



INVITATION TO BID

DO NOT SHIP BASED UPON THIS BID

Return this **SIGNED** form to:
Louisiana Tech University
Office of Purchasing
PO Box 3157
208 Keeny Circle, RM 408
Ruston, Louisiana 71272

Bid Number: 50012-621-26 **Bid Title:** Purchase of a Nanoindenter System for the Institute for Micromanufacturing

Bid Schedule:

Pre-Bid Conference:

N/A

Bid Submission Deadline / Opening:

August 1, 2025 @ 10:00 AM

Bidder agrees to comply with all conditions below and attached to this request.

Prices are to be complete and the FOB point is to be Louisiana Tech University unless otherwise specified.

Bidder Information: (Bidder to provide all required information)

(Full Company Name)

(Full Street or Mailing Address)

(City)

(State)

(Zip)

(Phone)

(Email)

(Fax)

(Company Quote Number if Applicable)

PRICES MUST BE FIRM FOR AT LEAST 30 DAYS FROM BID OPENING DATE

FAILURE TO SIGN BELOW IN INK SHALL DISQUALIFY BID

Typed or Printed Name / Title

Authorized Signature

The Louisiana Tech University Office of Purchasing is seeking SEALED BIDS for the following:

Purchase of a Nanoindenter System for the Institute for Micromanufacturing

A Bid Bond is not required for this solicitation

Product Literature for any product(s) bid MUST accompany a vendor's response. Failure to comply will result in the Vendor's bid being not considered

See Attached Bid Specifications for additional details

ALL BIDS MUST BE RETURNED TO THE LOUISIANA TECH UNIVERSITY OFFICE OF PURCHASING VIA MAIL OR IN PERSON.

The Bidder is solely responsible for ensuring that its courier service provider makes inside deliveries to our physical location. Louisiana Tech University is not responsible for any delays caused by the bidder's chosen means of delivery.

For questions regarding specifications, please contact the Office of Purchasing at 318-257-4205 or purchasing@latech.edu. Please ensure that the above bid number appears on all communications.

IMPORTANT: If bidding other than requested brand and product number (or style), enclose sufficient literature to determine compliance with specifications. Failure to comply with this request may eliminate your bid from consideration. Any manufacturer's names, trade names, brand names, or catalog numbers used in the specifications are for the purpose of describing and establishing general quality levels. Such references are not intended to be restrictive. Bids will be considered for any brand which meets or exceeds the quality of the specifications listed for any items.

The Louisiana Tech University Office of Purchasing is now accepting SEALED BIDS for the Purchase of a Nanoindenter System for the Institute of Micromanufacturing. In consultation with the faculty in the Institute of Micromanufacturing, the following requirements have been established for the purchase of a new state-of-the-art Nanoindenter system.

Bidders should pay careful attention to Item No. 5 on the Instructions to Bidders regarding pre-payments.

Bidders shall provide product literature for their quoted model and any quoted accessories that are included with the bid. Failure to provide complete documentation may result in the bid being deemed non-responsive. By submitting a response to this Sealed Bid solicitation, the vendor is certifying that the product(s) bid comply with all of the Technical Details listed below.

Technical Details:

The Nanoindenter instrument and associated electronics must contain all of the following:

- Standalone enclosure for vibration and environmental isolation of stage, camera and nanoindenter head. System shall also contain a passive isolation platform such as a granite block.
- Nanoindenter head must be able to apply greater than or equal to 10 mN of force over a displacement of 5 μm with a maximum loading rate greater than or equal to 50 mN/s with the system ideally employing electrostatic actuation for nanomechanical testing.
- Nanoindenter head must also be able to perform nanoscratch including lateral load measurements. The system and analysis software shall provide analysis and determination of the critical load of adhesion.
- Thermal drift of nanoindenter head must be less than or equal to 0.05 nm/sec.
- The force actuation/displacement sensing must be combined in a single transducer assembly to eliminate sources of measurement error and variability; such as cosine and Abbe offset errors associated with separate displacement sensing mechanisms.
- Separate or same Nanoindenter head as above with a modulation frequency range of 0.1 Hz to 300 Hz in the normal direction for measuring creep, nano-Dynamic Mechanical Analysis and relaxation.
- System shall have load noise floor less than or equal to 75 nN.
- All transducers shall be able to operate under both load or displacement feedback control using any user-defined load functions.
- High precision, fully automated and programmable motorized translational stages for sample movement.
- System must be able to accommodate at least a 4" Si wafer.
- System must be able to handle sample weights greater than or equal to 5 kg.
- Flexible sample mounting, with an optional vacuum-based mounting for flat samples being ideal.
- High speed mechanical property mapping of at a rate of least greater than or equal to 1 indent/second, with selectable force or displacement control cutoffs. High speed mechanical property mapping shall be compatible with heating cooling, fluid and electrochemical stages specified below.
- System must be compatible with liquid/fluid samples and soft/biological samples.
- System must have in-situ SPM imaging with probe scanning as opposed to sample scanning, with nm scale resolution for topography of pre- and post-test scanning of samples surfaces, and SPM imaging must be done with the same probe that is used to conduct the nanomechanical testing
- SPM imaging maximum scan size should cover an area of greater than or equal to 60 μm x 60 μm and be compatible with all optional stages such as heating and cooling.
- Optical imaging system with at least a 10X objective fiber optic light source and high-resolution color CCD camera for high quality color images of the sample surface.
- An emergency stop option that electronically interlocks the nanoindentation head to the stage controller must be included to reduce the risk of accidental head crashes.
- System must be upgradable to add future options such as a heating stage greater than or equal to 400°C, cooling stage less than or equal to -120°C, electrochemical nanoindentation, and high force transducer head greater than or equal to 5 N.
- The entire Nanoindenter system must be fully supported for a guaranteed minimum of seven (7) years for both technical and spare parts support after installation is completed at Louisiana Tech University.
- The system must include all manuals and the manufacturer offers telephone, e-mail and remote system support during the normal work hours of Louisiana Tech University.
- The nanoindenter system will come with a one (1) year warranty

Computer and Software Requirements:

- Vendor supplied Windows based computer (including monitor, keyboard and mouse) with extra available USB-A ports. The computer shall have preinstalled acquisition software that allows for access to all components of the instrument (no additional data keys required), complete data analysis software and a site-license for off instrument data processing.

Shipping, Installation, and Training

- Shall be included in pricing of the system
- Unit Price shall include all shipping, transportation, installation, training fees, and insurance from the vendor's production facility to the receiving dock at the Institute for Micromanufacturing, 505 Tech Drive, Ruston, LA, 71272. Also known as Free On Board or F.O.B. shipping.
- The shipping crate shall have shock and tilt registration devices.
- Prior to unloading, the University will check the devices and contact supplier in case any of these are activated and will request guidance. The same will apply if the crate is showing damage.
- Unloading the equipment is the responsibility of Louisiana Tech University.
- Louisiana Tech University is responsible for placing the system and installing any supporting facilities.
- The Awarded Vendor is responsible for unpacking the equipment, assembling the equipment, starting up the equipment and verifying all aspects of operation.
- Louisiana Tech University and the Awarded Vendor will verify that all components are functioning properly and will run several standard and experimental samples to verify that the system is operating nominally.

Taxes

- Louisiana Tech University is exempt for all local and state sales tax; bids shall *not* include tax.

Schedule of Items

Bid Number:	50012-621-26	Bid Title:	Purchase of a Nanoindenter System for the Institute for Micromanufacturing
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[illegible]



Louisiana Tech University

Division of Finance
Office of Purchasing

THIS IS A REQUEST FOR A SEALED BID INSTRUCTIONS TO BIDDERS

1. Read the entire bid, including all terms and conditions and specifications.
2. Louisiana Tech University is not liable for any cost incurred by the bidders prior to execution of a contract and the issuance of a purchase order. Any bidder who ships or otherwise expends time or money prior to award as defined does so at the bidder's own risk.
3. All bid prices must be typed or written in ink. Any corrections, erasures or other forms of alteration to unit prices should be initialed by the bidder. If the bidder needs to submit a change, question, exception, or modification to any aspect of the bid specifications, terms, conditions, or bidder instructions, must do so in written form submitted to the Louisiana Tech University Office of Purchasing prior to the bid opening date. All responses and/or addenda will be officially submitted by the Louisiana Tech University Office of Purchasing 72 (seventy-two) business hours before the bid opening date. Business hours is defined as University operating hours while the University is open. Unless received as specified above, all bid information will remain unchanged.
4. This bid is to be manually signed in ink.
5. Bid prices shall include all delivery charges paid by the vendor, F.O.B. Destination, unless otherwise provided in the solicitation. Bids requiring deposits, "payment in advance" or "C.O.D" may be rejected. Payment is to be made within 30 days after receipt of properly executed invoice or delivery, whichever is later.
6. Amount of bid bond required: every bid submitted for in excess of fifty thousand dollars shall be accompanied by a bid bond guaranteed by a surety company qualified to do business in the state of Louisiana. The bid bond shall be for five percent of the official bid amount.
7. To assure consideration of your bid, all bids and addenda should be returned in an envelope or package clearly marked with the bid opening date and the bid number; or submitted in the special envelope, if furnished for that purpose. The Bidder is solely responsible for ensuring that its courier service provider makes inside deliveries to our physical location. The University is not responsible for any delays caused by the bidder's chosen means of delivery. Bidder is solely responsible for the timely delivery of its bid. Bids received after the due date and time will not be considered.
8. Bids submitted are subject to provisions of the laws of the State of Louisiana including but not limited to L.R.S. 39:1551-1736; Purchasing rules and regulations; executive orders; standard terms and conditions; special conditions; and specifications listed in this solicitation.
9. Important: By signing the bid, the bidder certifies compliance with all instructions to bidders, terms conditions and specifications, and further certifies that this bid is made without collusion or fraud. This bid is to be manually signed in ink by a person authorized to bind the vendor (see no. 27). All bid information shall be in ink or typewritten.
10. Address all inquiries and correspondence to the Louisiana Tech University Office of Purchasing at the address and telephone number listed herein.

11. Bid forms: All written bids, unless otherwise provided for, must be submitted on, and in accordance with, forms provided, and properly signed (see no. 27). Bids submitted in the following manner will not be accepted:
 - A. Bid contains no signature indicating intent to be bound;
 - B. Bid sent by facsimile equipment;
 - C. Bid filled out in pencil; and
 - D. Bid not submitted on the designated bid forms.
12. Bids must be received at the address specified in the solicitation prior to bid opening time in order to be considered.
13. Standards of quality – Any product or service bid shall conform to all applicable federal, state, and local laws and regulations, and the specifications contained in the solicitation. If bidding other than the requested brand or product number (or style), enclose sufficient literature to determine compliance with specifications. Failure to comply with this request may eliminate your bid from consideration. Unless otherwise specified in the solicitation document, any manufacturer's name, trade name, brand name, or catalog number used in the specification is for the purpose of describing the standard of quality, performance, and characteristics desired; and is not intended to limit or restrict competition. Bidder must specify the brand and model name of the product offered in the bid. Bids not specifying brand and model number shall be considered as offering the exact product specified in the solicitation. See bid document for full requirements.
14. New Products: Unless specifically called for in the solicitation documents, all products for purchase must be new, never previously used, and the current model and/or packaging. No remanufactured, demonstrator, used or irregular product will be considered for purchase unless otherwise specified in the solicitation documents. The manufacturer's standard warranty will apply unless otherwise stated in the solicitation.
15. Louisiana Tech University reserves the right to award items separately, grouped or on an all-or-none basis and to reject any or all bids and waive any informalities.
16. This agreement is non-exclusive and shall not in any way preclude Louisiana Tech University from entering into similar agreements and/or arrangements with other vendors or from acquiring similar, equal, or like goods and/or services from other entities or sources.
17. Bid opening: Bidders may attend the bid opening, but no information or opinions concerning the ultimate contract award will be given at the bid opening or during the evaluation process. Bids may be examined within 72 hours after bid opening. Information pertaining to completed files may be secured by visiting the Louisiana Tech University Purchasing Office during normal working hours. Written bid tabulations will not be furnished prior to 72 hours.
18. Prices: Unless otherwise specified by Louisiana Tech University in the solicitation, bid prices must be complete, including transportation prepaid by bidder to destination and firm for acceptance for a minimum of 30 days. If accepted, prices must be firm for the contractual period.
19. Taxes: Vendor is responsible for including all applicable taxes, fees, and tariffs in the bid price. Louisiana Tech University is exempt from all Louisiana state and local sales and use taxes. By accepting an award, resident and non-resident firms acknowledge their responsibility for the payment of all taxes duly assessed by the State of Louisiana and its political subdivisions for which they are liable, including but not limited to: franchise taxes, privilege taxes, sales taxes, use taxes, ad valorem taxes, etc.
20. Contract renewals: In the event that bid specifications include a renewal option, a term contract may be extended for two additional 12-month periods at the same prices, terms, and conditions upon mutual agreement of the State of Louisiana agency and the contractor. In such cases, the total contract term cannot exceed 36 months.

21. Contract cancellation: Louisiana Tech University has the right to cancel any contract, in accordance with purchasing rules and regulations, including but not limited to: (1) failure to deliver within the time specified in the contract; (2) failure of the product or service to meet specifications, conform to sample quality or to be delivered in good condition; (3) misrepresentation by the vendor; (4) fraud, collusion, conspiracy or other unlawful means of obtaining any contract with the University; (5) conflict of contract provisions with constitutional or statutory provisions of state or federal law; (6) any other breach of contract. Louisiana Tech University has the right to cancel any contract for convenience at any time by giving thirty (30) days written notice to the vendor. In such cases, the vendor shall be entitled to payment for complaint deliverables in progress.
22. Applicable law: All contracts shall be construed in accordance with and governed by the laws of the State of Louisiana.
23. In accordance with Executive Order Number JBE 2018-15, effective May 22, 2018, for any contract for \$100,000 or more and for any contractor with five or more employees, Contractor, or any Subcontractor, shall certify it is not engaging in a boycott of Israel, and shall, for the duration of this contract, refrain from a boycott of Israel. The State reserves the right to terminate this contract if the Contractor, or any Subcontractor, engages in a boycott of Israel during the term of the contract.
24. The bidder agrees to abide by the requirements of the following as applicable: Title VI of the Civil Rights Act of 1964 and Title VII of the Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972, Federal Executive Order 11246 as amended, the Rehabilitation Act of 1973, as amended, the Vietnam Era Veteran's Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, the Fair Housing Act of 1968 as amended, and bidder agrees to abide by the requirements of the Americans with Disabilities Act of 1990. Bidder agrees not to discriminate in its employment practices, and will render services under this contract without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, veteran status, political affiliation, disability, or age in any matter relating to employment. Any act of discrimination committed by bidder, or failure to comply with these statutory obligations when applicable shall be grounds for termination of any contract entered into as a result of this solicitation.
25. Special accommodation: Any "qualified individual with a disability" as defined by the Americans with Disabilities Act, who has submitted a bid and desires to attend the bid opening, must notify the Louisiana Tech University Office of Purchasing in writing not later than seven days prior to the bid opening date of their need for special accommodations. If the request cannot be reasonably provided, the individual will be informed prior to the bid opening.
26. Indemnity: Contractor agrees, upon receipt of written notice of a claim or action, to defend the claim or action, or take other appropriate measure, to indemnify, and hold harmless, the state, its officers, its agents and its employees from and against all claims and actions for bodily injury, death or property damages caused by the fault of the contractor, its officers, its agents, or its employees. Contractor is obligated to indemnify only to the extent of the fault of the contractor, its officers, its agents, or its employees. However, the contractor shall have no obligation as set forth above with respect to any claim or action from bodily injury, death or property damages arising out of the fault of the state, its officers, its agents or its employees.
27. Signature authority: Attention: R.S. 39:1594(c) (4) requires evidence of authority to sign and submit bids to the State of Louisiana. You shall indicate which of the following apply to the signer of this bid.

Please circle one:

- 1) The signer of this bid is either a corporate officer who is listed on the most current annual report on file with the Secretary of State or a member of a partnership or partnership in commendam as reflected in the most current partnership records on file with the Secretary of State. A copy of the annual report or partnership must be submitted to this office before contract award.
- 2) The signer of this bid is a representative of the bidder authorized to submit this bid as evidenced by documents such as Corporate Resolution, Certification as to Corporate Principal, etc. If this

applies, a copy of the resolution, certification, or other supportive documents must be attached hereto.

- 3) The bidder has filed with the Secretary of State an affidavit or resolution or other acknowledged/authentic document indicating that the signer is authorized to submit bids for public contracts. A copy of the applicable document must be submitted to this office before contract award.
28. In accordance with the provisions of R.S. 39:2182, in awarding contracts after August 15, 2010, any public entity is authorized to reject a proposal or bid form, or not award the contract to, a business in which any individual with an ownership interest of five percent or more, has been convicted of, or has entered a plea of guilty or nolo contendere to any state felony or equivalent federal felony crime committed in the solicitation or execution of a contract or bid awarded under the laws governing public contracts under the provisions of chapter 10 of Title 38 of the Louisiana Revised Statutes of 1950; professional, personal, consulting, and social services procurement under the provisions of Chapter 16 of Title 39, or the Louisiana Procurement Code under the provisions of Chapter 17 of Title 39.
29. It is agreed that the Legislative Auditor of the State of Louisiana and/or the Office of the Governor, Division of Administration auditors shall have the option of auditing all accounts which relate to this contract.
30. The continuation of this contract is contingent upon the appropriation of funds to fulfill the requirements of the contract by the legislature. If the legislature fails to appropriate sufficient monies to provide for the continuation of the contract, or if such appropriation is reduced by the veto of the Governor or by any means provided in the Appropriations Act to prevent the total appropriation for the year from exceeding revenues for that year, or for any other lawful purpose, and the effect of such reduction is to provide insufficient monies for the continuation of the contract.
31. Whenever a public entity enters in to a contract in excess of five-thousand dollars (\$5,000) for the construction, alteration, or repair of any Public Works, the official representative of the public entity shall reduce the contract to writing and have it signed by the parties. When an emergency as provided in R.S. 38:2212(D) is deemed to exist for the construction, alteration, or repair of any Public Works and the contract for such emergency work is less than fifty-thousand dollars (\$50,000), there shall be no requirement to reduce the contract to writing (R.S. 38:2241).
32. For each contract in excess of twenty-five thousand dollars (\$25,000) per project, the public entity shall require of the contractor a bond with good, solvent, and sufficient surety in a sum of not less than fifty percent (50%) of the contract price for the payment by the contractor or subcontractor to claimants as defined in R.S. 38:2242. The bond furnished shall be a statutory bond and no modification, omissions, additions in or to the terms of the contract, in the plans or specifications, or in the manner and mode of payment shall in any manner diminish, enlarge, or otherwise modify the obligations of the bond. The bond shall be executed by the contractor with surety or sureties approved by the public entity and shall be recorded with the contract in the office of the recorder of mortgages in the parish where the work is to be done not later than thirty days after the work has begun.
33. For construction projects falling within classifications of 37:2150 the bidder must be fully qualified under any state or local licensing law for contractors in effect at the time and at the location of the work before submitting his bid. In the state of Louisiana, revised statutes 37:2150, et seq. Will be considered, if applicable. The contractor shall be responsible for determining that all of his sub-bidders or prospective subcontractors are duly licensed in accordance with law. On any bid in excess of fifty thousand dollars (\$50,000), the Contractor shall certify that he is licensed under R.S. 37:2150-2163 and show his license number on the bid. The bid envelope shall be identified on the outside with the Name of the Project, Bid Number, Bid Time, the Name of the Bidder and the License Number of the Bidder.
34. Prohibited Contractual Arrangements – Per Louisiana R.S. 42:1113.A, no public servant, or member of such a public servant's immediate family, or legal entity in which he has a controlling interest shall bid on or enter into any contract, subcontract, or other transaction that is under the supervision or jurisdiction of the agency of such public servant. See statute for complete law, exclusions, and provisions.

35. Prohibition of Companies That Discriminate Against Firearm and Ammunition Industries - In accordance with La. R.S. 39:1602.2, the following applies to any competitive sealed bids, competitive sealed proposals, or contract(s) with a value of \$100,000 or more involving a for-profit company with at least fifty full-time employees: Unless otherwise exempted by law, by submitting a response to this solicitation or entering into this contract, the Bidder, Proposer or Contractor certifies the following: 1. The company does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association based solely on the entity's or association's status as a firearm entity or firearm trade association; 2. The company will not discriminate against a firearm entity or firearm trade association during the term of the contract based solely on the entity's or association's status as a firearm entity or firearm trade association. The State reserves the right to reject the response of the Bidder, Proposer or Contractor if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response or if the certification is no longer true.

TO: Louisiana Veteran-Owned and Service-Connected Disabled Veteran-Owned Small Entrepreneurships

RE: Veteran Initiative – Act 167 of the 2009 Legislative Session

➤ **ARE YOU ELIGIBLE FOR PARTICIPATION?**

- Are you a veteran-owned small entrepreneurship or a service-connected disabled veteran-owned small entrepreneurship in accordance with documentation from the United States Department of Veteran Affairs or the Louisiana Department of Veteran Affairs?
- Are you a Louisiana domiciled business?
- Do you have less than fifty (50) full-time employees?
- Are your annual gross revenue receipts \$5,000,000 or less (for construction) or \$3,000,000 for (non-construction) for each of the previous three (3) tax years?

If your answers are yes, your company may be eligible for participation in the Louisiana Veteran-Owned and Service-Connected Disabled Veteran-Owned Small Entrepreneurship Program, also known as the Veteran Initiative.

➤ **WHAT IS THE VETERAN INITIATIVE?**

The Veteran Initiative, created by LRS 39:2171 through 2179 and LRS 51:931, provides additional opportunities for certified Louisiana-based small entrepreneurship to participate in contracting and procurement with the State. Key features of the programs are:

- This is a goal-oriented program
- It is race and gender neutral
- Participation is restricted to Louisiana-based certified veteran-owned and service-connected disabled veteran-owned small entrepreneurship

The rules governing the implementation of the program are located at <http://www.doa.louisiana.gov/osp/se/se.htm>.

➤ **WHY IS CERTIFICATION IMPORTANT?**

Certification is required for the participation in the Veteran Initiative. Under this program, you may be given increased opportunity to participate in Louisiana state contracts. Certain contracts may be awarded to your business without competition. And, certification is one of the methods that the State of Louisiana will utilize as a basis for benchmarking for annualized procurement and contracting goals.

➤ **WHAT AGENCY IS RESPONSIBLE FOR CERTIFICATION?**

The Louisiana Department of Economic Development (LED) is responsible for certifying Small Entrepreneurships for participation in the program. The (LED) Small Business Certification System may be accessed by <https://smallbiz.louisianaeconomicdevelopment.com/Account/Login>. For additional information regarding certification, please contact the LED at 800.450.8115 or 225.342.3000.

➤ **WHAT IS THE ROLE OF THE DEPARTMENT OF VETERANS AFFAIRS?**

The Louisiana Department of Veterans Affairs is responsible for disseminating information on this program and other veterans' benefits to Louisiana veterans. Information on this program and other veterans' benefits can be accessed at www.vetaffairs.al.gov.

The State of Louisiana is committed to the success of this program and encourages your participation.