

**REQUEST FOR QUOTATION  
 \*\*THIS IS NOT AN ORDER\*\***

**Return Quotes To:**

The University of Tennessee  
 Purchasing Department  
 5723 Middlebrook Pike  
 Knoxville , TN 37921

Information	
Date:	10/27/2009
RFQ No:	6000037628
Collective No:	10033417
Return Quote By:	11/05/2009 5:00 PM E.S.T.
Promised Ship Date: (Furnish)	_____
Payment Terms: (Furnish)	_____
FOB UT Dest Unless Otherwise Specified Below	
_____	
Buyer:	Bradley New
Phone:	865-974-3108
Fax:	865-974-2973

Vendor Address
Bidder # D99999
University of T
PARENT RFQ
UT TN

Item	Quantity	UM	Material/Description	Price Per Unit	Net Amount
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NOTE: Any potential bidder not otherwise notified by the University for this requirement must register at: <http://purchasing.tennessee.edu>. Scroll to "Bid & Proposal Advertisements" under Quick Links, and follow the instructions. Failure to do so will result in rejection of your bid.

Items to be CH Instruments or equal

00001	1	EA	CH5660D ELECTROCHEMICAL WORKSTATION		
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WINDOWS-BASED ELECTROCHEMICAL INSTRUMENT CAN PERFORM CYCLE VOLTAMMETRY (CV), LINEAR SWEEP VOLTAMMETRY (LSV), STAIRCASE VOLTAMMETRY (SCV), TAFEL PLOT (TAFEL), CHRONOAMPEROMETRY (CA) CHRONOCOULOMETRY (CC), DIFFERENTIAL PULSE VOLTAMMETRY (DPV), NORMAL PULSE VOLTAMMETRY (NPV), DIFFERENTIAL NORMAL PULSE VOLTAMMETRY (DNPV), SQUARE WAVE VOLTAMMETRY (SWV), AC VOLTAMMETRY (ACV), SECOND HARMONIC AC VOLTAMMETRY (SHACV), AMPEROMETRIC i-t CURVE (i-t), DIFFERENTIAL PULSE AMPEROMETRY (DPA), DOUBLE DIFFERENTIAL PULSE AMPEROMETRY (DDPA), TRIPLE PULSE AMPEROMETRY(TPA), INTEGRATED PULSE AMPEROMETRIC DETECTION (IPAD), BULK ELECTROLYSIS WITH COULOMETRY (BE), HYDRODYNAMIC MODULATION VOLTAMMETRY(HMV), SWEEP-STEP FUNCTIONS (SSF), MULTI-POTENTIAL STEPS (STEP), ACIMPEDANCE (IMP), IMPEDANCE - TIME (IMP-t), IMPEDANCE -POTENTIAL (IMPE), CHRONOPOTIOMETRY (CP), CHRONOPOTENTIOMETRY WITH CURRENT RAMP (CPCR), MULTI-CURRENT STEPS (ISTEP), POTENTIOMETRIC STRIPPING ANALYSIS (PSA) AND OPEN CIRCUIT POTENTIAL - TIME (OCP-t). THE CORRESPONDING POLAROGRAPHIC AND STRIPPING MODES FOR MOST VOLTAMMETRIC TECHNIQUES ARE AVAILABLE.

**HARDWARE SPECIFICATIONS:**

- POTENTIOSTAT
- GALVANOSTAT
- POTENTIAL RANGE: -10 TO 10V FOR BOTH CHANNELS
- POTENTIOSTAT RISE TIME: 0.6 us
- 3- OR 4 ELECTRODE CONFIGURATION
- CURRENT RANGE: 250 mA

