# REQUEST FOR BID INDUCTIVELY COUPLED PLASMA EMISSION SPECTROPHOTOMETER (ICP) FOR ILLINOIS VALLEY COMMUNITY COLLEGE BID # BID2023-B01

Illinois Valley Community College District No. 513 (the College) is accepting sealed bids for a new **Inductively Coupled Plasma Emission Spectrophotometer (ICP)**. Pricing must include shipping, installation, and training sessions provided at the IVCC campus.

#### **INSTRUCTIONS TO BIDDERS**

Bids must be made in accordance with the instructions contained herein. Questions concerning this bid may be directed to the Purchasing Department at 815-224-0417. Bids shall be submitted on the forms furnished by the College in a sealed envelope, clearly marked "INDUCTIVELY COUPLED PLASMA EMISSION SPECTROPHOTOMETER". Submit all bids to:

Illinois Valley Community College District No. 513
Purchasing Department – Room C343
815 Orlando Smith Road
Oglesby, Illinois 61348

Electronic bid submissions shall be considered a sealed document if they are received at the purchasing office by the time and date set herein for receipt of bids. The vendor assumes the risk of premature disclosure due to submission in an unsealed form. Electronic bids must be e-mailed to purchasing@ivcc.edu with the subject BID: INDUCTIVELY COUPLED PLASMA EMISSION SPECTROPHOTOMETER – BID2023-B01.

Bids will be received and publicly read aloud in Room C-326, Illinois Valley Community College District No. 513, Oglesby, Illinois, at 10:00 A.M. on December 9, 2022. Bids received after this time will not be accepted and will be returned to you unopened. Faxed bids will not be accepted.

#### **ACKNOWLEDGEMENT OF ADDENDA:**

Signature of a company official on an original document shall be construed as acknowledgement of receipt of any and all addenda pertaining to this specific bid. Identification by number of addenda and date issued should be noted on all bids submitted. FAILURE TO ACKNOWLEDGE RECEIPT OF ADDENDA ON BID SUBMITTED MAY RESULT IN DISQUALIFICATION OF BID.

#### **BIDDING PROCEDURES:**

No bid shall be modified, withdrawn, or canceled for sixty days after the bid opening date without the consent of the College's Board of Trustees.

Changes or corrections may be made in the bid documents after they have been issued and before bids are received. In such cases, the College will issue a written addendum describing the change or correction to all bidders of record. Such addendum shall take precedence over that portion of the documents concerned and shall become part of the bid documents. Except in unusual cases, addendum will be issued to reach the bidders at least five (5) days prior to the date established for receipt of bids.

Each bidder shall carefully examine all bid documents and all addenda thereto and shall thoroughly familiarize themselves with the detailed requirements thereof prior to submitting a bid. Should a bidder find discrepancies or omissions from documents, or should there be doubt as to the meaning, the bidder shall, at once, and in any event not later than ten (10) days prior to bid due date, notify the Director of Purchasing who will, if necessary, send a written addendum to all bidders. The College will not be responsible for any oral instructions. All inquiries shall be directed to the Director of Purchasing. After bids are received, no allowance will be made for an oversight by the bidder.

#### SIGNATURE ON BIDS:

The College requires the signature on bid documents to be that of an authorized representative of said company. Each Bidder, by making her/his bid, represents that she/he has read and understands the bidding documents and that these instructions to bidders are a part of the specifications.

#### TAX EXEMPTION:

The College is exempt from paying Illinois Use Tax, Illinois Retailers Occupation Tax, Federal Excise Tax, and Municipal Retailer's Occupation Tax (Tax Exemption ID # E9995-5253-06)

#### AWARD CRITERIA:

As provided by statute, award will be based on the lowest and best (most advantageous to the College) as determined by consideration of:

- 1. Price, General reputation and performance capabilities of the bidder
- 2. Conformity with specifications herein
- 3. Availability of customer support,
- 4. The extent to which the goods or services meet IVCC needs

As deemed in the best interest of the College, the College reserves the right to reject any and all bids or waive any minor irregularity or technicality in bids received.

#### **BID AWARD:**

The successful contractor, and/or any contractor, shall not proceed on this bid until it receives a purchase order from the College. Failure to comply is the risk of the contractor.

#### **CLERICAL ERRORS:**

If applicable, all errors in price extensions will be corrected by the College and totals for award determination corrected accordingly, unless the bidder specifies that no change be made in the total submitted. In this case, all incorrect price extensions will be noted at "lot", and award determination made on the basis of total price submitted.

#### INVESTIGATION OF BIDDERS:

The College will make any necessary investigation to determine the ability of the bidder to fulfill the bid requirements. The College reserves the right to reject any bid if it is determined that the bidder is not properly qualified to carry out the obligation of the contract.

