computer
- Accelerated Mode for fast, manual manipulator movement
- Easy selection of Mode (speed/res, pulse, Acceleration)
- Display of X, Y, Z coordinates, Mode, active manipulator
- Robotic Home and Work Position moves for easy automated pipette exchange
- USB interface
- Minimal micro step size should be of 46.88 nanometers/micro step.
- Three independent axes - 50 mm travel in X, 12.5 mm in Y and 25 mm in Z with max speed 3mm/sec
- Long Term Stability of Drive Mechanism should be < 1.0 micron in 4 hours
- Small foot print of dimension 160 x 127 x 64 mm

Sutter P-1000 - FLAMING - BROWN MICROPIPETTE PULLER

Tender heading: **Horizontal micropipette puller**

Specification:

- Filament based horizontal micropipette puller which should pull two symmetrical usable pipettes from each pull.
- Touch screen display with inbuilt pipette program techniques.
- Safe heat mode to protect /extend filament life.
- Jaw temperature sensor to define pulling conditions.
- Consistent and reliable in pulling micropipettes with tip diameter of 0.1µm.
- Capable of pulling Aluminosilicate and Borosilicate glass capillaries.
- Environmental chamber for Humidity control and programmable air pressure.
- Should be available with both time and pulse cooling modes.
- Able to perform Glass melting point test when new filament or glass introduced.
- Self contained air supply with filtration system and control over the time and pressure at which the air is delivered.
- Memory storage for storing 100 programs and program results.
- Should be able to pull up to 4mm OD glass pipette.
- Tip size achievable should be in the range of 0.06µm - 3µm.
- Max taper length achievable should be of 2cm.
- Packs of borosilicate tubing with filament (2500 numbers of 1.5mm outer dia, 0.86 mm inner dia x 75mm length) should be supplied standard for immediate startups.

Ala: VC3-8PP Pinch Valve Controlled Pressurized Perfusion Systems – 8 channels

Tender heading: **Valve Controlled 8 channel Pressurized Perfusion System**

Specification:

- 8 channel valve-controlled pressurized perfusion system for patch clamp recording and/or imaging applications.
- Electronic control of solution exchange with low-maintenance pinch valves should be used.
- Should be suitable long-term perfusion experiments with response time (Valve Opening Speed) of 15-20 ms
- Should be suitable for sensitive undisturbed Electrophysiological recordings with minimum electronic noise.
- Should have Customizable reservoir sizes and materials and should supply 60mL luer lock syringes along with the basic unit
- Magnetic stand with poles should be supplied as standard.
- DAQ control via analog or TTL input feature.
- Valve control through DAQ, Valve Commander Software, or controller feature.
- Spill sensor feature with automatic shutoff to protect microscope optics
- Valve open and close time stamps feature via analog or digital output
- 8 channel perfusion outlet manifold should be supplied as standard
- System should be supplied with heating cooling cube.

Quotations must be addressed to:

Dr. Appu Kumar Singh
Lab18
Department of Biological Sciences & Bioengineering
Indian Institute of Technology Kanpur
Kanpur 208 016, India
Email: singhappu@iitk.ac.in, nkhullar@iitk.ac.in

Terms and Conditions:

1. All equipment must be compatible with Indian electrical standards and codes. Engineering documentation on the physical sizes and weights of all major and minor components must be submitted.
2. IIT Kanpur is fully exempted from payment of GST on Imported Goods against our DSIR certificate.
3. IIT Kanpur is partially exempted from payment of Customs Duty (We will provide Custom Duty Exemption Certificate, CD applicable is 5.5%).
4. TENDER Specific Manufacturer Authorization Form from OEM Required.
5. The Institute reserves the right of accepting or rejecting any/all quotations without assigning any reason thereof.
6. All prices should be **F.O.R.**
7. Installation by OEM is preferred.

Appendix -1

TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)

Date: _____

To,

_____
_____
_____

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: -

_____

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:
_____as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc .,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,
(Signature of the Bidder, with Official Seal)

Appendix - 2

Declaration for Local Content

(To be given on Company Letter Head - For tender value below Rs.10 Crores)
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 Crores)

Date:
_____

To,
The Director,
Indian Institute of Technology Kanpur,
GT Road, Kalyanpur, Kanpur -208016

Sub: Declaration of Local content

Tender Reference No: _____

Name of Tender / Work: -
_____

1. Country of Origin of Goods being offered: _____
2. We hereby declare that items offered has ____% local content.

"Local Content" means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

*"*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law."*

Yours Faithfully,
(Signature of the Bidder, with Official Seal)