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- REFERENCE ELECTRODE INPUT IMPEDANCE: 1 e 12 ohm
- SENSITIVITY SCALE: Ie-12 -0.1 A/V IN 12 RANGES FOR BOTH CHANNELS
- INPUT BIAS CURRENT: <50 pA
- CURRENT MEASUREMENT RESOLUTION: < 50 pA
- FAST WAVEFORM UPDATING RATE: 16-BIT @ 10 MHz
- FAST DATA ACQUISITION: 16 BIT@ 1 MHz
- EXTERNAL SIGNAL RECORDING CHANNEL
- CV AND LSV SCAN RATE: 0.0001 TO 1000 SEC
- TRUE INTEGRATOR FOR CC
- DPV AND NPV PULSE WIDTH: 0.001 TO 10 SEC
- SWV FREQUENCY: 1 TO 100 kHz
- ACV FREQUENCY: 0.1 TO 10 kHz
- SHACV FREQUENCY: 0.1 TO 5kHz
- IMP FREQUENCY: 0.00001 TO 100 kHz (EXTENDED TO 1 M Hz FOR IMPEDANCE 10-1000 OHM)
- IMP AMPLITUDE: 0.00001V TO 0.7V RMS
- AUTOMATIC POTENTIAL AND CURRENT ZEROING
- POTENTIAL, CURRENT LOW-PASS FILTERS, COVERING 8-DECADE FREQUENCY RANGE, AUTOMATIC AND MANUAL STTING
- RDE CONTROL OUTPUT: 0-10V (CORRESPONDING TO 0-10000RPM)
- FLASH MEMORY FOR QUICK SOFTWARE UPDATE
- SERIAL PORT OR USB PORT SELECTABLE FOR DATA COMMUNICATION

SOFTWARE FEATURES:

- 32 BIT WINDOWS-BASED SOFTWARE
- MULTI-DOCUMENT INTERFACE
- OPEN, SAVE, DELETE, LIST, CONVERSION, AND PRINT FILES
- RUN, MACRO, iR COMPENSATION, FILTERING, RDE CONTROL, PRECONDITIONING, STEP FUNCTIONS, AND CELL CONTROL
- DATA PLOT, OVERLAY AND PARALLEL PLOTS, X-Y PLOT, ip ~ V PLOT, ip ~ V1/2 PLOT, Er ~ LOG v PLOT, SEMILOG PLOT
- GRAPHICS OPTIONS, COLOR AND FONT SELECTIONS
- SMOOTHING, DERIVATIVES, INTEGRAIION, SEMI-DERIVATIVE AND SEMI-INTEGRAL, INTERPOLATION, BASELINE FITTING AND SUBTRACTION, LINEAR BASELINE CORRECTION, DATA POINT REMOVING, DATA POINT MODIFICATION, BACKGROUND SUBTRACTION, SIGNAL AVERAGING, MATHEMATICAL OPERATION,

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			FOURIER SPECTRUM - CALIBRATION CURVE, STANDARD ADDITION, DATA FILE REPORT, CONCENTRATION - TIME DEPENDENCE REPORT AND PLOT - DIGITAL CV SIMULATOR, USER DEFINED MECHANISMS - IMPEDANCE SIMULATOR AND FITTING PROGRAM - DATA INFORMATION, DATA LISTING, EQUATIONS, CLOCK, TOOLBAR, STATUS BAR - CONTEXT SENSITIVE HELP - MAXIMUM DATA LENGTH: 128k-4096k SELECTABLE		
			Manufacturer _____ # _____		
			Warranty _____		
00002	2	EA	CHI104P 3MM GLASSY CARBON WORKING	_____	_____
			ELECTRODE		
			Manufacturer _____ # _____		
			Warranty _____		
00003	2	EA	CHI111P Ag/AgCl REFERENCE ELECTRODE	_____	_____
			Manufacturer _____ # _____		
			Warranty _____		
00004	2	EA	CHI115 PLATINUM WIRE COUNTER ELECTRODE	_____	_____

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Manufacturer \_\_\_\_\_ # \_\_\_\_\_

Warranty \_\_\_\_\_

00005	1	EA	CHI120: ELECTRODE POLISHING KIT	_____	_____
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Manufacturer \_\_\_\_\_ # \_\_\_\_\_

Warranty \_\_\_\_\_

00006	1	EA	SHIPPING & HANDLING (IF EXTRA)	_____	_____
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**DELIVERY MAY BE A FACTOR IN THE AWARD**

Delivery is requested as soon as possible. Please state your best delivery in the space provided below:

Best delivery date \_\_\_\_\_

**SPECIAL BID CONDITIONS**

**SBC 1 CONFLICT OF CONDITIONS**

In the event that there are any conflicts between the general bid conditions and these special bid conditions the special bid conditions shall take precedence.