#### MANUAL AND WARRANTIES:

Owner's manuals and warranties shall be provided at time of delivery.

#### **CERTIFICATION FORM:**

Bidders must sign the enclosed Certification Form that refers to the Criminal Code of 1961 and to the Illinois Human Right Act dealing with Sexual Harassment. The signed Certification must be submitted with your bid. Failure to do so may result in the rejection of your bid.

#### **EQUAL OPPORTUNITY EMPLOYMENT:**

Respondent shall comply with the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq., as amended, and any rules and regulations promulgated in accordance therewith, including, but not limited to, the Equal Opportunity Clause, Illinois Administrative Code, Title 44, Part 750 (Appendix A), which is incorporated herein by reference. In addition, the respondent shall comply with the Public Works Employment

Discrimination Act, 775 ILCS 10/0.01 et seq., as amended. Furthermore, the respondent shall comply with Public Act 98-107, which requires nearly any party that contracts with a community college to post employment of vacancies with the state's job board: IllinoisJobLink.com.

#### **SUPPLIER DIVERSITY:**

The College recognizes the importance of increasing the participation of businesses owned by minorities, females and persons with disabilities in public contracts. It is the policy of the College to promote the economic development of disadvantaged business enterprises by setting aspirational goals to award contracts to businesses owned by minorities, females, and persons with disabilities for certain services, to the extent provided by the Business Enterprise for Minorities, Females and Persons with Disabilities Act ("Act"), 30 ILCS 575/0.01 et seq. and the Business Enterprise Council for Minorities, Females, and Persons with Disabilities ("Council") which serves to implement, monitor and enforce the goals of the Act.

#### **LAW GOVERNING:**

Any contract resulting from this RFP shall be governed by and construed according to the laws of the State of Illinois, without regard to conflict of law principles.

#### W-9 FORM:

Please complete the enclosed W-9 form and return with your bid.

#### **SPECIFICATIONS**

The ICP must be capable of quantitating elemental concentrations in a wide variety of sample matrices.

The instrument will be used for educational and research laboratory activities. The instrument must be delivered and installed at ILLINOIS VALLEY COMMUNITY COLLEGE. The training sessions must also be provided at ILLINOIS VALLEY COMMUNITY COLLEGE.

#### **Hardware requirements:**

#### 1. Sample Introduction

- The ICP sample introduction system must include a low flow/high sensitivity nebulizer and spray chamber.
- The spray chamber must be cyclonic and made of corrosion resistant inert material. The spray chamber should also be easily accessible for maintenance and care.
- All gas flows must be regulated by the system computer; this includes nitrogen purge gas, argon, and air.
- The system must possess a peristaltic pump that can accommodate the following: introduction of sample, addition of internal standard and pump waste to an appropriate location.

#### 2. RF Generator and Ignition Control

- The plasma ignition system must be computer controlled and totally automated. The system software must be able to extinguish the plasma and shut off the gas flows at a userdetermined time automatically after running an automated batch of samples.
- A remote access application is preferred.
- Limiting the consumption and cost of Argon consumed by the system is very important. The instrument must have technology that limits argon usage without effecting detection limits listed in table 1. Typical Argon flow during ICP operation must be <10 L/min.
- Argon flow shall be 0 LPM when the system is not running, or in stand-by mode.

#### 3. Optical System

- The instrument optical systems must be sealed to the laboratory environment such that it is not susceptible to dust, moisture, or acid fumes.
- The system must have a vertically oriented plasma torch with dual viewing optics.
- The instrument must have a double monochromator with dual backside-illuminated charge-coupled device (DBI-CCD) detector, real-time Dynamic Wavelength Stabilization<sup>™</sup> using an echelle-based spectrometer covering a spectral range of 165 - 900 nm.
- The spectral resolution (Full Width at Half Height) of the system must be <0.009 nm at 200 nm.
- The optical system must have a real-time wavelength stability correction to automatically adjust wavelength shifts by actively monitoring a neon emission lamp on the same detector.
- The instrument must use a solid-state detector (charge coupled device) that is optimized for performance across the emission spectrum and must measure analyte intensity simultaneously with background correction points.
- The instrument must automatically adjust integration times for intense and trace signals.
- The system must have an attenuated mode of operation to accurately measure high-intensity analytes at high concentrations without sample dilution.

