

DOCZE

DATE PRINTED

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

Solicitation

NUMBER AGR1341 PAGE 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:

GUY NISBET 304-558-8802

\$04-558-8802

DEPARTMENT OF AGRICUL

*509145214 01 800-762-4000 PERKINELMER HEALTH SCIENCES IN 710 BRIDGEPORT AVE MS 172 SHELTON CT 06484

SHELION CI 06484

DEPARTMENT OF AGRICULTURE
JOBSITE
SEE SPECIFICATIONS
T

07/23/2013 BID OPENING DATE: 08/20/2013 BID OPENING TIME 1:30PM CAT. LINE QUANTITY UOP ITEM NUMBER UNIT PRICE AMOUNT 0001 LS 493-69 \$67,745.66 \$67,745.66 **PTICAL EMISSION SPECTROMETER** REQUEST FOR QUOTATION (RFO) THE WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF AGRICULTURE, IS SOLICITING BIDS FOR THE PURCHASE OF A INDUCTIVELY COUPLED PLASMA - OPTICAL EMISSION SPECTROMETER FOR THE AGENCY LOCATION IN MOORFIELD, WV. PER THE ATTACHED SPECIFICATIONS. \$67,745.66 THIS IS THE END OF RFO AGR1341 ***** TOTAL: "Bid in accordance with PerkinElmer Health Sciences, Inc. Quotation 20593274 attached." 08/19/13 09:58:49 AM West Virginia Purchasing Division SIGNATURE TELEPHONE DATE 800-762-4000 ASSISTANT SÉCRETARY 04-3361624 ADDRESS CHANGES TO BE NOTED ABOVE

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

- 1. REVIEW DOCUMENTS THOROUGHLY: The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.
- 2. MANDATORY TERMS: The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

	apply to the constitution.				
1	A pre-bid meeting will not be held prior to bid opening.				
	A NON-MANDATORY PRE-BID meeting will be held at the following place and time:				
	A MANDATORY PRE-BID meeting will be held at the following place and time:				

3. PREBID MEETING: The item identified below shall apply to this Solicitation

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing. Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required

information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. VENDOR QUESTION DEADLINE: Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are non-binding.

Question Submission Deadline:

August 07, 2013 at 3:00 PM. EST.

Submit Questions to:

Guy Nisbet, Senior Buyer

2019 Washington Street, East Charleston, WV 25305 Fax: 304.558.3970

Email:Guy.L.Nisbet@WV.Gov

- 5. VERBAL COMMUNICATION: Any verbal communication between the Vendor and any State personnel is not binding, including that made at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.
- 6. BID SUBMISSION: All bids must be signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The bid delivery address is:

Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130 The bid should contain the information listed below on the face of the envelope or the bid may not be considered:

SEALED BID

BUYER:

SOLICITATION NO.:

BID OPENING DATE:

BID OPENING TIME:

FAX NUMBER:

In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus _____ convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE: Technical Cost

7. BID OPENING: Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when time stamped by the official Purchasing Division time clock.

Bid Opening Date and Time:

August 20, 2013 at 1:30 PM. EST.

Bid Opening Location:

Department of Administration, Purchasing Division

2019 Washington Street East Charleston, WV 25305-0130

- 8. ADDENDUM ACKNOWLEDGEMENT: Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.
- BID FORMATTING: Vendor should type or electronically enter the information onto its bid to
 prevent errors in the evaluation. Failure to type or electronically enter the information may result
 in bid disqualification.

GENERAL TERMS AND CONDITIONS:

- CONTRACTUAL AGREEMENT: Issuance of a Purchase Order signed by the Purchasing Division
 Director, or his designee, and approved as to form by the Attorney General's office constitutes
 acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's
 signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions
 contained in this Contract.
- DEFINITIONS: As used in this Solicitation / Contract, the following terms shall have the meanings
 attributed to them below. Additional definitions may be found in the specifications included with this
 Solicitation / Contract.
 - 2.1 "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.
 - 2.2 "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods and services requested in the Solicitation.
 - 2.3 "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.
 - 2.4 "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.
 - 2.5 "Purchase Order" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the successful bidder and Contract holder.
 - **2.6 "Solicitation"** means the official solicitation published by the Purchasing Division and identified by number on the first page thereof.
 - 2.7 "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.
 - 2.8 "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

accordance with the category that has been identified as	
Term Contract	

Initial Contract Term: This Contract becomes effective on

and extends for a period of

year(s).

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal must be submitted to the Purchasing Division Director thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to successive one (1) year periods. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

Reasonable Time Extension: At the sole discretion of the Purchasing Division Director, and with approval from the Attorney General's office (Attorney General approval is as to form only), this Contract may be extended for a reasonable time after the initial Contract term or after any renewal term as may be necessary to obtain a new contract or renew this Contract. Any reasonable time extension shall not exceed twelve (12) months. Vendor may avoid a reasonable time extension by providing the Purchasing Division Director with written notice of Vendor's desire to terminate this Contract 30 days prior to the expiration of the then current term. During any reasonable time extension period, the Vendor may terminate this Contract for any reason upon giving the Purchasing Division Director 30 days written notice. Automatic extension of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases, but Attorney General approval may be required.

Release Order Limitations: In the event that this contract permits release orders, a release order may only be issued during the time this Contract is in effect. Any release order issued within one year of the expiration of this Contract shall be effective for one year from the date the release order is issued. No release order may be extended beyond one year after this Contract has expired.

Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within (10) Weeks

		One Time Purchase: The term of this Contract shall run from the issuance of the Purchase Order until all of the goods contracted for have been delivered, but in no event shall this Contract extend for more than one fiscal year.
		Other: See attached.
4.	receiv	CE TO PROCEED: Vendor shall begin performance of this Contract immediately upon ing notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the xecuted Purchase Order will be considered notice to proceed
5.		NTITIES: The quantities required under this Contract shall be determined in accordance with egory that has been identified as applicable to this Contract below.
		Open End Contract: Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.
		Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.
		Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.
		One Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

- 6. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.
- 7. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.
- 8. REQUIRED DOCUMENTS: All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

	BID BOND: All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.
	PERFORMANCE BOND: The apparent successful Vendor shall provide a performance bond in the amount of The performance bond must be issued and received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.
	LABOR/MATERIAL PAYMENT BOND: The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be issued and delivered to the Purchasing Division prior to Contract award.
certific or irre same labor/r	of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide ed checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, vocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and material payment bond will only be allowed for projects under \$100,000. Personal or business are not acceptable.
	MAINTENANCE BOND: The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.
	WORKERS' COMPENSATION INSURANCE: The apparent successful Vendor shall have appropriate workers' compensation insurance and shall provide proof thereof upon request.
	INSURANCE: The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the state as a certificate holder:
	Commercial General Liability Insurance: or more. Builders Risk Insurance: builders risk – all risk insurance in an amount equal to 100% of the amount of the Contract.

The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.
LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.
The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not

9. LITIGATION BOND: The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

that requirement is listed above.

- 10. ALTERNATES: Any model, brand, or specification listed herein establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.
- 11. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or

other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

12. LIQUIDATED DAMAGES: Vendor shall pay liquidated damages in the amount for

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

- 13. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part. Vendor's signature on its bid signifies acceptance of the terms and conditions contained in the Solicitation and Vendor agrees to be bound by the terms of the Contract, as reflected in the Purchase Order, upon receipt.
- 14. REGISTRATION: Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee if applicable.
- 15. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.
- 16. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.
- 17. PAYMENT: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears, to the Agency at the address on the face of the purchase order labeled "Invoice To."
- 18. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.
- 19. DELIVERY: All quotations are considered freight on board destination ("F.O.B. destination") unless alternate shipping terms are clearly identified in the bid. Vendor's listing of shipping terms that contradict the shipping terms expressly required by this Solicitation may result in bid disqualification.
- 20. INTEREST: Interest attributable to late payment will only be permitted if authorized by the West Virginia Code. Presently, there is no provision in the law for interest on late payments.
- 21. PREFERENCE: Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Resident Vendor Certification form has been attached hereto to allow Vendor to apply for the preference. Vendor's

- failure to submit the Resident Vendor Certification form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.
- 22. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES: For any solicitations publicly advertised for bid on or after July 1, 2012, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to submission of its bid to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.
- 23. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 24. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-7.16.2.
- 25. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.
- 26. TIME: Time is of the essence with regard to all matters of time and performance in this Contract.
- 27. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.
- 28. COMPLIANCE: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendors acknowledge that they have reviewed, understand, and will comply with all applicable law.
- 29. PREVAILING WAGE: On any contract for the construction of a public improvement, Vendor and any subcontractors utilized by Vendor shall pay a rate or rates of wages which shall not be less than the fair minimum rate or rates of wages (prevailing wage), as established by the West Virginia Division of Labor under West Virginia Code 21-5A-1 available et seq. and http://www.sos.wv.gov/administrative-law/wagerates/Pages/default.aspx. Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage

- requirements are applicable. The required contract provisions contained in West Virginia Code of State Rules § 42-7-3 are specifically incorporated herein by reference.
- 30. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.
- 31. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary, no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). No Change shall be implemented by the Vendor until such time as the Vendor receives an approved written change order from the Purchasing Division.
- 32. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.
- 33. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.
- 34. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.
- 35. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.
- 36. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.
- 37. BANKRUPTCY: In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

38. [RESERVED]

- 39. CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/default.html.
- 40. DISCLOSURE: Vendor's response to the Solicitation and the resulting Contract are considered public documents and will be disclosed to the public in accordance with the laws, rules, and policies governing the West Virginia Purchasing Division. Those laws include, but are not limited to, the Freedom of Information Act found in West Virginia Code § 29B-1-1 et seq.