**SBC 2 BID AS SPECIFIED OR EQUAL**

The items on this request for quotations shall be as specified or equal. When the specifications specify a product by name of a manufacturer or vendor, or whenever the terms (similar to) and (equal to), or (approved equal) are used, the terms named are intended to set the standard for such materials or articles. The burden of proof shall rest solely with the supplier to prove that the proposed substitutes are equal to the materials or articles specified. The university shall be the sole judge as to whether the items submitted are equal to those specified.

**SBC-3- INFORMAL BID**

When responding in writing the envelope in which quotations are submitted should be identified by placing

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the required information on the outside of the envelope as follows: It is imperative that your name and address appear in the upper left corner of the envelope and that the collective number and due date appear in the lower left hand corner. Electronically transmitted bids will also be considered only whenever they are received in hand at the purchasing office by the time and date set for receipt of bids. Such electronically transmitted bids shall contain specific reference to the request for quotation inquiry number and due date; the items, quantities, and prices for which the bid is submitted; the time and place of delivery; reference to any other requested information; and a statement that the bidder agrees to all the terms, conditions and provisions of the request for quotations. All bids must be received in the purchasing department on or before the date and hour specified. Bids that miss this deadline will be rejected and returned unopened or kept on file in the purchasing department. No qualifying letters or statements from vendors will be considered a justification for accepting late bids.

For your convenience in submitting electronic bids, our facsimile (fax) number is:  
Knox campus: 865-974-2973

**SBC-4 WARRANTY**

Each bidder is required to attach to their quotation a detailed statement of warranty or guarantee. The statement should include the period of time involved as well as the specific details of the warranty.

**SBC-5- FOB**

PLEASE QUOTE F O.B. DESTINATION DELIVERED. TO INCLUDE ANY AND ALL FREIGHT CHARGES.

**SBC 6 BID MUST BE IN ACCORDANCE WITH SPECIFICATIONS**

Bidders are cautioned that unless otherwise stipulated in their bids, it will be assumed that they are bidding in strict accordance with the specifications and will be required to strictly comply therewith. Any deviations whatever from the specifications must be fully set forth and itemized in detail in a letter accompanying the bid. Generalized statements submitted with your bid in order to avoid complying with this requirement in full detail will not be accepted.

**SBC 7 INTERPRETATIONS AND ADDENDA**

Any questions concerning conditions and specifications should be directed to the purchasing department in writing no later than five (5) days prior to the bid opening. Inquiries must reference the date of bid opening and RFQ number.

**SBC-8 AWARD-ALL OR NONE:**

AWARD OF ALL ITEMS WILL BE MADE ON AN (ALL OR NONE) BASIS

**GENERAL BID CONDITIONS:**

All University of Tennessee general bid conditions apply to this

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bid. To view these conditions, which include protest procedures, please visit website  
 "http://purchasing.tennessee.edu/general\_bid\_conditions.htm". If for some reason you are unable to access  
 this website you may telephone (865) 974-3311 for a hard copy of these conditions.

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IF THE BIDDER TAKES EXCEPTION TO ANYTHING IN THE SPECIFICATIONS OR TERMS AND CONDITIONS. THE EXCEPTION MUST BE LISTED BELOW. IF NECESSARY YOU MAY SUPPLEMENT YOUR COMMENTS WITH AN ATTACHEMENT LISTING YOUR EXCEPTIONS. IF NO EXCEPTIONS ARE TAKEN WRITE 'NONE' IN THE AREA FURNISHED BELOW. IF NO COMMENTS ARE FURNISHED IT WILL BE ASSUMED THAT NO EXCEPTIONS ARE BEING TAKEN

