P.O. Date: 7/26/2016

## AM02 - Texas A&M University

## Purchase Order

Purchase Order Number

AM02-16-P026470

SHOW THIS NUMBER ON ALL PACKAGES, INVOICES AND SHIPPING PAPERS.

Vendor Number: 00042639 Quantachrome Corporation

O R

E DBA QUANTACHROME INSTRUMENTS
 N 1900 CORPORATE DR
 D BOYNTON BEACH, FL 334266650

INVOICING VENDOR SHALL SUBMIT AN ITEMIZED INVOICE SHOWING PURCHASE ORDER NUMBER. IF YOUR INVOICE IS NOT PROCESSED AS INSTRUCTED, PAYMENT MAY BE DELAYED.

SH-P FO	CHEMISTRY DEPT. Attn: Contact CARRIE FREDERIKSEN at (979)845- 3216; Email: carrie.frederiksen@chem.tamu.edu CHEMISTRY BLDG. Room 014 Corner of Spence & Ross St. 3255 TAMU COLLEGE STATION, TX 778433255 US Email: purchase@chem.tamu.edu Phone: (979) 845-0411
B I L L T O	ATTN: FMO Accounts Payable 750 Agronomy Road - Suite 3101 6000 TAMU Attn: Email invoices to invoices@tamu.edu Attn: Do not mail invoice if sending via email College Station, TX 778436000 USA Email: invoices@tamu.edu Phone: (979) 845-8362

Please login to Buy A&M to retrieve attachments associated with the Purchase Order. Solicitation (Bid) No.: AM02-16-B000474	Payment Terms: Net 30 Shipping Terms: F.O.B., Destination Freight Terms: Freight Allowed Delivery Calendar Day(s) A.R.O.: 60
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Item # 1 Class-Item 175-00

DynaSorb BT - Automatic gas sorption analyzer

Analysis capabilities include: \*Determination of breakthrough curves, \*Investigation of kinetic performance of adsorbents, \*Investigation of coadsorption and displacement phenomena, \*Determination of sorption selectivity, \*Reasonable downscaling of technical separation processes, \*Dynamic adsorption and desorption experiments; \*Determination of single- and multi-component adsorption data, \*Investigation of heat profiles along the adsorber bed.

Cable of handling both low gas flow rates and higher gas flow rates up to 40 L/min. Instrument must be configured with at least 2 highly accurate mass flow controllers(not included in instrument) and may have up to 4 total. Built in thermal conductivity detector measures small changes in gas concentration, however, a mass spectrometer may be coupled with the unit for higher degrees of analysis resolution.

Quantity	Unit Price	UOM	Discount %	Total Discount Amt.	Tax Rate	Tax Amount	Freight	Total Cost
1.00	\$ 70,240.00	EA	0.00 %	\$ 0.00		\$ 0.00	\$ 1,300.00	\$ 71,540.00

LN/FY/Account Code	Dollar Amour
1/16/02-CHEM-00050-246237-00181-8422842242-N-AA-CD-	\$ 7,869.4
SC-L	
1/16/02-CHEM-04600-446291-00001-8422842242-Y-AA-CD-	\$ 63,670.60
SC-F-302003593-814001370	

Item # 2 Class-Item 175-00

Evaporator Option, 110 - Direct liquid injection into a heated tube which vaporizes the liquid. The vapor is diluted in a heated manifold (60 degree C) to produce the desired partial pressure of vapor. **Total Discount** Tax Amount Unit Price UOM Discount % Tax Rate **Total Cost** Quantity Freight Amt. \$13,600.00 \$ 13,600.00 1.00 FA 0.00 % \$ 0.00 \$ 0.00 \$ 0.00 LN/FY/Account Code Dollar Amount 2/16/02-CHEM-04600-446291-00001-8422----842242-Y-AA-CD-\$13,600.00 SC-F-302003593-814001370 Item #3 Class-Item 175-00 Mass Flow Controller for DynaSorb, 2.0 L/m - for maximum flow rates from as small as 2% of full scale to 2.0 L/min. **Total Discount** Tax Amount Quantity Unit Price UOM Discount % Tax Rate Freight **Total Cost** Amt. 2.00 \$ 3,760.00 ΕA 0.00 % \$ 0.00 \$ 0.00 \$ 0.00 \$7,520.00 Dollar Amount LN/FY/Account Code 3/16/02-CHEM-04600-446291-00001-8422-----Y-AA-CD-SC-F-\$7,520.00 302003593-814001370 Item #4 Class-Item 175-00 Mass Flow Controller for DynaSorb, 1.0 L/m - Allows for maximum flow rates from as small as 2% of full scale to 1.0 L/min. Total Discount Tax Amount Unit Price UOM Tax Rate **Total Cost** Quantity Discount % Freight Amt. 1.00 \$3,760.00 ΕA 0.00 % \$ 0.00 \$ 0.00 \$ 0.00 \$ 3,760.00 LN/FY/Account Code Dollar Amount 4/16/02-CHEM-04600-446291-00001-8422-----Y-AA-CD-SC-F-\$3,760.00 302003593-814001370 Item # 5 Class-Item 175-00 Small Adsorber Column - 1cm x 6xm column for use with small sample volumes. **Total Discount** Tax Amount Quantity Unit Price UOM Discount % Tax Rate **Total Cost** Freight Amt. 1.00 \$ 2,560.00 ΕA 0.00 % \$ 0.00 \$ 0.00 \$ 0.00 \$ 2,560.00 Dollar Amount LN/FY/Account Code 5/16/02-CHEM-04600-446291-00001-8422-----Y-AA-CD-SC-F-\$ 2,560.00 302003593-814001370 Item #6 Class-Item 175-00 DynaSorb BT Reference Material I- Standard Material: 50 g for instrument test (1 x filling of standard reactor)

001370 ent Module (P UOM EA 0000-446291 001370	Discount % 0.00 % 1-00001-8422Y	or equivalent equip Total Discount Amt. \$ 0.00	Tax Rate	Tax Amount \$ 0.00	al or newer. To i Freight \$ 0.00 Doll	\$ 0.00 lar Amount \$ 0.00 include 19" Flat Scre Total Cost \$ 1,080.00 lar Amount \$ 1,080.00 /ledge and theoretica Total Cost \$ 0.00
04600-446291 001370 ent Module (P UOM 0 EA 04600-446291 001370 perator Traini	PC) - Dell Optiplex of Discount % 0.00 % 1-00001-8422Y ing Course - 2 day	or equivalent equip Total Discount Amt. \$ 0.00 7-AA-CD-SC-F- courses to provide Total Discount Amt.	Tax Rate	Tax Amount \$ 0.00	al or newer. To i Freight \$ 0.00 Doll	\$ 0.00 include 19" Flat Scre Total Cost \$ 1,080.00 lar Amount \$ 1,080.00
UOM EA 2004e 04600-446291 001370 perator Traini	Discount % 0.00 % 1-00001-8422Y ing Course - 2 day Discount %	Total Discount Amt. \$ 0.00 7-AA-CD-SC-F- courses to provide Total Discount Amt.	Tax Rate	Tax Amount \$ 0.00	Freight \$ 0.00 Doll	Total Cost \$ 1,080.00 lar Amount \$ 1,080.00
EA Code 04600-446291 001370 perator Traini UOM	0.00 % 1-00001-8422Y ing Course - 2 day	Amt. \$ 0.00 7-AA-CD-SC-F- courses to provide Total Discount Amt.	e an effective ba	alance of handson	\$ 0.00 Doll	\$ 1,080.00
Dode 04600-446291 001370 perator Traini	1-00001-8422Y ing Course - 2 day	7-AA-CD-SC-F- courses to provide Total Discount Amt.		alance of handson	Doll n practical know Freight	lar Amount \$ 1,080.00 /ledge and theoretica Total Cost
04600-446291 001370 perator Traini UOM	ing Course - 2 day	courses to provide Total Discount Amt.		Tax Amount	n practical know Freight	\$ 1,080.00 /ledge and theoretica
UOM	Discount %	Total Discount Amt.		Tax Amount	Freight	Total Cost
EA	0.00 %	\$ 0.00		\$ 0.00	\$ 0.00	\$ 0.00
				<b>\$</b>	• 0.00	<b>+</b>
	llator - provides sel	lection and thermo		vsis temperature b		1
		Amt.	Tax Rate		Freight	Total Cost
EA	0.00 %	\$ 0.00		\$ 0.00	\$ 0.00	\$ 4,000.00
	7-00181-8422N	I-AA-CD-SC-L				<u>lar Amount</u> \$ 4,000.00
ludes recircul	lating beaker temp	erature probe, circ	ulator quick con	nnector, beaker sta	and, hose, and	hose clamps
0		<u>Code</u> 00050-246237-00181-8422N	Code 00050-246237-00181-8422N-AA-CD-SC-L	Code 00050-246237-00181-8422N-AA-CD-SC-L	<u>Code</u> 00050-246237-00181-8422N-AA-CD-SC-L	Code Dol

Quantity	Unit Price	UOM	Discount %	Total Discount Amt.	Tax Rate	Tax Amount	Freight	Total Cost		
1.00	\$ 800.00	EA	0.00 %	\$ 0.00		\$ 0.00	\$ 0.00	\$ 800.00		
LN/FY/Account Code         Dollar Amount           10/16/02-CHEM-00050-246237-00181-8422N-AA-CD-SC-L         \$ 800.00										
					TAX:	\$ 0.00				
							FREIGHT:	\$ 1,300.00		
					107		TOTAL:	\$ 104,860.00		
				NED HEREIN MU PROCUREMEN						
OFFICE PRIOR 1	FO SHIPPING.					APPROVE	C			
he State of Texas is Exempt from all Federal Excise Taxes. tate and City Sales Tax Exemption Certificate: The A&M System claims an xemption from taxes under Chapter 20, Title 122A Revised Civil Statutes of Texas or purchase of tangible personal property described in this order, purchased from						Ву	: Angel Constar	ncio		
						Emai	I: agc@tamu.ed	u		
endor listed abo				clusive use of the		Phone#	t: (979) 845-384	7		
Texas.						BUYER				

FAILURE TO DELIVER: If the Vendor fails to deliver these supplies by the promised delivery date or a reasonable time thereafter, without giving acceptable reasons for delay, or if supplies are rejected for failure to meet specifications, the State reserves the right to purchase specified supplies and equipment elsewhere, and charge the increase in price and cost of handling to the Vendor. No substitution or cancellations permitted without prior approval of The Texas A&M University System.

The Terms and Conditions of the State shall prevail.

STATE OF TEXAS AND THE TEXAS A&M UNIVERSITY SYSTEM TERMS AND CONDITIONS APPLY.