If a Vendor considers any part of its bid to be exempt from public disclosure, Vendor must so indicate by specifically identifying the exempt information, identifying the exemption that applies, providing a detailed justification for the exemption, segregating the exempt information from the general bid information, and submitting the exempt information as part of its bid but in a segregated and clearly identifiable format. Failure to comply with the foregoing requirements will result in public disclosure of the Vendor's bid without further notice. A Vendor's act of marking all or nearly all of its bid as exempt is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor's act of marking a bid or any part thereof as "confidential" or "proprietary" is not sufficient to avoid disclosure and WILL NOT BE HONORED. In addition, a legend or other statement indicating that all or substantially all of the bid is exempt from disclosure is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor will be required to defend any claimed exemption for nondiclosure in the event of an administrative or judicial challenge to the State's nondisclosure. Vendor must indemnify the State for any costs incurred related to any exemptions claimed by Vendor. Any questions regarding the applicability of the various public records laws should be addressed to your own legal counsel prior to bid submission.

- 41. LICENSING: In accordance with West Virginia Code of State Rules §148-1-6.1.7, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.
- 42. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Purchase Order from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the

purchasing agency tenders the initial payment to Vendor.

43. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid for the same material, supplies, equipment or services; (2) that its bid is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this RFQ in its entirety; understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

The individual signing this bid on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

- 44. PURCHASING CARD ACCEPTANCE: The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.
 - Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.
- 45. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting,

supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms and returns pertinent to all of the foregoing. Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

46. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered

by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

- 47. PURCHASING AFFIDAVIT: In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.
- 48. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE: This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.
- 49. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire any interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.
- 50. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:
 Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.
 Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.requisitions@wv.gov.
- 51. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state

repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision.

The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

- 52. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:
 - a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
 - b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or

The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

other steel making process.

- a. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
- b. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.
- 53. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance
 Revised 07/12/2013

with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products.

This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

REQUEST FOR QUOTATION AGR1341

Inductively Coupled Plasma-Optical Emission Spectrometer Optima 8000 or EQUAL

SPECIFICATIONS

- PURPOSE AND SCOPE: The West Virginia Purchasing Division is soliciting bids on behalf of WV Dept. of Agriculture to establish a contract for the one time purchase of Inductively Coupled Plasma-Optical Emission Spectrometer or EQUAL.
- DEFINITIONS: The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
 - 2.1 "Contract Item" means Inductively Coupled Plasma-Optical Emission Spectrometer or equal.
 - 2.2 "Pricing Page" means the pages upon which Vendor should list its proposed price for the Contract Items in the manner requested. The Pricing Page is either included on the last page of this RFQ or attached hereto as Exhibit A.
 - 2.3 "RFQ" means the official request for quotation published by the Purchasing Division and identified as AGR1341.

3. GENERAL REQUIREMENTS:

- 3.1 Mandatory Contract Item Requirements: Contract Item must meet or exceed the mandatory requirements listed below.
 - 3.1.1 Inductively Coupled Plasma-Optical Emission Spectrometer Optima 8000 or EQUAL
 - 3.1.1.1 Inductively Coupled Plasma-Optical Emission Spectrometer Optima 8000 or EQUAL must have flat plate plasma generation technology which uses approximately half the argon of traditional helical coil systems.
 - **3.1.1.2** Dual viewing optics are required to allow the plasma to be viewed radially or axially.
 - 3.1.1.3 The selection of axial or radial viewing must be software controlled with automated adjustment of the plasma alignment in both the horizontal and vertical directions.

REQUEST FOR QUOTATION AGR1341

Inductively Coupled Plasma-Optical Emission Spectrometer Optima 8000 or EQUAL

- 3.1.1.4 The spectrometer must cover the full spectral range of 160-900nm.
- 3.1.1.5 The instrument must be able to determine all desired elements using one analytical method, with multiple wavelengths per element, both axially and radially.
- **3.1.1.6** The instrument must be able to deselect selected wavelengths from a method prior to measurement.
- 3.1.1.7 System should include a pneumatically controlled shutter that opens and closes for each sample, protecting the first transfer mirror and extending the useful lifetime of the mirror.
- 3.1.1.8 Inductively Coupled Plasma-Optical Emission Spectrometer Optima 8000 or EQUAL must be compatible with WinLab32 software. Software must be able to append a method to an autosampler run during the run.
- 3.1.1.9 Inductively Coupled Plasma-Optical Emission Spectrometer Optima 8000 or EQUAL must have a compressed air shear gas system to eliminate interferences in the plasma. The torch must be able to be adjusted for plasma viewing while the plasma is lit. The system must have a three channel peristaltic pump to allow for online addition of internal standards.

4. CONTRACT AWARD:

- 4.1 Contract Award: The Contract is intended to provide Agencies with a purchase price for the Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest overall total cost as shown on the Pricing Pages.
- 4.2 Pricing Page: Vendor should complete the Pricing Page by filling the model no./brand name, unit price, extended amount, and the bidder/vendor information. Vendor should complete the Pricing Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified.

REQUEST FOR QUOTATION AGR1341

Inductively Coupled Plasma-Optical Emission Spectrometer Optima 8000 or EOUAL

Notwithstanding the foregoing, the Purchasing Division may correct errors as it deems appropriate. Vendor should type or electronically enter the information into the Pricing Page to prevent errors in the evaluation.

5. PAYMENT:

5.1 Payment: Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

6. DELIVERY AND RETURN:

- 6.1 Shipment and Delivery: Vendor shall deliver the Contract Items within 10 weeks after receiving a notice to proceed. Vendor is responsible for the set up and complete training of lab staff onsite following delivery of the instrument. Contract Items must be delivered to Agency at WV Dept. of Agriculture, 60B Industrial Park Rd., Moorefield, WV 26836.
- 6.2 Late Delivery: The Agency placing the order under this Contract must be notified in writing if the shipment of the Contract Items will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the Contract, and/or obtaining the Contract Items from a third party.
 - Any Agency seeking to obtain the Contract Items from a third party under this provision must first obtain approval of the Purchasing Division.
- 6.3 Delivery Payment/Risk of Loss: Vendor shall deliver the Contract Items F.O.B. destination to the Agency's location.
- 6.4 Return of Unacceptable Items: If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable, or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

REQUEST FOR QUOTATION AGR1341

Inductively Coupled Plasma-Optical Emission Spectrometer Optima 8000 or EQUAL

6.5 Return Due to Agency Error: Items ordered in error by the Agency will be returned for credit within 30 days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

		PRICING PAGE			
Item No.	Description	Model No/Brand Name	Quanity	Unit Price	Extended Amoun
1	Inductively Coupled Plasma-Optical Emmission OPT Spectrometer Optima 8000 or EQUAL	MA 8000 CONCENTRIC N0780011	1		\$65,969.45
	FREIGHT AND INSIDE DELIVERY		1		\$1,776.21
	Failure to use this form may result in disqualification			GRAND TOTAL	\$67,745.66
	Bidder / Vendor Information				
Name:	PerkinElmer Health Sciences, Inc	termination and an administration of the second			
Address:	710 Bridgeport Avenue, Shelton, CT 06484				
Phone:	800-762-4000				
Email Address:	ContractsShelton@perkinelmer.com				

Rev. 07/12

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1.	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
	Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or, Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents
	and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
2.	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
3.	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
4.	Application is made for 5% resident vendor preference for the reason checked: Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
5.	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
6.	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
7.	Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules. Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.
require agains	runderstands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the ements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty at such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency ucted from any unpaid balance on the contract or purchase order.
author the rec	emission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and izes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid juired business taxes, provided that such information does not contain the amounts of taxes paid nor any other information and by the Tax Commissioner to be confidential.
and a	penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true courate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate es during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.
Bidde	: Signed:
Date:	

RFQ No.	AGR1341

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, 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: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. 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.

DEFINITIONS:

WITNESS THE FOLLOWING SIGNATURE:

NOTARY PUBLIC State of Connecticut My Commission Expires

"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.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"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 exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

Vendor's Name: PerkinElmer Health Sciences, Inc Authorized Signature: resulf young Date: 8/6/3013 State of Connecticut County of Farrfrefd, to-wit: Taken, subscribed, and sworn to before me this 6 day of August 20/3. My Commission expires March 2/ 20/7. AFFIX SEAL HERE NOTARY PUBLIC Purchasing Affidavit (Revised 07/01/2012)

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.

PerkinElmer Health Sciences, Inc				
(Company)	Douest-			
(Authorized Signature)				
Assistant Secretary				
(Representative Name,	Title)			
800-762-4000	203-944-4904			
(Phone Number)	(Fax Number)			
16 august	2013			
(Date)				

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

17 NO.	P. 199		Numbers Received: ox next to each addendum	received))	
]]	Addendum No. 1	1]	Addendum No. 6
]]	Addendum No. 2	. []	Addendum No. 7
]]	Addendum No. 3	[1	Addendum No. 8
	[]	Addendum No. 4	C]	Addendum No. 9
	1]	Addendum No. 5]]	Addendum No. 10
furthe discu	er un ssion	ders	stand that any verbal repro ld between Vendor's repr	esentation esentative d to the sp	ma s an ecit	denda may be cause for rejection of this bid. I de or assumed to be made during any oral ad any state personnel is not binding. Only the fications by an official addendum is binding.
				16	Jan.	Company Mulhorized Signature Authorized Signature Date
						2000

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.





Phone: 1-800-762-4000 Fax: (203) 944-4914

Quotation

To:

GUY NISBET

STATE OF WEST VIRGINIA

BID AGR1341 PO BOX 50130

PURCHASING DIVISION

CHARLESTON WV 25305-0130

QUOTE NO.:

20593274

QUOTE VALID TO: 09/28/2013

QUOTE DATE: PAY. TERMS:

08/15/2013

FREIGHT TERMS:

Net 30 Days FOB Destination - Frt Quoted

ULTIMATE DEST.:

UNITED STATES OF AMERICA

TELEPHONE NO.

304-558-8802

FAX NO.

YOUR REFERENCE BID AGR1341

ITEM	MATERIAL	DESCRIPTION	QTY/EA	UNIT PRICE	TOTAL
1 I	MATERIAL N0780011	OPTIMA 8000 CONCENTRIC^ Sales Discount Optima 8000 ICP-OES with concentric sample introduction syste Optima 8000 ICP Optical Emission Spectrometer. Cyclonic spray chamber / Concentric nebulizer system. The new Optima 8000 ICP-OES system brings advanced technologientry level ICP market. The CCD array detector allows you to col complete simultaneous analyte spectrum at speeds that far exceed conventional sequential systems. Automatic dual viewing ensure	l em ogy to the llect a	67,000.00	67,000.00 10,050.00-
		lowest detection limits and the widest working ranges. The Optim is the ideal solution for research and quality assurance laboratorie that have a wide variety of samples and lower frequency of analyst custom-designed solid-state CCD array detector, the solid-state R supply and the sealed optical system provide both superior perfor and enhanced reliability. That reduces operating costs and, more importantly, ensures that your instrument is available when neede Computer-controlled gas flows and mass flow of the nebulizer ga	na 8000 es sis. The LF power mance		
		day-to-day reproducibility. The Optima's proven 32-bit Windows WinLab32 for ICP, makes it easy to get up in running in minutes than days. Customizable method development enables your analyquickly configure the system, increasing your lab's productivity. To compact, benchtop design conserves valuable laboratory space. Patented Flat Plate# plasma generation technology The Optima 8000 features maintenance-free Flat Plate plasma generation technology. Flat Plate induction generates a transversely symmet plasma while using approximately half the argon of traditional help	software, rather sts to The		

SEND PURCHASE ORDERS TO:

PerkinElmer Health Sciences, Inc.

710 Bridgeport Ave. Shelton, CT 06484-4794 Phone: 1-800-762-4000

Fax: (203) 944-4914

Email: USInstrumentOrders@perkinelmer.com

PREPARED BY:

SALES REPRESENTATIVE: TIMOTHY WILLIAMS

Flor Vazquez





To: GUY NISBET

ITEM

Phone: 1-800-762-4000 Fax: (203) 944-4914 Quotation

TOTAL

QUOTE NO.:

20593274

QUOTE VALID TO:

09/28/2013

QUOTE DATE:

08/15/2013

QTY/EA UNIT PRICE

STATE OF WEST VIRGINIA

MATERIAL DESCRIPTION coil systems.

D Rugged, reliable power

Fourth-generation, free-running, solid-state RF power supply to provide exceptional ruggedness and reliability, eliminating the need for costly power tubes. Solid-state design makes the power supply exceptionally compact.

Widest working range

Method-controlled dual viewing of the plasma delivers the widest working range possible, giving the lowest detection limits and the greatest concentration range in a single system. Axial viewing allows trace measurements because it provides a longer emission path for increased sensitivity and lower background levels. At the same time, radial viewing permits percentage concentration measurements. With the Optima 8000, trace and percentage concentration levels can be automatically determined in the same run without having to search for unfamiliar alternative wavelengths.

Shear gas advantage

To eliminate interferences caused by the cooler regions in the plasma gas, the Optima 8000 uses a unique compressed air shear gas system to remove the cool tail-plume of the plasma. This provides a maintenance-free, reliable system compared to alternative methods, which use expensive argon gas and water-cooling and are prone to clogging.

Accurate and reliable

The Optima 8000 features a high-speed, high-resolution double monochromator and solid-state detector. High resolution yields reduced interferences and improved accuracy. Limited component movement and Dynamic Wavelength Stabilization ensure exceptional wavelength accuracy and reliability. With the optical system's superior light throughput and the unmatched quantum efficiency of the solid-state detector, the Optima 8000 gives you exceptional detection limits quickly and routinely.

Dynamic wavelength stabilization

Since the system continually references a neon background; the Optima 8000 is faster, more precise and stable than conventional systems that rely on mercury references between reads. Dynamic Wavelength Stabilization (DWS) allows direct on-peak measurement, eliminating the need for peak searches.

PlasmaCam# viewing

Enables continuous viewing of the plasma for simpler method development and remote diagnostic capabilities from within the WinLab32 for ICP software

A fully configured Optima 8000 system also requires a controller assembly (consisting of a suitably configured computer, printer and





Phone: 1-800-762-4000 Fax: (203) 944-4914 Quotation

QUOTE NO.:

20593274

QUOTE VALID TO:

09/28/2013

QUOTE DATE:

08/15/2013

To:	GUY NISBET		
	STATE OF WEST VIRGINIA		

STATE	OF	WEST	VIKGINIA

ITEM	MATERIAL	DESCRIPTION	QTY/EA	UNIT PRICE	TOTAL
		WinLab 32 for ICP software), a chiller and, optionally, an autosa	ampler.	3,000	
ł					
2	N0770630	SOLUTIONS KIT-OPTIMA 8000 INSTALLATION Mat'l Disc Exculsiv	1	573.00	573.00 573.00-
3	N0772046	CHILLER-1HP 230V/60HZ TP QUIET Material Discount 1HP Whispercool# Chiller Cooling Capacity @ 20C: 2650 watts on 50Hz; 2900 watts on 60 Pump Flow: 3.5 gpm / 13.2 lpm Pump Pressure (adjustable): 90 psi maximum / 6.9 bar maximum 55 psi) Microprocessor-based temperature controller Large, easy to read digital temperature display (°C or °F) Cool Command# modulated refrigeration system for enhanced to stability and extended compressor life Chiller is designed for indoor installation in ambient temperature between 5° and 30°C (41° and 86°F); relative humidity should n 80% (non-condensing) Sound measurement @ 1 meter away: 65dBA (full load) / 62dBA Electrical Requirements: 50Hz: 240V / 1PH / 12.2 Amps	emperature es	4,290.00	4,290.00 4,290.00-
		Electrical Requirements: 60Hz: 208-230V/ 1PH / 12.2 Amps Dimensions: 27.6" L x 14.5" W x 22.6" H / 70.2cm L x 36.8cm Shipping Weight: 99 lbs / 90 kgs Manufacturer's Warranty: 2 years parts & labor	W x 57.5cm H		
4	N0770452	CONTROLLER-ICP WINLAB32 W/MON Sales Discount Model: Lenovo ThinkCentre® M82, 3.3 GHz Intel® Core i5-35 with Microsoft® Windows® 7 Professional Memory: 8 GB (4GB x2 DIMMs) Hard Drive: 1 TB, 7200 RPM Networking: Integrated Gigabit Ethernet External I/O Ports: 8 USB 2.0 (2 front, 6 rear), 1 Ethernet (RJ45 serial (9-pin), 1 VGA (DB-15 Display Port) out Media: DVD-Recordable Video: Integrated video Mouse: Lenovo USB Optical Wheel Mouse Keyboard: Preferred Pro USB Keyboard Audio: Integrated High Definition Audio Monitor: 24" LCD flat-panel widescreen display		5,600.00	5,600.00 840.00-





Phone: 1-800-762-4000 Fax: (203) 944-4914 Quotation

QUOTE NO.:

20593274

QUOTE VALID TO:

09/28/2013

QUOTE DATE:

08/15/2013

To: GUY NISBET

STATE OF WEST VIRGINIA

ITEM	MATERIAL	DESCRIPTION	QTY/EA	UNIT PRICE	TOTAL
		Warranty: Next Business Day parts and labor, on-site response for	or three		
		years.			
		(PerkinElmer reserves the right to supply equivalent or enhanced			
		versions of products resold by PerkinElmer, such as computers,	ın		
		response to model changes by the manufacturer.)			
		Includes software and parallel printer cable.			
		The multitasking WinLab for ICP software is designed to offer t	he		
		maximum amount of flexibility combined with ease of set up and	d routine		
		operation. This unique software design enables the advanced use	er to		7,
		develop an optimum method, but still allows the new user or beg	ginner to		
		run routine methods. Some of the features of the WinLab for ICI	P software		
		are:			
		*Easy-to-use Windows-based graphical user interface.			
		*Extensive, context-sensitive on-line help			
		*The ability to display, store and recall spectra for every sample			
		analyzed			
		*Data display and reprocessing, without the need to rerun sampl	es.		
		(Original data are unchanged.)			
		*Comprehensive data storage using an industry-standard database	se		
×		*High resolution graphics			
		*On-line library for wavelength selection and identification			
İ		*Automated plasma shutdown and warmup			
		*Automated alignment of transfer optics			
		*The use of multiple internal standards *The ability to use stored calibration curves to permit semiquant	itativa		
			itative		
	*Auto integration feature, which selects the optimum integration time				
		for each line for each sample, depending on the analyte concentration *The ability to mathematically compensate for spectral interferences			
using Multicomponent Spectral Fitting (MSF)					
		*Interfering Element Corrections (IECs)			
		*On-line system diagnostics.			
		on the dystem diagnostics.			
5	09421127	DDINTED HD I ASEDIET M601	1	1,200.00	1,200.00
5	09421127	PRINTER-HP LASERJET M601	s 1)	1,200.00	1,200.00
6	09421130	CABLE-USB2 480MBPS A/B PLUG 10 FT	1	36.00	36.00
7	N2020006	S10 Autosampler for ICP	1	8,900.00	8,900.00
		Material Discount			8,900.00-
ł					





Phone: 1-800-762-4000 Fax: (203) 944-4914

Quotation

QUOTE NO .:

20593274

QUOTE VALID TO: 09/28/2013

QUOTE DATE:

08/15/2013

To:	GUY NISBET
	STATE OF WEST VIDGIN

	TE OF WEST	100 - 100 100 100 100 100 100 100 100 10	EDATE:	08/15/2013	
TEM	MATERIAL	DESCRIPTION	QTY/EA	UNIT PRICE	TOTAL
8	N0205010	ICP-OPTIMA ICP New Inst Train Disc 3 day course conducted at a PerkinElmer Technical Center] er.	2,050.00	2,050.00 2,050.00
9	N0771725	Optima Advanced Bench Sales Discount	1	2,765.00	2,765.0 414.7
10	N0771726	Monitor Arm for Advanced Bench Sales Discount	1	748.00	748.0 74.8
11	REGDELICP	Regular Delivery	1	1,776.21	1,776.2
			Total Net F	Total Net Price in USD:	
			ns are available - We offer competitive rates with a wide range g your PerkinElmer technology - Speak to your Sales Engineer		
		Did you know that you can order selected products online	at www.perkinelme	er.com/shop?	
		MATERIAL DISCOUNT SHOWS A PROMOTIONAL EXPIRES ON 9/28/2013	DISCOUNT. PRO	MO ICP200913	
		Please when submitting your order include our Quotation *	or Reference number	er.	
		The amount displayed does not include tax charges. These charges will be added to the invoice if applicable. *			
		Includes installation and one year warranty (parts, labor a	nd travel).		
		Estimated delivery: 6-7 weeks after receipt of order. * Terms subject to credit approval.			
		Please note that special delivery requirements (ie: lift-gate, inside delivery, unpack, holiday, or off hours			





To: GUY NISBET

Phone: 1-800-762-4000 Fax: (203) 944-4914

Quotation

QUOTE NO.:

20593274

QUOTE VALID TO: 09/28/2013

QUOTE DATE:

08/15/2013

UNIT PRICE TO

1. Delivery Dates and Prices

a) All delivery and shipment dates indicated on the face hereof are approximate and subject to Seller's availability schedule. Seller will make reasonable efforts to meet the delivery date(s) quoted. However, Seller will not be liable for its failure to meet the quoted delivery dates or for any delay in performance hereunder due to unforeseen circumstances or shortages, due to causes beyond its control, or due to its voluntary or mandatory compliance with any governmental act, regulation, or request. If, by reason of such circumstances, Seller's supplies of the equipment or service (hereinafter the "Product(s)") covered hereby are limited, Seller shall have the right to allocate the available supply among its customers in such manner as it, in its sole discretion, determines appropriate. b) All orders are priced on the basis of an estimated shipment date within ninety (90) days of the date of order to the stated destination. Should Buyer request a change in the estimated shipment date or otherwise cause delay in delivery beyond ninety (90) days from the date of order or request that the Products be shipped outside the country of original delivery, the prices established by this quote shall no longer apply, and Seller's list prices in effect on the actual date of shipment shall be used in determining the price to be paid. Except as provided above, if the price is stated by reference to a published price list, then the price shall be the price on the published price list in effect at the time Seller receives Buyer's purchase order, without regard to the requested delivery date. However, if any Product is ordered prior to the effective date of a published price change and the delivery date is rescheduled, the price in effect at the time of the initial delivery date shall apply. c) If Buyer requests shipment to a country other than the country originally requested, and if Seller elects not to cancel the order pursuant to Paragraph 12 hereof, Seller's applicable surcharge for the actual country of delivery shall be added to the price. d) Notwithstanding any provision to the contrary herein, all prices are subject to increase without notice to reflect changes in: (1) Federal or State laws taxing raw material or processed materials; (2) applicable laws or regulations governing working hours or compensation of labor; and/or (3) freight charges, insurance costs,

- duty or other factors affecting costs of shipment.

 2. Packing and Loss or Damage in Transit. Products will be packed for shipment in a manner suitable to the method of shipment specified by Buyer, or to the method selected by Seller in the absence of instructions. Unless otherwise indicated on the face hereof, all sales hereunder are f.o.b. shipping point, and all risk of loss or damage to equipment in transit is upon Buyer. Payment will be media in eccenteracy with Payment 5 shelow.
- will be made in accordance with Paragraph 5 below.

 3. Payment Due For Partial Deliveries. Seller may, in its sole discretion, deliver any portion of the Products ordered, regardless of utility to Buyer in the absence of the undelivered portion, and all such partial deliveries shall be accepted and paid for in accordance with the terms of Paragraphs 4 and 5 below. Likewise, completion of any installation services shall not be a condition to Buyer's obligation to remit payment. The making of a partial delivery that, to any extent, is not in accordance with the contract of sale shall not affect the Buyer's obligation hereunder to remit payment.
- 4. Inspection, Acceptance and Return of Products or Trade-Ins. Buyer shall inspect the Products immediately upon receipt and shall, within five (5) business days after receipt, give written notice to Seller of any claim for shortage or that the Products do not conform with the terms of the contract of sale. If Buyer shall fail to give such notice, the Products shall be deemed accepted and to conform with the terms of the contract of sale, and Buyer shall be bound to pay for the Products in accordance with the terms of Paragraph 5 below. Return of Products, defective or otherwise, will not be accepted by Seller without (i) written notification from Buyer to Seller within 30 days of receipt of invoice and (ii) receipt of a return authorization number from Seller. Products authorized to be returned shall be shipped f.o.b. destination, freight pre-paid. When return of nonconforming goods has been accepted by Seller, conforming shipment may be made in accordance with Paragraph 1 above and Paragraph 8 below without further liability on Seller's part. Buyer will be liable for restocking charges in the event Products are returned to the Seller which are not defective and are in accordance with these terms. When a trade-in is authorized by Seller, Buyer shall ship, f.o.b. destination, freight pre-paid, the material or equipment so authorized for trade-in, to Seller's specified location.
- 5. Payment and Credit Terms. Unless otherwise indicated on the face hereof, Buyer agrees to remit payment in full to the address provided on the face of Seller's invoice for all shipments, including shipments of any portion of the Products ordered, upon receipt of invoice. This obligation shall not be contingent upon the completion of any installation services included in the purchase price. No cash discounts will be granted. Account balances not paid in accordance with these terms are subject to the maximum prevailing legal interest rate calculated from date of delinquency. In the event Seller finds it necessary to refer an account to an attorney or an agent for collection of delinquent accounts Buyer shall pay all costs of collection including, without limitation, reasonable attorneys' fees. Buyer agrees that Seller shall retain a security interest in the Products sold hereunder to secure any portion of the price not paid on delivery and will, on request, execute a security agreement in such form as is required by Seller, which, at Seller's option, may be filed with appropriate local, state, or other relevant authorities. Should Buyer become delinquent in the payment of any sum due hereunder, or if Buyer becomes insolvent, or if any proceedings are commenced under any bankruptcy or similar laws for Buyer's reorganization or other debt adjustment, Seller will not be obligated to continue performance. Seller reserves the right to change the credit terms provided herein when, in Seller's opinion, the financial condition or previous payment record of Buyer so If, within thirty (30) days of receipt of written notice of such change. Buyer fails to agree and comply with different terms of credit, and/or fails to give adequate assurance of due performance, Seller may (a) by notice to Buyer, treat such failure or refusal as a repudiation by Buyer of the portion of the purchase order not then fully performed, whereupon Seller may cancel all further deliveries and any amounts unpaid hereunder shall immediately become due and payable; or (b) make shipments under reservation of a demand for advance payment or payment against tender of documents of title. Buyer's acceptance of delivery of any Products shall constitute a representation that Buyer is solvent.
- 6. Taxes. Buyer is responsible for the ultimate payment of all taxes which may be assessed or levied on or on account of Products sold hereunder to Buyer, whether termed a gross receipts tax, use tax, property tax, sales tax or otherwise. Where Buyer claims that a transaction is not subject to any such tax, that Buyer is exempt, or that Seller is not required to collect such tax. Buyer agrees to provide Seller with any documentation necessary to support such a claim, to allow Seller to document its decision not to collect such tax(es), and to indemnify and hold Seller harmless from and against any and all fines, penalties, interest, taxes, and other expenses, including, without limitation, reasonable attorney's fees, incurred by Seller as a result of reliance upon Buyer's position.
- 7. Installation and Site Preparation. Installation services are included in the purchase price of the Products sold hereunder only if expressly

TERMS AND CONDITIONS OF SALE

ed on the face of Seller's quotation or in Seller's applicable price list. Installation services for Products transferred outside the country of original delivery by Buyer's actions may be subject to additional charges based on the actual installation site location. For Products requiring installation by Seller's service personnel, it is the responsibility of Buyer to prepare the site environmentally and provide the required services, power, water, drain, air, bottled gases, permits, licenses, approvals, etc., as well as whatever is required to uncrate and transport the Product to its appropriate location for use. Failure to do so, prior to Seller's service personnel arriving at Buyer's site on the mutually agreed upon installation date, will result in a service charge by Seller to cover the lost time of its service personnel. Should Seller be unable to perform the required installation services within twelve months of a Product's shipment date as a result of Buyer's inability to prepare the site as required, Buyer may be responsible for additional costs associated with required hardware, software and firmware updates. Because Seller's service personnel may be required to enter upon Buyer's premises for the purpose of providing service to the Products sold hereunder, Buyer hereby undertakes to maintain its premises in a safe condition and to comply with all applicable laws, statutes and regulations governing workplace health and safety, and hereby accepts full responsibility for any harm or injury to, or liability arising from work performed by, Seller's personnel while on Buyer's premises, except to the extent caused solely by the gross negligence or willful misconduct of Seller's personnel. Seller's sales and service personnel are not authorized to enter into any indemnity or hold harmless agreements on behalf of Seller.

8. Limited Warranty.

a) Warranty.

- i) Seller warrants to Buyer that the Products sold to Buyer are, at the time of shipment to Buyer from Seller, free from defects in materials and workmanship.
- ii) This warranty shall be valid for a period of 90 days from the date of shipment to Buyer, unless a different period is specified herein, or in Seller's applicable price list in which case such specified period shall apply. Notwithstanding anything to the contrary contained herein, the warranty period for data processing equipment, including data storage devices, processors, printers, terminals, communication interfaces, tape drives and allsimilar devices, is in all cases limited to ninety (90) days from the date of shipment to Buyer.
- iii) Except in the case of an authorized distributor of Seller, authorized in writing by Seller to extend this warranty to distributor's customers, the warranty herein applies only to Buyer as the original purchaser from Seller and may not be assigned, sold or otherwise transferred to any third party.
- iv) As Buyer's sole and exclusive remedy under this warranty, Seller agrees either to repair or replace, at Seller's sole option, any part or parts of such Products which, under proper and normal conditions of use, prove(s) to be defective within the applicable warranty period. Alternatively, Seller may at any time, in its sole discretion, elect to discharge its warranty obligation hereunderby accepting the return of any defective Product pursuant to the terms set forth herein and refunding the purchase price paid by Buyer.
 - b)-Exclusions and Limitations.
- i) It is recognized that some parts by their nature may not function for the warranty period applicable to the Product. Therefore, expressly excluded from the warranty herein are chromatography columns, filaments, energy sources, lamps, power amplifier tubes, graphite tubes, sample cell holders, burner and furnace chambers, nebulizers, and other similar parts referenced in the Product's applicable operating manual.
- ii) The warranty herein excludes any equipment or accessories which are identified on applicable price lists, quotations, special promotional materials, or on the face hereof, for which this limited warranty may be further limited. Included within this category are items produced by third party manufacturers (as to which Seller passes to Buyer the warranty it has been provided by the manufacturer) and items which are sold at specially reduced prices with reduced warranty protection (in some cases, extended warranty protection may be available at an increased price).
- iii) This warranty does not cover loss, damage, or defects resulting from: transportation to the Buyer's facility, improper or inadequate maintenance by Buyer, Buyer-supplied software or interfacing, unauthorized modification or misuse, operation outside of the environmental specifications for the Product or improper site preparation or maintenance.
- iv) No warranty is made with respect to used, reconstructed, refurbished or previously owned Products, which will be so marked on the face hereof and, unless otherwise indicated on the face hereof, shall be sold "As Is".
- v) The warranty herein applies only to Products within the country of original delivery. Products transferred outside the country of original delivery, either by Seller at the direction of Buyer or by Buyer's actions subsequent to delivery, may be subject to additional charges prior to warranty repair or replacement of such Products based on the actual location of such Products and Seller's warranty and/or service surcharges for such loction(s).
- c) Place of Service. Except when otherwise provided in Seller's current applicable price list. Seller shall use reasonable efforts to perform all warranty services hereunder at Buyer's facility, as soon as reasonably practicable after notification by Buyer of a possible defect; provided, however, that Seller reserves the right to require that Buyer return the Product to Seller's production facility, transportation charges prepaid, when necessary to provide proper waranty service.
- d) Software and Firmware Products. The sole and exclusive warran ty applicable to software and firmware products provided by Seller for use with a processor is as follows: Seller warrants that such software and firmware will conform to Seller's program manuals current at the time of shipment to Buyer when properly installed on the processor, provided, however, that Seller does not warrant that the operation of the processor or software or firmware will be uninterrupted or error-free.
- SELLER MAKES NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCTS, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

9. Exclusive Remedies.

THE REMEDIES PROVIDED HEREIN ARE BUYER'S SOLE AND EXCLUSIVE REMEDIES. SELLER SHALL NOT BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, WHETHER BASED ON CONTRACT. TORT, STRICT LIABILITY OR OTHERWISE, ARISING OUT OF THE DESIGN, MANUFACTURE, SALE, DELIVERY, INSTALLATION, SERVICE OR USE OFTHE PRODUCTS.

10. Patent Indemnity.

Seller agrees to defend, at its own expense, any suit or legal proceeding which may be brought against Buyer alleging infringement by Buyer of any

patent of the United States, as a result of Buyer's use of the Product sold hereunder for its intended purposes, provided that Buyer shall give Seller prompt written notice of any claim, threat, or institution of any such suit or legal proceeding, and provided further that Seller shall then have the sole right to control and conduct the defense and/or settlement of such claim, threat, suit or legal proceeding, either in the name of Seller or Buyer or both, and Buyer shall, at Seller's request and expense, provide relevant information and reasonable cooperation. Seller shall pay all final judgments and all costs and attorney's fees assessed against Buyer in any such suit or legal proceeding, provided Buyer has complied with the conditions hereof with respect to prompt notice and cooperation in connection with such suit or legal proceeding and given exclusive control thereof to Seller. Notwithstanding the foregoing, Seller shall not be liable for any attorney's fees or other legal expenses incurred by Buyer without the knowledge and prior written consent of Seller. Seller shall have the right, at its own expense, to procure for Buyer the right to continue using the Product claimed to infringe, replace said Product with an equally satisfactory non-infringing Product, modify said Product so that it becomes non-infringing, or remove such Product and refund the purchase price thereof less a reasonable amount for use, damage or obsolescence.

The foregoing indemnity fully defines Seller's obligation for patent infringement. Such obligations shall specifically not apply to:

infringement. Such obligations shall specifically not apply to:
a) an infringement claim resulting from additions or changes in or to
the Product made by Buyer or any third party or from use in combination with
other equipment; or b) an infringement claim which is settled without the prior
written consent of Seller; or c) an infringement claim which results from compliance by Seller with specifications furnished by Buyer.

The total amount of Seller's obligation and liability under this Section shall not exceed the price paid by Buyer to Seller for the Product held to infringe, and in no event will Seller be held accountable for consequential damages under this indemnity, such as loss of business profits or goodwill. With respect to any infringement claim arising from Product manufactured in whole or in part to Buyer's specifications or from use of such Product in conjunction with any other goods, Buyer will indemnify and hold harmless Seller from and against all such claims for damages or profits arising from infringement of patents, designs, copyrights or trademarks.

11. Modification of Terms.

BUYER'S ACCEPTANCE OF ANY QUOTATION IS EXPRESSLY SUBJECT TO BUYER'S ASSENT TO EACH AND ALL OF THE TERMS AND CONDITIONS SET FORTH IN SELLER'S QUOTATION, AND BUYER'S ASSENT TO THESE TERMS AND CONDITIONS OF SALE SHALL BE CONCLUSIVELY PRESUMED FROM BUYER'S SUBMISSION OF ITS PURCHASE ORDER. NO ADDITION TO OR MODIFICATION OF SAID TERMS AND CONDITIONS SHALL BE BINDING UPON SELLER UNLESS SPECIFICALLY AGREED TO BY SELLER IN WRITING. IF BUYER'S PURCHASE ORDER OR OTHER CORRESPONDENCE CONTAINS TERMS OR CONDITIONS CONTRARY TO OR IN ADDITION TO THE TERMS AND CONDITIONS CONTAINED HEREIN OR IN SELLER'S QUOTATION, ACCEPTANCE OF ANY ORDER BY SELLER SHALL NOT BE CONSTRUED AS ASSENT TO SUCH CONTRARY OR ADDITIONAL TERMS AND CONDITIONS OR CONSTITUTE A WAIVER BY SELLER OF ANY OF THE TERMS AND CONDITIONS CONTAINED HEREIN OR IN SELLER'S QUOTATION. SELLER'S ACCEPTANCE OF BUYER'S PURCHASE ORDER IS EXPRESSLY CONDITIONED ON BUYER'S ASSENT TO THESE TERMS AND CONDITIONS IS VALID, UNLESS CONFIRMED IN WRITING BY AN AUTHORIZED REPRESENTATIVE OF SELLER.

12. Authority to Export.

ALL ORDERS ACCEPTED FOR EXPORT (AND/OR RE-EXPORT)
ARE SUBJECT TO: 1) UNITED STATES GOVERNMENT EXPORT
REGULATIONS; AND 2) BUYER PROVIDING SELLER WITH ALL
DOCUMENTATION NECESSARY FOR SHIPMENT TO THE DESTINATION
COLINTRY

13. Software Licenses and Copyrighted Material.

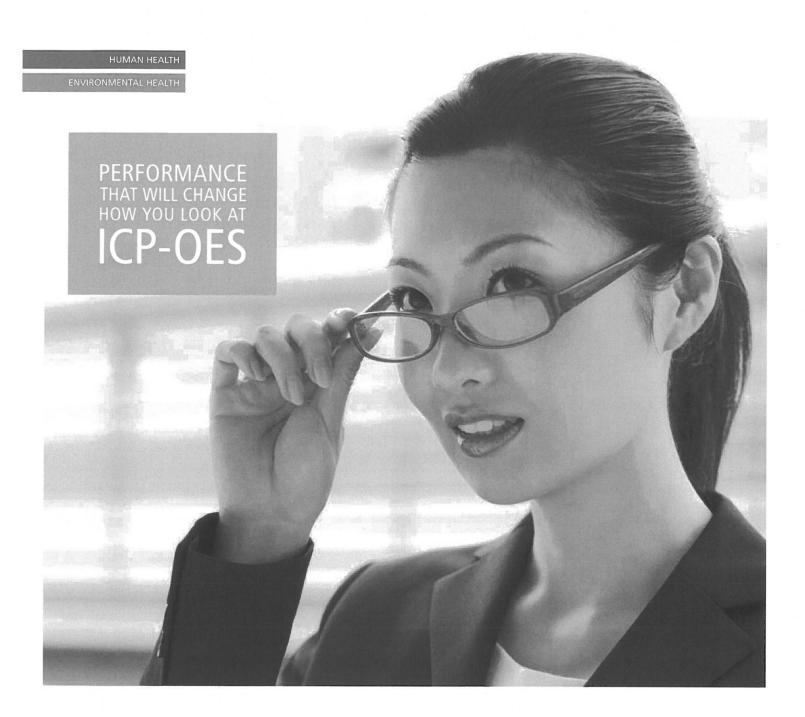
 a) Seller provides software products by license only. The terms of the license are available from Seller and are deemed accepted by Buyer on delivery of licensed software.

 b) Unless otherwise specified, Seller's copyrighted material (software, firmware, and printed documentation) may not be copied except for archive purposes, to replace a defective copy, or for program error verification by Buyer.

14. Miscellaneous.

a) Excusable Delays. Seller shall not be liable for delays in delivery or failure to manufacture or deliver goods due to acts of God, acts or failures to act of Buyer, acts of civil military authority, fires, strikes, floods, epidemics, attack war, delays in transportation or other causes beyond Seller's reasonable control, including, without limitation, delays in obtaining or inability to obtain necessary labor, materials, components, or manufacturing facilities. b) Governing Law. The contract of sale shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts, U.S.A. without regard to its principles of conflict of laws. Any disputes relating to the contract of sale between Buyer and Seller shall be adjudicated in the state or federal courts in the Commonwealth of Massachusetts, U.S.A., and both parties hereby consent to the exclusive jurisdiction of said courts for purposes of any such litigation. The parties expressly agree to waive application of the United Nations Convention on Contracts for the International Sale of Goods. c) Confidential Data and Information. If, in connection with the sale, purchase, use, or maintenance of the Products, Seller is requested, required, or deems it advisable to furnish data or information which it, in its sole discretion, deems proprietary, confidential, or both, Seller shall not, in any event, submit or be required to furnish such data or information unless Buyer enters into an agreement concerning the handling, use, copying, retention and return of such information, the form of which agreement is available to Buyer on request. Seller does not agree to accept any proprietary or confidential information of Buyer in the absence of such a written agreement signed by an authorized representative of Seller. d) Assignment. Buyer may not assign, transfer or delegate any of its rights or obligations herein without the prior written consent of Seller, and any purported assignment of such rights or obligations without such consent shall be null and void.. e) Severability. If any provision herein is deemed unenforceable by a court of competent jurisdiction, the other provisions shall remain in full force and effect as if the unenforceable provision had not been included.







Optima 8x00 Series
ICP Optical Emission Spectrometers



BREAKTHROUGH PERFORMANCE FOR EVERY TYPE OF LABORATORY



ENVIRONMENTAL

Easy to use and engineered for exceptional throughput and detection limits, the Optima™ 8x00 series helps maximize productivity and profitability.

- Built-in environmental methods for guicker start-up
- Dual view capability allows measurement of high and low concentrations in the same run for enhanced productivity
- Torch cassette—low maintenance, simple operation
- eNeb[™] delivers 2-4x detection limit improvement to more easily meet regulatory requirements

GEOCHEMICAL

Designed to deliver reproducible accuracy even with complex matrices, the Optima 8x00 series offers unsurpassed performance without compromising sample throughout.

- Flat Plate™ plasma technology lowers operating and maintenance costs
- WinLab32[™] Multicomponent Spectral Fitting—superior interference correction for more accurate results
- Simultaneous data acquisition for maximum sample throughout





PHARMACEUTICAL/NUTRACEUTICAL

With the lowest detection limits of any ICP-OES and a full suite of enhanced data security features, the Optima 8x00 series makes it easy to comply with stringent regulatory requirements.

- Detection of full list of elements for transition to USP 232/233
- WinLab32 for ICP Enhanced Security™ for 21 CFR Part 11 compliance
- eNeb delivers 2-4x detection limit improvement to keep up with evolving regulatory requirements

FOOD/PRODUCT SAFETY

With a range of revolutionary technologies, the Optima 8x00 series offers

- Flat Plate plasma technology improves robustness for many different matrices
- PlasmaCam[™] aids in method development and productivity
- WinLab32 for ICP software designed to deliver rapid method development





With its groundbreaking features and expanded capabilities, the Optima 8x00 series is more than just an evolution of the world's most popular ICP-OES... it's a revolution.

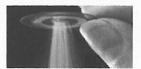
Continuing PerkinElmer's long history of excellence and leadership in ICP technology, the Optima 8x00 series carries on a tradition of offering the best resolution and linear dynamic range. More significantly, the 8x00 series delivers a level of stability and detection limits never before seen in an ICP instrument.

Built around the proven design of the Optima platform and controlled with our industry-leading, Windows 7-compatible WinLab32 software, the 8x00 series will change the way you look at ICP-OES. The line's breakthrough performance is the result of a series of cutting-edge technologies that optimize sample introduction, enhance plasma stability, simplify method development, and dramatically reduce operating costs.

REVOLUTIONARY TECHNOLOGY—SPECTACULAR RESULTS

eNeb Sample Introduction

The most efficient and consistent sample introduction system available. By generating a constant flow of uniform droplets, the eNeb option enables Optima to deliver superior stability and unsurpassed detection limits—ideal for environmental and pharmaceutical labs.



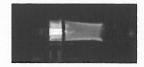
Flat Plate Plasma Technology

A patented RF generator featuring maintenance-free plasma induction plates in place of the traditional helical load coil. With no cooling required and reduced argon consumption, operating costs are dramatically lowered.



PlasmaCam Viewing Camera

By offering continuous viewing of the plasma, this integrated color camera simplifies method development and enables remote diagnostic capabilities for maximum uptime. Ideal for high-throughput contract labs in food/product safety and geochemical.





Laboratories have very different definitions of what it means to get the most out of their ICP. But whether your priority is precision or reliability, flexibility or stability, speed or simplicity, you'll find the ideal solution in the Optima 8x00 series.

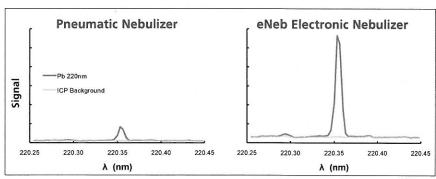
Reduced argon consumption with Flat Plate plasma technology

With PerkinElmer's patented Flat Plate plasma technology, the same robust, matrix-tolerant plasma is generated and maintained with almost half the argon consumption of helical load-coil systems. Maintenance-free, this whole new approach to RF generation minimizes operating costs without compromising performance. Flat Plate plasma technology is designed to run at 8 liters/minute plasma gas flow at any RF power, allowing for robust plasma conditions.

2-4x better detection limits with eNeb sample introduction system

With the revolutionary eNeb (electronic nebulizer) system, samples can be introduced into the Optima far more effectively and efficiently than ever before. Engineered around a precision-manufactured inert aerosol head, eNeb produces exceptionally consistent droplets no more than 6 microns in diameter. These small, uniform droplets can be dried, atomized and ionized more quickly and consistently for detection limits 2-4x better than those attainable with other sample introduction systems.

Ideal for all sample types—including those with high levels of dissolved solids—eNeb's aerosol head is manufactured from a rugged, long-lasting inert polymer, delivering exceptional matrix tolerance, acid resistance, and precision.

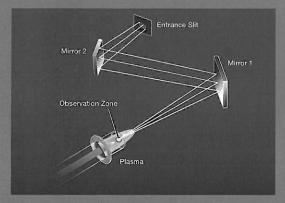


By producing small, uniform droplets without the use of a high-pressure gas stream, eNeb's analyte signals increase 2-4x more than the background for exceptional detection limits.

ENGINEERED TO DELIVER PROVEN PERFORMANCE

Advanced optical system ensures superior detection limits

Engineered for enhanced light throughput, the optical system on Optima instruments delivers superior detection limits, simplifying compliance with U.S. EPA, EN and DIN regulations. Unsurpassed stability and analytical accuracy are ensured through either Dynamic Wavelength Stabilization™ (model 8000) or a thermally stabilized optical system (model 8300).

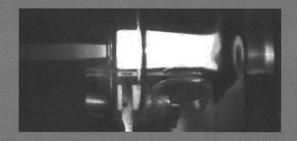


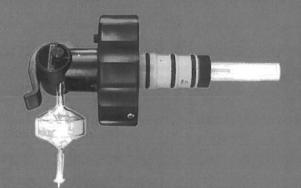
Patented dual viewing of the plasma enhances productivity

Elements with high and low concentrations can be measured in the same run for superior throughput and efficiency. Axial viewing provides the lowest detection limits while radial viewing with variable viewing height permits extended working ranges and eliminates ionization effects.

Unique, shear gas system eliminates interferences

By removing the cool tail plume of the plasma, this innovative technology eliminates interferences. Since it uses air instead of expensive high extraction systems or cones that tend to clog and require cleaning, the system is maintenance-free, improves performance and enables a greater linear dynamic range. Removing the tail plume also minimizes the need to add expensive ionization suppressants.





Adjustable, quick-change torch cassette simplifies maintenance and optimizes performance

Simple to adjust (with no tools) even while the ICP is running, Optima's torch cassette makes it easy to optimize performance, even with the most difficult samples. For added flexibility, the instrument is compatible with a variety of nebulizers and spray chambers, including eNeb, Scott/Cross Flow and Cyclonic/Meinhard™ options.

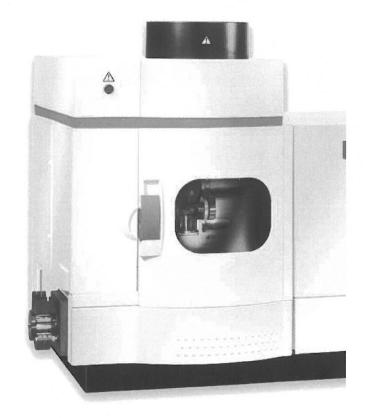
Two high-performance SCD (Segmented-array Charge-coupled Device) detectors improve accuracy Available on the Optima 8300, the detectors provide superior resolution and performance across the entire wavelength range (with one for UV, the other for Vis), reducing interferences and improving accuracy.

PUTTING TOGETHER THE PERFECT ICP SOLUTION

eNeb—Delivers the best signals, stability, and detection limits of any built-in sample introduction system available on an ICP-OES.

Flat Plate plasma technology—Generates a robust, maintenance-free, matrix-tolerant plasma using half the argon of traditional load-coil technologies.

Patented dual view—Offers radial and axial viewing of the plasma for effective measurement of elements with high and low concentrations in the same method.

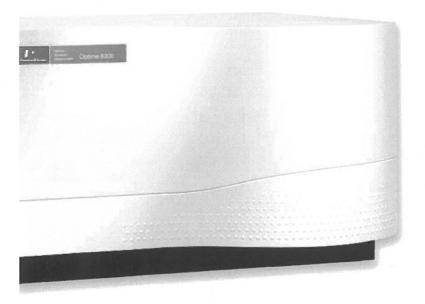


Adjustable torch cassette—Makes it easy to optimize performance—even with the most difficult samples—and offers simple maintenance.



Shear gas system—Removes the cool tail plume of the plasma to eliminate interferences and minimizes the need for ionization suppressants. With no cones to clean or expensive high extraction systems, the use of shear gas is maintenance-free and optimizes performance in the axial view.

Select the model that best addresses the needs and priorities of your laboratory	Optima 8000	Optima 8300	
Maximum Throughput		×	
Fastest Warm-Up	X		
Universal Data Acquisition		×	
Time-Resolved Data Acquisition		×	
Smallest Instrument Footprint	X		



WinLab32 for ICP software—Provides all the tools to analyze samples, report and archive data, and ensure regulatory compliance with an optional Enhanced Security package.

PlasmaCam—Enables continuous viewing of the plasma for simpler method development and remote diagnostic capabilities.

Two SCD detectors—Deliver superior resolution across the entire wavelength range, reducing interferences and improving accuracy, offering truly simultaneous data acquisition (Optima 8300).

Autosamplers—Optimize productivity with a choice of compatible models including the PerkinElmer S10 and a variety of other sample-introduction system options.

THE SOFTWARE TO SIMPLIFY YOUR WORKFLOW



To complement its many new hardware innovations, the Optima 8x00 series features an equally impressive array of software enhancements making it faster and easier than ever to go from sample to results.

The Windows 7-compatible industry-leading WinLab32 for ICP software simplifies every step of your workflow—before, during and post analysis.

Easy to set up and get started

Simple method development

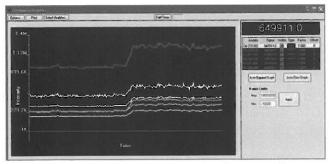
Use the software's built-in methods for added speed and simplicity, or follow four easy steps to create your own. Either way, WinLab32 software makes method development effortless and ensures compliance even with today's most stringent regulatory standards.

Multicomponent Spectral Fitting (MSF)

Particularly effective when running complex matrices, this patented approach to interference correction allows the analytical signal to be extracted from the measured spectra without interferences for improved analytical accuracy, precision and detection limits.

Time-resolved data acquisition

Expanded to collect multi-element data up to 60 minutes. This Optima 8300 feature is used to facilitate speciation, laser ablation and hydride generation analyses.



By displaying data in a continuous real-time graphics format, WinLab32 software makes it easier than ever to optimize instrument performance. In this example, signals can be seen to improve as the RF power is increased.

Continuous real-time graphics

By acquiring and displaying data in real-time, WinLab32 software allows you to adjust the operating parameters of the instrument and RF generator during a run to optimize your method. For example, RF power and nebulizer flow can be changed while their impact is monitored.

Enhance your productivity

QC functions in manual mode

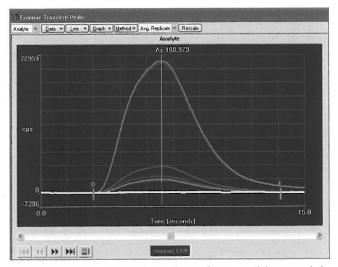
To simplify operation and ensure quality data, WinLab32 software allows you to take full advantage of QC functions without the need for an autosampler.

Adding methods during autosampler run

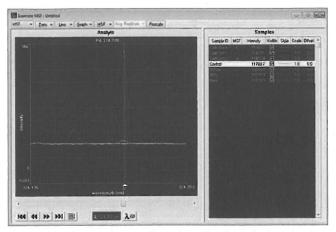
Simply click on the "Append Method" button in the software interface and you can dynamically add to your autosampler run lists even after an analysis has started.

Advanced SmartRinse™ feature

SmartRinse customizes and adjusts rinse times based on element concentrations in each sample. With the Optima 8x00 series, you now have Advanced SmartRinse capability that allows for automatic rinse-time optimization to improve productivity while preventing sample-to-sample contamination.



Transient signal handling expands sample-introduction capabilities to include speciation and hydride analysis.



Multicomponent Spectral Fitting allows the analytical signal to be isolated from the measured spectra—without interferences—for superior accuracy, precision and detection limits.

Get more out of your data

QC charting

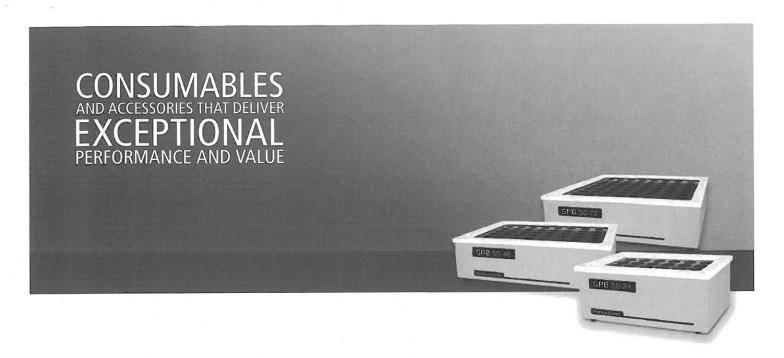
Collect and maintain performance graphs over time by using this feature to quickly and easily prepare quality control charts from your data and store customized templates for future use. Results from QC samples, standards, blanks or any sample can be plotted, with limit ranges, means or expected values included on the chart. Results can even be formatted and exported for use with other applications.

Reprocessing

This useful tool allows you to optimize a measurement for a particular sample without having to re-run it. Potential adjustments include adding or changing background correction points, optimizing peak position, correcting data-entry errors and changing the calibration curve type. When reprocessing, the software never changes the original, raw data and clearly identifies the reprocessed data with a notation of what was done.

Universal Data Acquisition (UDA)

Running in UDA mode, WinLab32 gives you the flexibility to collect all the available spectral data for every sample regardless of the elements being determined. You can then retroactively determine the concentrations of elements not in the original method or at alternate wavelengths, avoiding re-runs and saving precious time and resources (Optima 8300).



To further enhance the instrument's functionality, PerkinElmer offers a full array of accessories and consumables designed, tested and proven to achieve the best performance, productivity and reliability, while minimizing overall operating costs.

Autosamplers and Supplies

Compatible with virtually all sample introduction systems, our productivity-enhancing S10, CETAC and ESI autosamplers are fully integrated with our WinLab32 for ICP software. A wide variety of high-quality autosampler tubes and supplies are also available.





Sample Preparation

Multiwave™ 3000 microwave sample digestion system— Precise control with high-power heating and high-pressure capability along with built-in cooling reduces cycle time, improving productivity

PerkinElmer Sample Preparation Blocks (SPB)— Acid-resistant, Teflon®-coated blocks guarantee temperature uniformity for any digestion/heating method requiring a temperature below 180 °C

Flow Injection for Atomic Spectroscopy (FIAS) Systems

A fully automated system that simplifies and speeds up analyses required for complex sample preparation, such as mercury and hydride-forming elements

ICP Consumables and Supplies

Nebulizers/Spray Chambers—Revolutionary eNeb electronic nebulizer, Scott/Cross Flow and Cyclonic/Meinhard™ options



Injectors—full selection of alumina, quartz and sapphire injectors

Flat Plate Torches—PerkinElmer exclusive, one-piece, demountable quartz models designed for quick and easy replacement

PerkinElmer Pure Standards—Over 300 single and multi-element standards each with a Certificate of Analysis that documents the quality, stability and reliability



For a complete listing of ICP consumables and supplies—including information on other available torches, nebulizers, spray chambers and injectors—please contact your sales or service representative or visit www.perkinelmer.com/icpoesconsumables.

THE MOST TRUSTED NAME IN ELEMENTAL ANALYSIS

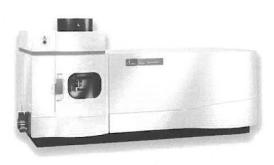
PerkinElmer has been at the forefront of atomic spectroscopy technology for over 50 years. No matter what your field, application or sample type, we have the tools and expertise to help you achieve accurate results quickly, efficiently, effortlessly.

With tens of thousands of installations worldwide, PerkinElmer systems are performing inorganic analyses every hour of every day. So turn to the most trusted name in the industry. And take advantage of a complete array of solutions engineered for unparalleled performance, accuracy and confidence.

Atomic Absorption



ICP-OES



ICP-MS



For more information on our full suite of atomic spectroscopy products and services—including a wide array of mercury analyzers and sample preparation tools—please visit www.perkinelmer.com/atomicspectroscopy.

THE NUMBER ONE NAME IN LABORATORY SERVICES

PerkinElmer's OneSource® Laboratory
Services is the market leading laboratory
asset management solution, pioneered
more than a decade ago with more than
400,000 multi-vendor assets under its
care. OneSource Laboratory Services goes
beyond just maintenance and repair of
instrumentation. OneSource incorporates
laboratory asset management as part of
our customers' business equation—a
partner with proven results in improving
efficiencies, optimizing operations and
providing cost certainty across the globe.
OneSource, the ONE you can count on.



PerkinElmer, Inc. 940 Winter Street Waltham, MA 02451 USA P: (800) 762-4000 or (+1) 203-925-4602 www.perkinelmer.com





With its groundbreaking features and expanded capabilities, PerkinElmer's award-winning **Optima™ 8x00** series is more than just an evolution of the world's most popular ICP-OES ... it's a revolution.

Built around the proven design of the Optima platform, the 8x00 series delivers breakthrough performance through a series of cutting-edge technologies that enhance plasma stability, simplify method development and dramatically reduce operating costs:

- Flat Plate[™] Plasma Technology with a patented, maintenance-free RF generator, uses half the argon of traditional systems dramatically reducing operating costs.
- Patented Dual View offers radial and axial viewing of the plasma for effective measurement of elements with high and low concentrations in the same method.
- PlasmaCam[™] Viewing Camera offers continuous viewing of the plasma, simplifying method development and enabling remote diagnostic capabilities for maximum uptime.

Don't miss the opportunity to learn more about the award-winning Optima 8x00 series at www.perkinelmer.com/optima8x00



At the Pittcon 2012 conference in Orlando, Florida, the PerkinElmer **Optima 8300**ICP-OES spectrometer was named "Best New Spectroscopy Product of 2011" by the readers of SelectScience.net.



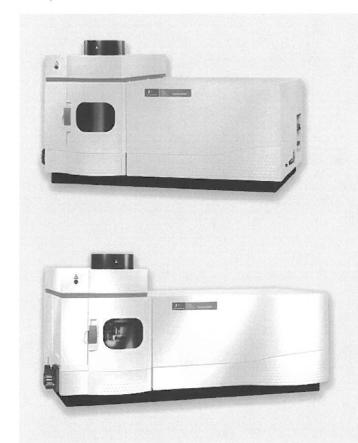
And at the 2012 Annual Conference of China Scientific Instruments held in Beijing, the PerkinElmer **Optima 8000 ICP-OES** spectrometer was the

proud recipient of a "Best New Instrument of the Year 2011" award.



The Optima 8x00 ICP-OES series comes with a wide range of features that are standard on every configuration: Flat Plate plasma technology, PlasmaCam viewing camera, advanced optical system, dual viewing of the plasma, unique shear gas system, and adjustable quick-change torch cassette.

The Optima 8x00 is available in two models:



Optima 8000 ICP-OES

A bench-top, dual-view ICP-OES with full-wavelengthrange CCD array detector, delivering flexibility and excellent analytical performance.