CERTIFICATION: MY COMPANY IS CLASSIFIED AS A:

NOTE: It will be assumed that business category is large if no response is furnished

LARGE BUSINESS \_\_\_\_\_ SMALL BUSINESS \_\_\_\_\_ WOMAN OWNED \_\_\_\_\_

PLEASE INDICATE BELOW ONLY IF YOUR FIRM IS AT LEAST 51 PERCENT OWNED BY A MEMBER(S) OF THE FOLLOWING GROUPS

BLACK AMERICAN \_\_\_\_\_ HISPANIC AMERICAN \_\_\_\_\_ ASIAN PACIFIC AMERICAN \_\_\_\_\_ NATIVE AMERICAN \_\_\_\_\_ ASIAN INDIAN AMERICAN \_\_\_\_\_

IT IS UNDERSTOOD AND AGREED THAT THIS BID WHEN CERTIFIED BY AN AUTHORIZED SIGNATURE SHALL CONSTITUTE AN OFFER WHICH WHEN ACCEPTED IN WRITING BY THE UNIVERSITY'S PURCHASING DEPARTMENT AND SUBJECT TO THE TERMS AND CONDITIONS OF SUCH ACCEPTANCE WILL CONSTITUTE A VALID AND BINDING CONTRACT BETWEEN THE UNIVERSITY OF TENNESSEE AND THE BIDDER/CONTRACTOR SUBMITTING SUCH OFFERING

WE OFFER TO SELL TO YOU THE ABOVE MATERIAL(S) OR SERVICES AT THE PRICE AND TERMS SPECIFIED HEREON AND IN ACCORDANCE WITH THE UNIVERSITY'S GENERAL AND ANY SPECIAL BID CONDITIONS FURNISHED AND INCORPORATED INTO THIS DOCUMENT. ALL EXCEPTIONS, ALTERNATIVE MATERIALS, OR SPECIFICATIONS IF ANY HAVE BEEN CLEARLY INDICATED. IF YOU HAVE ANY QUESTIONS ABOUT THIS REQUEST FOR QUOTATION, CONTACT THE BUYER AT THE ADDRESS OR TELEPHONE NUMBER SHOWN ABOVE.

WHEN OFFERING A 'NO BID' PLEASE INDICATE YOUR REASON(S) BELOW AND RETURN THIS INFORMATION WITH YOUR RESPONSE

\_\_\_\_\_ DO NOT HANDLE THIS TYPE EQUIPMENT \_\_\_\_\_ CANNOT MEET SPECIFICATIONS  
 \_\_\_\_\_ CANNOT MEET REQUIRED DELIVERY \_\_\_\_\_ MATERIALS NOT AVAILABLE  
 \_\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_

IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 878, PUBLIC ACTS OF 2006 THE CONTRACTOR HEREBY ATTESTS THAT THE CONTRACTOR SHALL NOT KNOWINGLY UTILIZE THE SERVICES OF AN ILLEGAL IMMIGRANT IN THE PERFORMANCE OF THIS CONTRACT AND SHALL NOT KNOWINGLY UTILIZE THE SERVICES OF ANY SUBCONTRACTOR WHO WILL UTILIZE THE SERVICES OF AN ILLEGAL IMMIGRANT IN THE PERFORMANCE OF THIS CONTRACT

ALL FIRMS WISHING TO DO BUSINESS WITH THE UNIVERSITY MUST LIST THEIR FEDERAL TAX ID NO. OR SOCIAL SECURITY NO. (IF INDIVIDUAL) IN THE SPACE PROVIDED:

TAX ID OR SSN: \_\_\_\_\_

\_\_\_\_\_  
 (Signature)  
 \_\_\_\_\_  
 (Printed Name and Company Name)  
 \_\_\_\_\_  
 (Telephone # Toll free if available)  
 \_\_\_\_\_  
 (E-Mail Address)

\_\_\_\_\_  
 (Date)  
 \_\_\_\_\_  
 (Title)  
 \_\_\_\_\_  
 (FAX #)  
 \_\_\_\_\_  
 (WEB Site Address)