#### 4. Autosampler/Diluter

- The instrument autosampler must have a capacity of at least 100 sample vials.
- The autosampler must permit the use of sample vials of various volumes supplied by various vendors. Volumes necessary are 15 ml and 50 ml sample tubes.
- The autosampler must include dual, flowing rinse stations.
- The system must permit sampling of any vial at any point in the analytical sequence. The system must allow the addition of a sample anytime during the analysis.
- The manufacturer must offer the upgrade-able capability of automatically diluting samples which are over the range of the calibration curve, including the necessary software to perform this task. It is imperative that the autosampler and software be able to perform this task independent of analyst involvement.

#### 5. Installation accessories

- The ICP System must include a refrigerated water circulator.
- The ICP System must include a Basic Air Compressor 115V/60 HZ.
- The ICP System must include a heavy duty, rolling instrument bench, D 30x W 35x H 35, with locking casters.
- The ICP System must include a Line Conditioner 3.8 KVA, 60HZ 15.8A, 208/240V INPUT, 120/208/240OUTPUT ISOLATION, FILTERING AND SURGE SUPPRESSION C320P Input plug, (1)C320R, (4)5-20R Output Receptacles
- The ICP System must include an ICP spares kit consisting of: Black/Black 0.76 mm ID PVC Solva, Pkg.12, Qty. 1 Tygon Tubing 0.3M/Per Feet Qty.1

Viton O-Ring 0.799 ID x 0.103 WD Qty.2

PVC Red/Red Tubing 1/14 mm ID, Pkg.12 Qty.1

PVC Blk/Blk Tubing 0.76 mm ID, Pkg. 12 Qty.1

Hose Clamp 1/4 Inch Stainless Steel Qty.1

PTFE Tubing .031 X .016 Per 1FT/0.3M Qty.4

Solva Tubing Yellow 2.79 mm ID 0.3 Qty.3

Spectrometer Air Filter Qty.2

Nebulizer Clip Tyton Snapper Qty.1

Quartz Torch 1-Slot 1 Qty.

Cyclonic/Concentric Adj. Injector O-Ring Kit Qty.1

Optical Kit w/Windows/O-Rings Qty.1

Nebulizer Liquid Fit 0.020" IDx0.062" OD Qty. 1

Alumina Injector 2.0 mm Qty.1

O-Ring 0.101 ID x 0.070 WD Teflon Coated Qty.2

FG+ Gas Quick Connect for MEINHARD Nebulizer Qty.1

700 µL/min Self-aspirating Capillary for ST Nebulizer Qty.1 Torch Igniter Contact 0.4 mm Qty.1

#### 6. PC/Controller must include:

- Windows 10 Computer Dell OptiPlex XE3 Windows® 10 (64-bit)
- Processor Intel Core i5-8500
- Memory 32GB (2x16GB) 2666MHz DDR4 UDIMM Non-ECC Memory
- HDD Size/HDD Spindle 1TB 7.2k RPM SATA 6Gbps
- Mechanical Package 360W Standard Power Supply, Country Specific Power Cord
- Audio Internal Speaker
- Graphics Intel Integrated Graphics
- Keyboard Dell KB522 Wired Multi-Media Keyboard <Local Language> - Black
- DVD R+/-W DVD-RW Drive (Reads and Writes to DVD/CD)
- Mouse Dell MS116 Wired Mouse, Black

- WWAN Intel Dual Band Wireless AC 9560 (802.11ac) 2x2 + Bluetooth 5
- Integrated Ethernet Integrated Intel I219-LM Ethernet LAN 10/100/1000
- Warranty 3-Year On-site Intl. Delivery
- Custom Image Win10 2019 LTSC / IoT / Embedded

#### Notes:

3- RS232 ports (1 off main board; 2 on add-in card) 10 - USB Ports: 1 x USB Type-C 3.1 Gen 2 5 x USB 3.1 Type-A (1 front, 4 rear) 4 x USB 2.0 Type-A (2 front, 2 rear)

#### **Software requirements:**

- Instrument operating software must be Windows based.
- All functions of the instrument including torch operation, gas flow, wavelength stabilization and calibration, and data collection must be controlled by the instrument software.
- The software must have built-in diagnostic checks for instrument systems in order to verify proper operating conditions.
- The system software must permit simultaneous background correction and multicomponent spectral fitting for interference correction.
- The system software must perform real-time wavelength monitoring to ensure wavelength stability.
- The system software must permit the instrument to be started and stopped by user defined settings. When stopped by these settings, the instrument must be capable of stopping the gas flow.
- The software must allow for reprocessing of data.

#### Safety requirements:

The instrument and all associated components must be approved for safe use by a nationally accepted testing laboratory.

#### **Training requirements:**

- ICP System Installation must include familiarization session, ½ day.
- ICP System must include on-line, instructor led ICP class, 2 days.
- ICP System must include on-site, advanced ICP training by an ICP scientist, including travel and living expenses, 1 day.