For added flexibility, the Optima 8000 is available in two configurations, so that you can choose the nebulizers and spray chambers best suited for your applications: Scott/Cross Flow and Cyclonic/Meinhard™

Optima 8300 ICP-OES

A bench-top, dual-view ICP-OES with two solid-state SCD detectors, delivering superior detection limits and true simultaneous measurements.

The Optima 8300 is also available in two configurations for added flexibility, so that you can choose the nebulizers and spray chambers best suited for your applications: Scott/Cross Flow, Cyclonic/Meinhard™

The Optima 8x00 ICP-OES series continues PerkinElmer's long history of excellence and leadership in ICP and atomic spectroscopy. No matter what your field, application or sample type, we have the tools and expertise to help you achieve accurate results quickly, efficiently, effortlessly.

Don't miss the opportunity to learn more about the award-winning Optima 8x00 series at www.perkinelmer.com/optima8x00

PerkinElmer, Inc. 940 Winter Street Waltham, MA 02451 USA P: (800) 762-4000 or (+1) 203-925-4602 www.perkinelmer.com



TECHNICAL NOTE

ICP-Optical Emission

Multicomponent Spectral Fitting

Introduction

Baseline and interfering element correction (IEC) techniques are used with ICP optical emission spectrometry to correct analytical signals for contributions from the plasma, the matrix, or elements other than the analyte. If the contributions from these components are not corrected accurately, the analytical result will be erroneous. Yet both correction techniques rely on interpolated or extrapolated correction factors.

Baseline correction measurements typically are made at one or two wavelengths adjacent to the analyte wavelength with the assumption that the baseline at the analyte wavelength can be interpolated from the baseline correction measurement. IEC correction relies on the validity of single-point measurements made on each interfering element, assuming that the IEC measurements can be extrapolated accurately to correspond to different concentrations of the interferent. Both techniques rely on the validity of the interpolation or extrapolation. Although the two techniques can improve performance with some types of samples, they are not universally applicable.

Multicomponent Spectral Fitting

For greater accuracy, using a full segment of the spectrum around the analyte wavelength is preferred to using just one or two points. To achieve that goal and to provide superior correction capabilities, PerkinElmer developed Multicomponent Spectral Fitting (MSF). Mathematically, MSF uses a multiple linear least squares model based on an analysis of the pure analyte, the matrix, and the blank (Figure 1). It sounds complicated, but it isn't. Think of it as automatic simultaneous multi-point background correction. Using MSF for spectral overlap correction requires only that a minimum of three solutions are analyzed: the blank, a pure solution of the element being determined, and pure solutions for each of the potentially interfering elements in the matrix. MSF and the computer do the rest – automatically. There are no limits on the number of interfering elements that can be included in a model. In addition, once models are developed for an element, they can be used in many different analytical methods.

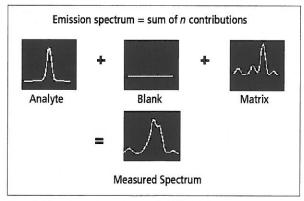


Figure 1. The measured spectrum consists of several components, demonstrating the need for improved spectral fitting techniques like MSF.

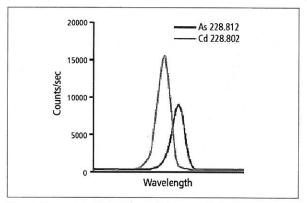


Figure 2. Running the Cd and As standards separately demonstrates the spectral overlap.



As an example, let's look at the determination of arsenic in the presence of cadmium at the 228.812-nm emission line. The sample spectra for solutions containing 1.1 mg/L Cd and 31 mg/L As are shown in Figure 2.

After creating an MSF model using these spectra, the combined spectrum of the complex matrix can be measured, as shown in Figure 3. Applying MSF, the corrected spectrum for arsenic (Figure 4) shows no evidence of the interfering sample matrix and is easily quantifiable. It's that simple.

Because MSF uses all of the spectral information available, both the analytical accuracy and the detection limits are improved. Figure 5 shows that the detection limits for this group of elements are improved significantly with MSF over those obtained with no background correction, with sequential off-peak background correction, or with simultaneous background correction.

Why does MSF improve detection limits more at longer wavelengths?

Detection limits in the lower UV with a low-noise detector are usually limited by photon shot noise, caused by the random arrival times of the photons as they reach the detector. In contrast, detection limits at higher wavelengths are limited by noise due to the sample introduction system, often called "flicker" noise. Simultaneous background correction (including MSF) can compensate for flicker noise automatically, so the performance improvements are more pronounced at higher wavelengths.

MSF can significantly improve your analytical results – detection limits, accuracy, and precision. Even better, it's included as a standard feature with all PerkinElmer® Optima™ series ICP optical emission spectrometers.

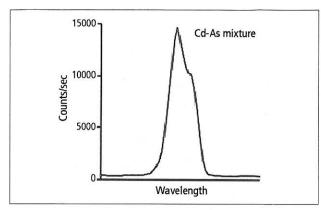


Figure 3. The Cd overlaps the As peak, making it difficult to measure As with conventional background correction techniques and necessitating the selection of an alternate wavelength.

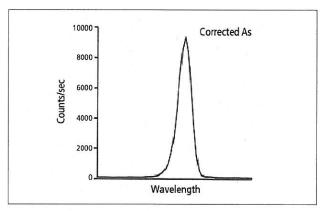
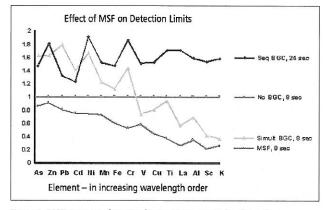


Figure 4. The correct As concentration is determined despite the Cd overlap, making it easier to develop methods using MFS.



 ${\it Figure 5.} \ MSF \ improves \ detection \ limits \ over \ sequential \ and \ simultaneous \ background \ correction \ techniques.$

PerkinElmer, Inc. 940 Winter Street Waltham, MA 02451 USA P: (800) 762-4000 or (+1) 203-925-4602 www.perkinelmer.com





DATE PRINTED

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

PERKINELMER HEALTH SCIENCES IN

800-762-4000

MS 172

Solicitation

To

NUMBER AGR1341

PAGE

ADDRESS CORRESPONDENCE TO ATTENTION OF:

GUY NISBET

804-558-8802

DEPARTMENT OF AGRICULTURE JOBSITE SEE SPECIFICATIONS

SHELTON CT 06484

710 BRIDGEPORT AVE

*509145214 01

08/12/2013 BID OPENING DATE: 08/20/2013 BID OPENING TIME 1:30PM LINE CAT. QUANTITY UOP ITEM NUMBER UNIT PRICE **AMOUNT** ADDENDUM NO. 01 ADDENDUM ISSUED TO PUBLISH VENDOR SUBMITTED QUESTIONS, AND AGENCY RESPONSES TO QUESTIONS, PER THE ATTACHED DOCUMENTATION. NO OTHER CHANGES. 0001 LS 493-69 \$67,745.66 \$67,745.66 PTICAL EMISSION SPECTROMETER \$67,745.66 THIS IS THE END OF REO AGR1341 ****** TOTAL: "Bid in accordance with Perkin Elmer Health Sciences, Inc. Quotation 20593274 attached." The Spectroblue IQP system does not meet the specifications. In addition, we do not see this company in the environmental arena. Service is generally an issue with companies who do not have many systems in the field; response times can be long. Our years of experience has shown us that tape water is not practical when one is adhere to regulatory requirements; we have notice a major difference in RSDs and analytical results between the heat of the summer versus the cool water temperatures of the winter. If a lab is using tap water they must constantly adjust their instrument parameters to compensate for the temperature changes. SIGNATURE TELEPHONE DATE 800-762-4000 ASSISTANT SECRETARY 04-3361624 ADDRESS CHANGES TO BE NOTED ABOVE

SOLICITATION NUMBER: Addendum Number:

No. 01

AGR1341

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

]	Modify bid opening date and time
lessonseed.	1	Modify specifications of product or service being sought
[4	/	Attachment of vendor questions and responses
ſ	1	Attachment of pre-bid sign-in sheet
[1	Correction of error
*	I	Other

Description of Modification to Solicitation:

Addendum issued to publish vendor submitted questions and agency responses to these questions. No other changes to solicitation.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- 2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

AGR1341 Vendor Submitted Questions (8/07/2013)

- 1. Our ICP-OES has an equivalent system to the system requested in AGR1341. However, the below specs are not required due to equivalency, or we do not meet them. If you feel these are not subject to change, and the end user is not receptive to qualified bid responses, we will opt to no-bid this request.
 - A. 3.1.1.1 Helical coil system, but our sealed optics do not require an Argon purge.
 - B. 3.1.1.4 160-900 nm Our system is 165-770nm, would this be acceptable?
 - C. 3.1.1.7 Our optics system does not require the described transfer mirror. The optics are Rowland based..., not Echelle based.
- A.1. Specifications do not meet the expectations of the instrument required.

 (I've attached a brochure on our SPECTROBLUE system, and performance specs in water.)
- Q.2. Is a computer required as part of the bid?

A.2. Yes

Q.3. What type of samples are going to be used for this instrument:

Aqueous samples? yes
Viscous samples?
High solid samples? yes
Organic solvent samples?
Volatile organic solvent samples
High Salt samples
High sensitivity samples
Hydrofluoric acid samples
Limited volume samples

- Q.4. Do you wish to cool the instrument with tap water or an external cooling device?
 - A.4. external cooling device
- Q.5. Do you need increased sensitivity for any of the following elements: As, Se, Ge, Sn, Sb, Te, Bi, or Hg?

A.5. no

Q.6. Do you require Internal Standard addition?

A.6. yes

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: AGR1341

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

[]	x]	Addendum No. 1	I]	Addendum No. 6
]]	Addendum No. 2	[]	Addendum No. 7
1]	Addendum No. 3	[]	Addendum No. 8
[]	Addendum No. 4	[]	Addendum No. 9
[]	Addendum No. 5	[]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

PerkinElmer Health Sciences, Inc

Company

Authorized Signature

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012