



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Solicitation

NUMBER
7713005

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ALAN CUMMINGS 304-558-2402

VENDOR

RFQ COPY
 TYPE NAME/ADDRESS HERE
 Shimadzu Scientific Instruments, Inc.
 7102 Riverwood Drive
 Columbia, MD 21046

SHIP TO

DIVISION OF HIGHWAYS
 MCS&T DIVISION
 190 DRY BRANCH DRIVE
 CHARLESTON WV
 25306 304-558-9892

DATE PRINTED
10/19/2012

BID OPENING DATE: 11/07/2012 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		490-55	\$117,644.00	\$83,082.80
ICAP 6300 DUO VIEW ICF-OES SPECTROMETER OR EQUAL						
THE WEST VIRGINIA STATE PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF HIGHWAYS, IS SOLICITING BIDS TO PROVIDE THE AGENCY WITH AN ICAP 6300 DUO VIEW ICF-OES SPECTROMETER OR EQUAL PER THE ATTACHED SPECIFICATIONS.						
***** THIS IS THE END OF RFQ 7713005 ***** TOTAL:						\$83,082.80

RECEIVED
 2012 NOV -7 AM 9:01
 WV PURCHASING DIVISION

SIGNATURE <i>Weather J</i>	TELEPHONE 410-381-1227	DATE 10/31/12
TITLE Field Sales Engineer	FEIN 52-1035956	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



Shimadzu Scientific Instruments

7102 Riverwood Drive
Columbia, MD 21046

Toll Free: 1.800.388.6996
Fax: 410.290.9140
www.ssi.shimadzu.com

October 31, 2012

Alan Cummings
State of West Virginia Purchasing Division
2019 Washington Street, E.
Charleston, WV 25305

Dear Alan,

Shimadzu appreciates this opportunity to earn your business. By choosing Shimadzu, The West Virginia Division of Highways can look forward to having a comprehensive team and the tools necessary to be completely successful in your laboratory. Feel comfortable knowing you are investing in a technology leader that will make you successful with today and future analytical needs.

Please note that no autosampler was mentioned on the bid specifications, so I have optioned both of our autosampler options on my bid proposal.

Thank you in advance for reviewing this proposal in its entirety. If you have any follow-up questions, I am happy to answer them.

Best regards,

A handwritten signature in black ink, appearing to read "Heather J.", written in a cursive style.

Heather Juzwa
Field Sales Engineer

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Shimadzu Scientific Instruments, Inc.

(Company)

Heather J

(Authorized Signature)

Heather Juzwa, Field Sales Engineer

(Representative Name, Title)

724-745-2662

(Phone Number)

410-290-9140

(Fax Number)

11/5/12

(Date)



QUOTATION

Number: SSI-51963-WK8M Rev. 0

QUOTE DESCRIPTION:

RFQ 7713005 ICP-OES Spectrometer for ASTM E350, ASTM C114, ASTM C311, and ASTM D632.

Alan Cummings
State of West Virginia
2019 Washington Street, E.,
Charleston, WV 25305
Phone: (304) 558-2402
Fax:
E-mail: Alan.W.Cummings@wv.gov

Effective Date	10/31/2012	Proposed Ship Date	30 Days/ARO
Expiration Date	11/30/2012	FOB	DESTINATION
Ship Method	BEST WAY	Shipping Terms	PREPAID & ADD
Inco Terms			

PLEASE SEE ATTACHED TERMS AND CONDITIONS

For questions or modifications about this quote, please contact your sales representative. If you are a tax exempt customer, please contact Customer Service and send a copy of your exemption certificate in with your order. The exemption certificate can also be faxed to 410-381-1222

Salesperson:	Heather Juzwa	MAT Regional Office
Phone:	(800) 388-6996 Ext. 1673	7102 Riverwood Drive
E-mail:	hljuzwa@SHIMADZU.com	Columbia, MD 21046-2502

ADDITIONAL INFORMATION:

THANK YOU FOR YOUR INTEREST IN SHIMADZU SCIENTIFIC INSTRUMENTS

Authorization Signature

Date: 10/31/2012

For Order Placement:

Reference Quotation Number on Purchase Order
Shimadzu Scientific Instruments
7102 Riverwood Drive
Columbia MD 21046
Toll Free: 800-477-1227
Phone: 410-381-1227
Fax: 410-381-6781
E-mail: customer.service@shimadzu.com
Int'l Fax: 410-309-6130
Int'l Email: icsc@shimadzu.com

Line #	Product Number	Product Name	Qty	List Price	Ext'd Price
Primary					
3	220-95324-51	ICPE-9000 DUAL VIEW	1	\$92,420.00	\$64,694.00
ICPE-9000 Simultaneous Emission Spectrometer with Dual View					
ICPE-9000 is a high throughput simultaneous inductively coupled plasma emission spectrometer. The ICP utilizes an Echelle grating system under vacuum conditions with a large 1" x 1" liquid cooled CCD detector. Vacuum conditions of the optical bench allows determinations in the vacuum UV region for elements like Phosphorous and Sulfur. The 1 mega pixel CCD enables better sensitivity as more light can be focused onto the detector. The ICPE-9000 uses a vertical mini torch with an axial or radial view, controlled electronically by PC. The mini torch reduces Argon consumption up to 40% with no sacrifice of sensitivity. Vertically mounted torches are not susceptible to clogging or buildup as conventional horizontally mounted torches. ICPEsolution software features easy to use software which includes a method development assistant, automatic correction for overlapping wavelengths, and a wavelength data base with 110,000 emission lines. Package includes ICPE-9000 instrument, ICPEsolution software (P/N 211-44263-92), Radial View Unit (211-86200-91), CCD Cooling Water valve kit and crossover cable.					
4	044-01809-07	CA-1114A-1 Cooling Water Circulator for AA or ICP	1	\$4,800.00	\$3,360.00
5	211-86152-91	COOLING WATER VALVE KIT FOR PLASMA STAND	1	\$800.00	\$560.00
Cooling water valve kit for plasma stand					
6	205-07778-02	HYDROFLUORIC ACID CHAMBER ASSY	1	\$1,700.00	\$1,190.00
7	046-00092-14	NEBULIZER, HYDROFLUORIC ACID AR30-1-CPIS	1	\$2,244.00	\$1,570.80
Nebulizer, Hydrofluoric acid AR30-1-CPIS					
8	046-00092-12	NEBULIZER, SEA SPRAY HIGH SOLIDS TYPE FOR ICPE-9000	1	\$850.00	\$595.00
SeaSpray High Solids Nebulizer for ICPE-9000					
SeaSpray with EzyFit uptake=2ml/min with 1,500mm tubing.					
9	204-19281-00	WATER BUBBLER	1	\$760.00	\$532.00
Water Bubblers					
Used to prevent blockages in the nebulizer when analyzing samples containing large amounts of sodium or salts.					
10	205-09627-01	DE-MOUNTABLE TORCH FOR HYDROFLUORIC ACID	1	\$6,200.00	\$4,340.00
De-mountable torch					
For use with Hydrofluoric Acid					
11	204-74323-00	TORCH, HIGH CONCENTRATION SALT SAMPLE	1	\$700.00	\$490.00
Torch, High concentration salt sample					
Used when introducing an undiluted solution of a salt containing sample, where the salts content is in % order.					
12	211-43740-00	ORIFICE ASSY FOR ICPE-9000 STANDARD TORCH	1	\$230.00	\$161.00
Orifice Assembly					
13	211-84175-00	CONNECT PIPE HFS	1	\$410.00	\$287.00
Connect pipe HFS					
For use with Hydrofluoric Acid					
14	211-86140-91	Drain Kit for Straight Spray Chamber, Organic Solvents & HF Acid	1	\$1,370.00	\$959.00
Drain Kit for use with organic solvent samples and hydrofluoric acid samples on the straight or Scott type spray chamber					
15	220-95357-04	ICP Setup Standards	1	\$320.00	\$288.00



QUOTATION

Number: SSI-51963-WK8M Rev. 0

Line #	Product Number	Product Name	Qty	List Price	Ext'd Price
Solutions used to set up and install the ICP spectrophotometer.					
Package contains one each of 100mL volume of: 5ppm Lead (Pb), 5mm Lithium (Li) and 5 ppm Phosphorus (P) in HNO3 and 10ppm of Aluminum (Al) and 10 ppm Barium (Ba) in HNO3.					
16	220-95357-03	ICP & AA MULTIELEMENT STANDARDS IN 50 ML BOTTLE w/ HNO3-CONTAINS	1	\$250.00	\$225.00
Package contains one 50 mL bottle of 100 ppm of 26 elements. The elements include: Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Si, Ag, Na, Tl, Ti, V, and Zn.					
17	220-95248-02	Regulator, Argon or Nitrogen, CGA-580	1	\$400.00	\$360.00
Regulator, Argon, AA					
Pressure Regulator for AA systems with 1/4 inch barbed nipple, for Argon.					
18	211-44280-91	QAQC SOFTWARE PACKAGE	1	\$1,500.00	\$1,050.00
QAQC software package					
Used for accuracy management. Software includes features needed by environmental laboratories such as spike and recovery calculation systems.					
19	220-97318-10	STANDARD WORKSTATION PC (DELL T3500-W3503)	1	\$2,210.00	\$1,989.00
STANDARD WORKSTATION PC (DELL T3500-W3503) Shimadzu Standard Workstation Mini tower PC with Intel® Core 2 Duo™ processor (2.40GHz/13337MHz/4MB L2 cache).					
20	220-97321-10	DELL G2410, 24 INCH WIDESCREEN, FLAT PANEL	1	\$480.00	\$432.00
24" Widescreen LCD display, resolution to 1920 x 1080, contrast ratio (typical): 1000:1. Brightness (typical): 250 cd/m2, 0.277 mm pixel pitch.					
Limited warranty: Three years Advanced Portable Exchange through Dell.					
21	I&F	INSTALLATION AND CUSTOMER FAMILIARIZATION	1	\$0.00	\$0.00
22	1YW	1 YEAR WARRANTY	1	\$0.00	\$0.00
23	BALANCE_OFFER	YOU MAY ADD A SHIMADZU BALANCE TO THIS ORDER AT 40% DISCOUNT. ASK FOR DETAILS	1	\$0.00	\$0.00
YOU MAY ADD A SHIMADZU BALANCE TO THIS ORDER AT 40% DISCOUNT. ASK FOR DETAILS					

NOTE: Taxes are not included in the quoted amount

Total List Price	\$117,644.00
Total Line Item Discounts	\$34,561.20
Subtotal	\$83,082.80
Total Amount	\$83,082.80

Quote Options

Line #	Product Number	Product Name	Qty	List Price	Ext'd Price
Primary - Options					
1	206-50100-30	ASC-6100F AUTO SAMPLER	1	\$4,200.00	\$2,940.00
ASC-6100F Flame Auto Sampler					
ASC-6100F Flame Auto Sampler for use with ICPE-9000 or AA-6300. Rack contains 60 samples positions and 8 reagent positions.					
2	220-95338-01	CETAC ASX-520 AUTOSAMPLER IF ICP, 4 X 60 X 14 ML	1	\$8,500.00	\$7,650.00
CETAC ASX-520 Autosampler for ICP, 4 x 60 x 14mL					
CETAC ASX-520 Autosampler with 4 racks of 60 vials with 14 mL volumes. Also included is Software for operating the Shimadzu ICPE-9000 with control of ASX-520.					



Terms and Conditions

Shimadzu Scientific Instruments, Inc. - GENERAL TERMS AND CONDITIONS OF SALE

SALES AGREEMENT

The sales agreement ("Sales Agreement"), as referenced hereinbelow, shall mean and refer to these General Terms and Conditions of Sale ("General Terms and Conditions of Sale"), together with such other documents concerning the purchase of equipment and/or Products designed and/or manufactured by Shimadzu Scientific Instruments, Inc. ("Products"), which documents have been or will be executed by and between Shimadzu Scientific Instruments, Inc. ("SSI") and the individual or entity identified therein as the purchaser of said Products ("Buyer"). The documents that comprise the Sales Agreement may include, but are not limited to: these General Terms and Conditions of Sale; price quote provided by SSI; purchase order issued by Buyer as modified and accepted by SSI; bill of sale for Products; bill of lading issued for the shipment of Products; and product invoice. All Products shall be for research use only and not for use in the diagnosis of disease or other conditions, including a determination of the state of health, in order to cure, mitigate, treat or prevent disease or its sequelae ("Diagnostic Purposes").

PRICES

The prices set forth in the Sales Agreement:

(i) are SSI's domestic prices based upon manufacture of the quality and type of Product(s) ordered for shipment to and end use within the United States and Canada only - all Products shipped for end use outside the United States and Canada shall be subject to SSI's international pricing; (ii) are subject to revision when interruption, engineering changes or changes in quantity or quality a re-caused or requested by Buyer; and (iii) unless otherwise specified, do not include warranty service or installation outside the United States and Canada. Errors in Product pricing or related terms by SSI which may, in SSI's sole discretion, be deemed clerical errors are subject to correction by SSI at any time.

SPECIFICATIONS

Weights and dimensions set forth in Product related sales literature ("Sales Literature") are not guaranteed unless previously certified in writing. SSI may, without affecting the obligations under the Sales Agreement, make what SSI regards in its sole discretion as minor changes to the specifications of the Product or Products delivered under the Sales Agreement from those contained in Sales Literature.

TERMS OF PRODUCT USE

Buyer represents and warrants that the Products have not been purchased for Diagnostic Purposes and that the Buyer will not at any time use the Products for Diagnostic Purposes. The Buyer acknowledges that use of the Product for Diagnostic Purposes is cause for Termination of this Agreement, as set forth in the "Contingencies; Force Majeure" section below.

TERMS OF PAYMENT

Subject to credit approval by SSI, terms of payment on the Sales Agreement are net thirty (30) days from date of the invoice unless otherwise specifically stated on the invoice. Invoices are payable at par on date due at any place of collection designated by SSI in funds bankable at par. Payment made beyond terms will be subject to simple interest of 1 - 1/2% per month on the outstanding balance. All orders are accepted and SSI's obligation to make deliveries are subject to SSI's right to either: (i) require Buyer to make payment of all or any part of the purchase price in advance of delivery of Product(s), or (ii) make shipment of Product(s) to Buyer payable C.O.D.

If Buyer fails to make advance payment when requested to do so by SSI or if Buyer is or becomes delinquent in the payment of any sum of any kind due SSI or refuses to accept C.O.D. shipments (whether or not arising out of the Sales Agreement), then SSI shall have the right, in addition to any other remedy to which it may be entitled in law or in equity, to cancel the Sales Agreement, refuse to make further deliveries, and declare immediately due and payable all unpaid amounts for Products and services previously delivered to or performed for Buyer. Each shipment shall be considered a separate and independent transaction and payment therefor shall be made accordingly. Buyer must notify SSI within fifteen (15) days from the invoice date if Buyer has not received the Product(s).

REPOSSESSION

In the event of nonpayment, either of the entire purchase price or a portion thereof, Buyer expressly consents to the right of SSI to reclaim by repossession of any and all Products delivered to Buyer pursuant to the Sales Agreement for which payment has not been made within (90) days of invoice. In the event that SSI elects to exercise its right to reclaim Products by repossessing the same, said election shall be deemed to be in the alternative and not to the exclusion of any other remedy to which SSI may be entitled, at law or in equity. To the extent that SSI successfully reclaims Products, it shall credit Buyer's account for the value of the same, as determined by SSI in its sole discretion. No Products may be reclaimed by repossession unless and until Buyer is provided with prior notice of SSI's intention to elect such remedy. Such notice shall state the date, time and location that Products shall be available for repossession. Such notice shall also provide Buyer with a final opportunity to cure the default of nonpayment within five (5) days of notice to avoid the execution of the remedy of repossession. The costs of repossession, including legal fees and costs of collection, shall be added to Buyer's account.

SECURITY INTEREST

In addition to any other remedies hereunder or otherwise provided at law or in equity, SSI shall have the right, and Buyer hereby grants SSI the right, without further notice to or consent from Buyer, to secure any and all payment obligations of Buyer by recordation of a security interest in the Products that are the subject of the Sales Agreement. Said security interest shall be in the form of a UCC Financing Statement (UCC Form 1) or other form prescribed by contract or applicable law. No UCC Financing Statement recorded for the benefit of SSI will be released unless and until all financial obligations to SSI incurred by Buyer with respect to the Products have been fully satisfied.

SHIPMENTS

(i) The cost of packaging for domestic shipments is included in the quoted price unless otherwise provided. For international shipments or where special packaging is specified or necessary, a charge will be made to cover such expense. (ii) For shipments to and from places within the United States, all shipments, unless otherwise agreed in writing, shall be FOB point of shipment and title and risk of loss or damage shall pass to Buyer at the point of shipment. The cost of transportation and insurance (if requested by Buyer) shall be borne by Buyer. (iii) For shipments from the United States to ports and or places outside the United States all shipments are, unless otherwise agreed in writing, FOB Columbia, MD. SSI's obligation to affect shipment of the Products purchased by Buyer shall be fully discharged, and beneficial ownership, legal title and all risk of loss or damage shall pass to Buyer when the Products are made available for shipment to a carrier at the designated FOB location. If shipped FOB Destination, upon arrival Buyer shall be entitled to conduct a reasonable investigation of the Products purchased by it, but all claims for losses due to loss or damage to Products while in transit shall be waived unless made immediately in writing by Buyer to SSI, but not more than (30) thirty days after arrival. If Buyer shall fail or refuse to accept delivery of any of the Products for unverifiable claims for loss or damage to Products occurring while in transit, all sums paid on deposit shall be retained by SSI as liquidated damages, provided, however, that SSI may recover in full its actual damage from Buyer in the event that actual damages exceed the amount retained as liquidated damages. (iv) All claims for damage or loss of insured shipments shall be immediately communicated, when possible, to SSI at Shimadzu Scientific Instruments, Inc. 7102 Riverwood Drive, Columbia, Maryland 21046-2502 Attn: Customer Service Phone: (410) 381-1227.

Buyer shall immediately notify delivering carrier of loss or damage to the shipment and SSI will cooperate with Buyer in the adjustment of all claims. Buyer agrees to permit SSI or SSI's representative to inspect damaged Products.

TERMINATION

Upon any termination or cancellation of the Sales Agreement by Buyer (if otherwise specifically permitted by the terms of the Sales Agreement), either in whole or in part, Buyer agrees to promptly pay appropriate termination or cancellation charges invoiced by SSI. At SSI's sole discretion, the termination charge shall be not less than twenty percent (20%) of the total amount of the Sales Agreement.

RETURNED PRODUCTS

All returns must be pre-authorized by SSI and a Return Goods Authorization ("RGA") number must appear on the face of the package. Returned Products will be subject to a restocking charge. If deemed appropriate at SSI's sole discretion, the restocking charge shall be not less than twenty percent (20%) of the total amount of the Sales Agreement.

ALLOCATION OF PRODUCTS

If SSI is unable for any reason to supply the total demands for Products specified in Buyer's order, SSI may allocate its viable supply among any or all buyers, including Buyer, on such basis as SSI may deem fair and practical, without liability for any failure of performance which may result therefrom.

DELIVERY

The scheduled shipping or delivery date shown on the face hereof is SSI's best estimate of the time the Product order will be shipped and SSI assumes no liability for loss, general damages, or special or consequential damages due to delays.

TAXES AND OTHER CHARGES

All taxes on Products, goods and/or services sold under the Sales Agreement, including but not limited to federal, state and local excise, sales or use taxes, shall be borne solely by Buyer. Buyer shall be obligated to pay all taxes set forth on invoices, in accordance with the terms of payment, provided that SSI shall not invoice taxes when within 30 days of placing the order, Buyer has furnished SSI with written proof of exemption from tax in the form of a certificate of exemption or an equivalent document which Buyer represents and warrants is properly completed and validly executed. If, notwithstanding the foregoing, any taxing authority attempts to assess taxes, Buyer shall indemnify and hold harmless SSI from any loss, damage, claim or cause of action, including, but not limited to, tax, interest, penalties and professional fees, related to such attempted assessment and shall make payment to SSI for any such costs paid by SSI and invoiced to Buyer in accordance with the terms of payment.

PATENTS

SSI shall defend any suit or proceeding brought against Buyer so far as based upon an assertion that any Product furnished under the Sales Agreement constitutes a direct infringement of any United States patent having a claim of claims covering solely the Product itself, if notified promptly in writing and given authority, information and assistance (at SSI's expense) for the defense of same, and SSI shall pay all damages and costs awarded therein against Buyer. In the event said Product in such suit is held to constitute infringement and the use of said Product is enjoined, SSI shall, at its own option and at its own expense, either:

(i) procure for Buyer the right to continue using said Product, (ii) replace the same with a non-infringing Product, (iii) modify it so it becomes non-infringing, or (iv) remove said Product and refund the purchase price and transportation costs thereof. The foregoing obligations of SSI shall not apply to any infringement claim based upon: (i) any use of any Product sold hereunder in any process or in conjunction with any other product, (ii) any Product manufactured to Buyer's design or any Product having a design arising from SSI's compliance with Buyer's specifications; or (iii) use of any Product sold hereunder, if the Product has been modified or customized by Buyer.

The foregoing sets forth the entire liability of SSI for patent infringement by said Product. If any suit or proceeding is brought against SSI based on claims that the goods manufactured by SSI in compliance with Buyer's specifications and supplied to Buyer directly infringe any fully issued United States patent, then the patent indemnity obligations herein stated with respect to SSI shall reciprocally apply with respect to Buyer.

WARRANTY

Subject to the exceptions and upon the conditions stated below, SSI warrants that the Products sold under the Sales Agreement shall be free from defects in workmanship and materials for one year after shipment of the Products to the original Buyer by SSI (the "Warranty"), and if any such Products should prove to be defective within such one year period, SSI's sole liability (and Buyer's sole and exclusive remedy) shall be, at its option, either (i) to correct by repair or, at SSI election, by replacement with equivalent product any such defective Product, provided that investigation and factory inspection discloses that such defect developed under normal and proper use, or (ii) to refund the purchase price. The exceptions and conditions mentioned above are as follows: (i) Components or accessories manufactured by SSI which by their nature are not intended to and will not function for one year are warranted only to give reasonable service for a reasonable time; what constitutes reasonable time and reasonable service shall be determined solely by SSI. A complete list of such components and accessories is maintained at the factory; (ii) SSI makes no warranty with respect to components or accessories not manufactured by it. In the event of defect in any such component or accessory SSI will give reasonable assistance to Buyer in obtaining from the respective manufacturer whatever adjustment is authorized by the manufacturer's own warranty; (iii) any Product claimed to be defective must, if required by SSI, be returned to the factory, transportation charges prepaid, and will be returned to Buyer with transportation charges collect unless the Product is found to be defective, in which case SSI will pay all transportation charges; (iv) if the Product is a reagent or the like, it is warranted only to conform to the quantity and content and for the period (but not in excess of one year) stated on the label at the time of delivery; (v) SSI may from time to time produce a special printed warranty with respect to a certain Product, and where applicable, such warranty shall be deemed incorporated herein by reference; (vi) SSI shall be released from all obligations under all warranties, whether expressed or implied, if any Product covered hereby is repaired or modified by persons other than its own authorized service personnel unless such repair by others is made with the written consent of SSI; and (vii) SSI's obligations pursuant to all warranties, either express or implied, shall be expressly conditioned upon payment in full by Buyer for the Products covered by the warranties. In the event of non-payment, whether for the entire purchase price or a part thereof, SSI shall be released from all obligations under all warranties, either express or implied.

IT IS EXPRESSLY AGREED THAT THIS WARRANTY SHALL BE IN LIEU OF ALL WARRANTIES OR WARRANTY OF ANY NATURE WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF FITNESS AND MERCHANTABILITY, AND THAT NEITHER BUYER NOR SSI SHALL HAVE ANY LIABILITY FOR SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CAUSE WHATSOEVER, INCLUDING, BUT NOT LIMITED TO LOSS OF USE, LOSS OF DATA, LOSS OF PRODUCTIVITY, LOSS OF BUSINESS, LOSS OF PROFIT, LOSS OF PLANT, EQUIPMENT OR PRODUCTION. THE LIMITATION OF LIABILITY FOR SUCH DAMAGES SHALL BE APPLICABLE EVEN IF SSI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING OUT OF THE MANUFACTURE, USE, SALE, HANDLING, REPAIR, MAINTENANCE OR REPLACEMENT OF ANY OF THE PRODUCTS SOLD UNDER THE SALES AGREEMENT.

If an SSI Special Warranty (covering a designated item or items) is contained in the manual or is otherwise shipped with such designated item or items, the terms and conditions specified therein are incorporated herein by reference and shall supplement the foregoing warranty. In the event of a conflict between the terms and conditions specified herein and those specified in such Special Warranty, the terms and conditions specified herein shall control. SSI's warranties made in connection with this sale shall not be effective if SSI has determined, in its sole discretion, that Buyer has misused the Products in any manner, has failed to use the Products in accordance with industry standards and practices, or has failed to use the Products in accordance with instructions, if any, furnished by SSI.

Representations and warranties made by any person, including dealers and representatives of SSI, which are inconsistent or in conflict with the terms of this warranty, shall not be binding upon SSI unless expressly assumed in a writing that is approved and signed by an authorized officer of SSI. By signing the Sales Agreement, the Buyer specifically acknowledges that no representations or warranties were made by any person, including dealers and representatives of SSI, that the Product may be used for Diagnostic Purposes.

CONTINGENCIES; FORCE MAJEURE

SSI shall be entitled to cancel or rescind the Sales Agreement, without liability for loss or damage resulting therefrom, if: (i) any Product covered by the Sales Agreement is purchased for end use outside the United States or Canada; (ii) the Buyer breaches any of its representations or warranties found in this Agreement; or (iii) the performance of SSI's obligations under the Sales Agreement is in any way adversely affected by the occurrence of any contingency beyond the control of either SSI or SSI's suppliers, including but not limited to: (a) war (whether an actual declaration thereof is made or not), sabotage, insurrection, riot, act of a public enemy, or other act of civil disobedience; (b) failure or delay in transportation; (c) act of any government, government agency or subdivision of any government, or any judicial action affecting the terms of the Sales Agreement; (d) labor dispute, shortage of labor, fuel, raw material or technical or yield failure where SSI has exercised ordinary care in the prevention thereof; and (e) accident, fire, explosion, flood, storm or other act of God.

U.S. GOVERNMENT CONTRACTS

If the Products to be furnished under the Sales Agreement are to be used in the performance of a U.S. Government contract or subcontract, and a U.S. Government contract number shall appear on Buyer's order, those clauses of the applicable U.S. Government procurement regulations that are required to be included in U.S. Government contracts and subcontracts shall be incorporated herein by reference, including, without limitation, the Federal Acquisition Regulations and the Fair Labor Standards Act of 1938, as amended.

INDEMNIFICATION: Buyer shall at its own expense apply for and obtain any permits and inspections required for the installation and/or use of the Products. SSI makes no promise or representation that the Products or related services will conform to any federal, state or local laws, ordinances, regulations, codes or standards, except as particularly specified and agreed upon in writing by an authorized representative of SSI. SSI's Products are not for use in or with any nuclear facility unless specifically so stated by SSI in writing. SSI's Products are not for use for Diagnostic Purposes. SSI shall not be responsible for any losses or damages sustained by Buyer or any other person as a result of improper installation or misapplication of the Products. Buyer shall defend, indemnify and hold harmless SSI and its agents and employees against any loss, damage, claim, suit, liability, judgment or expense (including, without limitation, attorney's fees) arising out of or in connection with any injury, disease or death of persons (including, without limitation, Buyer's employees and agents) or damage to or loss of any property or the environment, or violation of any applicable laws or regulations resulting from or in connection with the sale, transportation, installation, use, or repair of the Products by Buyer or of the information, designs, services or other work supplied to Buyer, whether caused by the concurrent and/or contributory negligence of Buyer, SSI, or any of their agents, employees or suppliers. The obligations, indemnities and covenants contained in this paragraph shall survive the consummation or termination of this transaction.

CONFIDENTIAL INFORMATION

Except as required by law, neither party shall use (except for purposes connected with the performance of its obligations hereunder), divulge or communicate to any third party any information of the other it reasonably knows to be confidential.

FDA REQUIREMENTS

If any Product sold by SSI to Buyer is subject to regulation by the Food and Drug Administration as a device, then as to any such Product, sale and delivery is contingent upon successful completion and processing of a 510(k) notice. If such a 510(k) notice cannot be obtained by SSI, SSI shall have no obligation to deliver the Product.

COMPLIANCE WITH LAWS

Buyer agrees to comply fully with all federal, state, county and local laws, rules and regulations concerning the purchase, sale and use of Products. Without limiting the foregoing, Buyer agrees to comply with any the Export Administration Regulations; Federal Food, Drug & Cosmetics Act; the International Traffic In Arms Regulations of the United States; and the Foreign Corrupt Practices Act of the United States in so far as they apply to the sale of Products. To the extent the Products require license for export, the Products are licensed by the United States for delivery to the ultimate destination as shown on the shipment/invoice address and any contrary diversion may be prohibited by law.

APPLICABLE LAW, JURISDICTION VENUE

The Sales Agreement is made and entered into, and shall be governed, enforced and interpreted in accordance with the laws of the State of Maryland. The Buyer hereby expressly consents to the jurisdiction of the courts of the State of Maryland with regard to all issues and questions of law or fact pertaining to the Sales Agreement. In the event that either party commences litigation to enforce the Sales Agreement, said litigation shall be brought in the courts of Howard County, Maryland. The prevailing party to any such action shall be entitled to an award of all costs and attorney's fees actually incurred.

GENERAL PROVISIONS

The rights and obligations under these General Terms and Conditions of Sale will inure to the benefit of, and be binding upon the parties hereto and their respective heirs, administrators, executors, personal representatives, successors and permitted assigns. No action, failure of action or delay by either party will constitute a waiver of any of its rights or remedies under these General Terms and Conditions of Sale. SSI and Buyer are not, and will not be, joint venturers, partners, agents, servants, or employees or fiduciaries of the other, and do not have the power to bind or obligate the other. The waiver of a breach of any provision does not constitute a waiver of a subsequent breach of the same or different provision. If any of the terms of these General Terms and Conditions of Sale or the Sales Agreement are subsequently or are now illegal, they will be severed without affecting the remaining terms. The section headings are for reference only and will not be considered controlling as to the content and/or interpretation of any section.

ENTIRE AGREEMENT

These General Terms and Conditions of Sale, together with the Sales Agreement, and any attachments, exhibits and supplements specifically referred to in the Sales Agreement, are intended by the parties as a complete and exclusive statement of the terms of their agreement, and supersede all prior agreements, written or oral. No course of prior dealings between the parties and no usage of the trade may be used by Buyer to supplement or explain any term used herein.

END GENERAL TERMS AND CONDITIONS OF SALE

This document contains the number of pages indicated, including all attachments. Authorized signature required on quotation pages

SSI-51963-WK8M Rev. 0

Authorization Signature



Date: 10/31/2012

SPECIFIC BID RESPONSE – 7713005 – ICP-OES SPECTROMETER

3.1.1 iCap 6300 Duo View ICP-OES Spectrometer, or equivalent

3.1.1.1 The Spectrometer must be capable of conducting chemical analysis on samples of plain carbon and low alloy steel, as noted in ASTM E350 Standard, as well as analyzing samples of cements, as noted in ASTM C114, fly ash, as noted in ASTM C311, and road salt, as noted in ASTM D632.

MEETS: The Shimadzu ICPE-9000 is able to perform all of these ASTM methods.

3.1.1.2 The Spectrometer must be capable of simultaneously analyzing required elements with detection limits of less than 1 ppb, and must include duo plasma viewing system providing both axial and radial torch views from a single configuration.

MEETS: The Shimadzu ICPE-9000 has a dual view plasma and can achieve detection limits of less than 1 ppb. Please see the enclosed detection limit table and the period table on page 4 of the brochure.

3.1.1.3 The Spectrometer must be a compact bench mounted unit with dimensions no greater than 840mm (w) x 750mm (d) x 590mm (h), and the system must be supplied complete with the software that allows analyst to add wavelengths, create methods, analyze samples and post-process the data while the spectrometer is acquiring data, and be compatible with Windows XP and Windows 7 operating systems.

EXCEPTION: The Shimadzu ICPE-9000 has no moving parts and is an Echelle polychromator. Because there are no moving parts, the footprint is larger than the iCap 6300. Namely, it is 1350 mm (w) x 760 mm (d) x 830 mm (h).

MEETS: The Shimadzu ICP software is very wizard driven and thus user friendly. It is able to do all things listed in the bid specification. In addition, the software has a Method Development Wizard which helps the user select the best wavelengths and minimize interferences. The software is Windows 7 32 bit compatible and XP compatible.

3.1.1.4 The Spectrometer must be suitable for 200 – 240v: 50/26Hz operation from a single phase 32A/20A supply.

MEETS: The Shimadzu ICPE-9000 has a 30 amp single phase 200, 220, 230 or 240 volt supply.

3.1.1.5 The Spectrometer must employ a water cooled RF generator with safety interlocks throughout the system providing safe shut down of the generator without damage to the instrument in the event of power failure. In addition, all failure events must be recorded to an electronic journal.

MEETS

3.1.1.6 The Spectrometer must employ a triple stage cooled Charge Injection Device (CID) detector, cooled to -45°C with solid state electronics to ensure high contrast/low noise imaging and quantification of all wavelengths in the analytical range without blooming. The CID must be photoactive over the whole surface area to enable continuous wavelength coverage and must contain a minimum of 540 x 540 pixels.

EXCEPTION: The Shimadzu ICPE-9000 utilizes a cooled CCD detector with almost 5 times the number of pixels at over 1,000,000. CCD's inherently have better Quantum Efficiency (QE). QE is how many electrons are produced for each photon. CCD's are 10-20% better than CID's because wires on CID's cover some of the photoactive surface.

The Shimadzu ICPE-9000 is thermally stabilized at 38°C, which reduces wavelength drift due to changing room temperature.

In addition, CID detectors need to be mapped and have inherently less wavelength coverage. The Shimadzu ICPE-9000 has over 110,000 wavelengths databased. Therefore, the user can do back and retrieve wavelength information, even if a particular element was not selected in the initial method setup.

Shimadzu's CCD uses a two side method of the detector for collecting light on the backside while eliminating blooming on the front side with special drains. The design permits maximum sensitivity while preventing blooming.

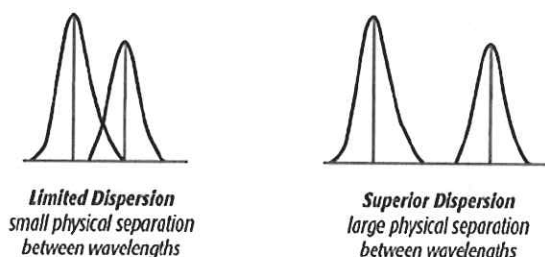
Furthermore, Thermo is the only company that utilizes CID detectors. All others on the market employ CCD detectors. Because of the CCD competition, advances are being

made to CCD detectors, while CID detectors still need mapped and have not kept up with technology because there is no competition.

ADDITIONAL SHIMADZU ADVANTAGES FOR CONSIDERATION

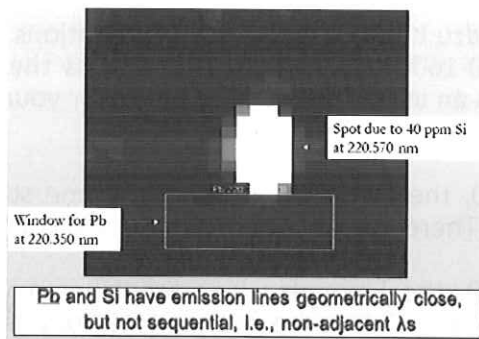
VIEW TECHNOLOGY: Unlike the iCap, the Shimadzu ICPE-9000 comes standard with an axial view (not radial view) configuration with optional dual view. Axial views provide detection limits that are 5-10 times better than radial view instruments.

WAVELENGTH RESOLUTION: The Shimadzu ICPE-9000 has 140% better resolution with a specification of 5 picometers and typical specification of 4.2 picometers, or 167% better. Better resolution means less spectral interferences from neighboring lines with superior dispersion. Please see figure below.

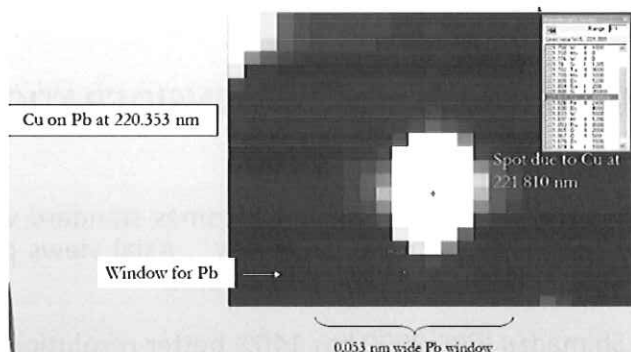


WAVE ORDER RESOLUTION: The Shimadzu ICPE-9000 has a large 1" by 1" detector, which eliminates false order overlaps. CID detectors do suffer from overlapping lines between elements from a different order. Please see below for examples, taken from a publication by Test America, one of the leading environmental testing laboratories (<https://doecap.oro.doe.gov/EDS/Readings/207%20Larry%20Penfold-Optical%20ICP%202011.ppt>).

1) In the example below, Si cause high false readings on Pb.



2) The next example Cu caused false high reading on Pb



Other examples show Si false high reading on Se, Mo false high reading on Pb, and Co false high reading on Ni.

ARGON QUALITY: Unlike the iCap, the Shimadzu ICPE-9000 can use less expensive, lower purity (99.95% versus 99.998%) and still perform to specifications.

ARGON NEBULIZER and AUXILLIARY GAS FLOWS: Unlike the iCap 6300, the Shimadzu ICPE-9000 Argon nebulizer gas and Argon auxiliary gas flows are computer controlled at 0.01 L/min and 0.05 L/min respectively, which improves optimization. These are convenient features that Thermo only offers in their higher end iCap 6500 spectrometer.

ARGON CONSUMPTION: The Shimadzu ICPE-9000 utilizes a mini-torch, which requires about half the Argon than any other instrument on the market, including the iCap 6300. This mini-torch has no sacrifice in sensitivity.

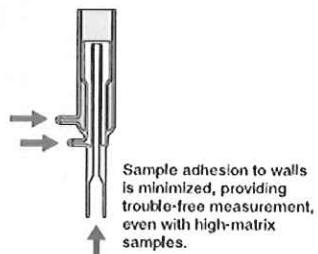
VACUUM SPECTROMETER: Unlike the iCap 6300, the Shimadzu ICPE-9000 is a vacuum-based spectrometer. This also reduced the cost of ownership. The vacuum comes equipped with a Pirani gauge so that the exact pressure is known and the user is altered when the measurement can begin. The vacuum only turns on when it is needed and shuts off automatically. Furthermore, a vacuum based instrument has much better reproducibility for lighter elements like P, K, and S, which absorb air and provide poor reproducibility on purged benches.

RF POWER: Unlike the iCap 6300, the Shimadzu ICPE-9000 has no RF limitations on the higher end. The instrument can achieve 800-1600 (not 1350) Watts across the entire wavelength range in dual view. This becomes an important consideration for your ASTM methods, which will have organic matrices.

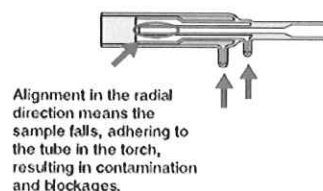
WAVELENGTH RANGE: Unlike the iCap 6300, the Shimadzu ICPE-9000 come standard with the ability to measure K at 766.490 nm. There is no optional extension required.

TORCH ORIENTATION: Unlike the iCap 6300, the Shimadzu ICPE-9000 has a vertical configuration for axial view, which permits higher solids to be analyzed without affecting the auxiliary and plasma gases. Please see the figure below.

Vertical Orientation
ICPE-9000



Radial Orientation
Conventional device



SUPPORT: A factory-trained Service Engineer install your equipment and provide basic familiarization. In addition to this, Shimadzu's approach to training is unique in the industry. We will show you how to run *your* samples, and spend the necessary time to train your analysts. This training is available as many hours as needed for all users to feel comfortable using the instrument. In addition, future re-trainings can be scheduled as new analysts join the team. We also offer free telephone technical support for the lifetime of the instrument and regardless of service contract coverage.

Exhibit A

Cost Sheet
RFQ#: 7713005

Item Number	Quantity	Unit of Measure	Description	"Or Equal" Part Number / Description	Unit Price
1	1	ea	DUO VIEW ICP-OES Icap 6300	220-95324-51/Shimadzu ICPE-9000	\$83,082.80

ICPE-9000

Top 10 Reasons to Buy a Shimadzu ICPE-9000

1. **Mini-torch**, low gas flow, can save up to 50% of the cost of operation compared to conventional ICPs.
2. **Vacuum Spectrometer** reduces startup time, saves money as no purge gas is required, and provides long-term stability.
3. **Method Development Assistant** software automatically selects the appropriate wavelength for samples from a database of 110,000 wavelengths, selects ideal conditions based on physical, ionization and spectral interferences, and selects the appropriate background correction.
4. **Method Diagnostic Assistant** software automatically corrects for interferences based on a post-run analysis, saving the analyst time.
5. **Large-scale CCD** (1 inch x 1 inch) has over 1 million pixels for all wavelengths. Many competitors have between 70,000 and 256,000 pixels, a range 4 to 14 times less than the ICPE-9000, which means some wavelength and wave orders are not available.
6. **Dual View** allows an increased linear dynamic range by viewing the plasma in both axial (standard) and radial (optional) views in the same sample run for improved productivity.
7. **Vertical-torch** design reduces downtime by minimizing blockage and contamination when analyzing high-matrix samples.
8. **Semi-Quantitative Mode** allows unknown samples to be analyzed without standards. The results give an identification of the elements in the unknown plus an approximated concentration, thus making method development easy.
9. **Automatic Wavelength Calibration** at 20 different wavelengths. Competitive instruments require external sources which can burn out, become mis-aligned, and require maintenance.
10. Knowing you are getting over **130 years of experience** by purchasing from Shimadzu.

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentally established by a county or municipality; any separate corporation or instrumentally established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (*West Virginia Code §61-5-3*), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Shimadzu Scientific Instruments, Inc.

Authorized Signature: [Signature] Date: November 1, 2012

State of Maryland

County of Baltimore, to-wit:

Taken, subscribed, and sworn to before me this 1st day of November, 2012.

My Commission expires March 14, 2013.

AFFIX SEAL HERE

NOTARY PUBLIC [Signature]