#### Warranty requirements:

- The ICP System must be covered by a one-year warranty which includes all non-consumable parts, service, repair and travel time for the first year of ownership.
- Chiller must include a 2-year manufacturer's warranty.

### **Bid Form/Signature**

## ILLINOIS VALLEY COMMUNITY COLLEGE INDUCTIVELY COUPLED PLASMA EMISSION SPECTROPHOTOMETER Bid # BID2023-B01

With the full understanding of the bidding document, the following bid is submitted for **Inductively Coupled Plasma Emission Spectrophotometer (ICP)**. Please NOTE that the specific items listed in the bid document are an Avio 220 Max ICP-OES for reference only, you do not have to bid this brand. However, it must be comparable in specifications. **Pricing must include shipping and installation.** 

The College reserves the right to award all supplies to one vendor or to multiple vendors depending upon what is considered to be in the best interest of the College.

Line	<b>Equipment Description</b>	Qty	Cost	
	Inductively Coupled Plasma			
	Emission Spectrophotometer		<u>ر</u>	
1	(including all noted requirements)	1	<b>\$</b>	
Total				

Submitt	ted By;					
Company			Authorized Signature			
Address			Printed Name			
City	State	Zip	Phone			
Fax			E-Mail			
Date						

\*If submitting more than one offer, please make copies of this Bid Form.

<u>Submit one (1) offer per Bid Form</u>

#### **CERTIFICATION FORM**

TO: ILLINOIS VALLEY COMMUNITY COLLEGE DISTRICT NO. 513 OGLESBY, IL 61348

Pertaining to the bid titled: <u>INDUCTIVELY COUPLED PLASMA</u> EMISSION SPECTROPHOTOMETER - Bid # BID2023-B01

I/We, as the Bidder certify that I/we have not been barred from bidding on this project as a result of a conviction for either bid-rigging or bid-rotating under *Article 33E* of the "Criminal Code of 1961"

We also do hereby certify that we have a written sexual harassment policy in place in full compliance with Section2-105 of the Illinois Human Rights Act and will, upon request, be able to provide such written policy to the Department of Human Rights.

NAME OF CONTRACTOR/BIDDER
TITLE
DATE

#### THIS FORM MUST BE RETURNED WITH YOUR BID TO:

Illinois Valley Community College District No. 513 Purchasing Department – Room C343 815 North Orlando Smith Road Oglesby, Illinois 61348

#### Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

meme	Havenue service		Go to www.irs.gov	//Formwe for insur	actions and the late	st information.				
	1 Name (as shown	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.								
	Business name/disregarded entity name, if different from above									
Ded uo	following seven boxes.					4 Exemptions (codes apply only to cortain entities, not individuals; see instructions on page 3):				
	single-member LLC					Exempt payee code (if any)				
충흥	Limited liability	y company. Ente	or the tax classification	(C=C corporation, S=S	corporation, P-Partner	rship) ►				
호류	Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC th									
Print or type. c Instructions							code (if any)			
ecific P	is disregarded	is disregarded from the owner should check the appropriate box for the tax classification of its owner.								
8	Other (see Ins						(Applies to accounts maintained cubitle the U.S.)			
ŝ	5 Address (number, street, and apt. or suite no.) See instructions.				Requester's name and address (optional)					
8										
-	6 City, state, and ZIP code					Ī				
	7 List account num	ber(s) here (optic	onal)							
Par	til Taxpay	yer Identific	cation Number (	(TIN)						
			The TIN provided mu				urtty numi	ber		
backup withholding. For individuals, this is generally your social security number (SSN). However, fi resident allen, sole proprietor, or disregarded entity, see the instructions for Part, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see How to de			]-[	-						
TIN, later.						_				
Note: If the account is in more than one name, see the instructions for line 1. Also see What Name Number To Give the Requester for guidelines on whose number to enter.		and Employer	dentification number							
				$\Box$						
Par	Certific	cation								_
	penalties of perju	ry, I certify that	t							_
<ol> <li>The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and</li> </ol>										

- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue
  Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have falled to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TiN. See the instructions for Part II, later.

Sign Here Signature of U.S. person >

#### General Instructions

Section references are to the Internal Revenue Code unless otherwise noted

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

#### Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (TIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns the returns included but are not limited to the following. returns include, but are not limited to, the following.

. Form 1099-INT (Interest earned or paid)

- . Form 1099-DIV (dividends, including those from stocks or mutual
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- . Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- . Form 1099-S (proceeds from real estate transactions)
- . Form 1099-K (merchant card and third party network transactions)
- . Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuttion)
- Form 1099-C (canceled debt)
- . Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (Including a resident alleri), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding,