


INVITATION TO BID		BID DUE DATE AND TIME
BOARD OF SUPERVISORS OF LOUISIANA STATE UNIVERSITY AND AGRICULTURAL & MECHANICAL COLLEGE		11/21/2023 11:00 AM CT
SOLICITATION RFQ-0000002081 SUPPLIER # SUPPLIER NAME AND ADDRESS <div data-bbox="180 394 789 604" style="border: 1px solid black; height: 100px; width: 100%;"></div>	RETURN BID TO lsubids@lsu.edu Buyer Amy Hill Bourgeois Buyer Phone Buyer Email ahill5@lsu.edu Issue Date 11/03/2023	
TITLE: Chromatography Equipment		
<p style="text-align: center;">To Be Completed By Supplier</p> <ol style="list-style-type: none"> _____ "No Bid" (sign and return this page only). _____ My Company does not wish to receive future solicitations for this spend category. Specify your Delivery: To be made within _____ days after receipt of order. If applicable, Supplier's Addendum Acknowledgement/Response: As an authorized agent/signatory of the supplier, I/we acknowledge receipt of this Addendum, and _____ submit no alterations/clarifications to our original bid. _____ submit superseding revisions/clarifications to our original bid as written herein or attached hereto. <p style="text-align: center;">General Instructions to Suppliers</p> <ol style="list-style-type: none"> Sealed bids for furnishing the items and/or services specified are hereby solicited, and will be received by LSU Procurement at the "Return Bid To" address stated above, until the specified due date and time. Read the entire solicitation, including all terms, conditions and specifications. All bid information and prices must be typed or written in ink. Any corrections, erasures or other forms of alteration to unit price are to be initialed by the supplier. Bid prices are to be quoted FOB LSU/Destination and inclusive of any and all applicable shipping and handling charges unless otherwise specified in the solicitation. Any invoiced delivery charges not quoted and itemized on the LSU purchase order are subject to rejection and non-payment. Payment is to be made within 30 days after receipt of properly executed invoice, or delivery and acceptance, whichever is later. By signing this solicitation, the supplier certifies compliance with all general instructions to suppliers, terms, conditions and specifications; and further certifies that this bid is made without collusion or fraud. 		
SUPPLIER NAME	MAILING ADDRESS	
AUTHORIZED SIGNATURE	CITY, STATE ZIP	
PRINTED NAME	PHONE #	
TITLE	FAX #	
E-MAIL	FEDERAL TAX ID #	

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Bid Submission Information

All bids must be submitted electronically to LSU Procurement Services. Bids must be received at the "Return Bid To" email address no later than the due date and time specified herein. Bids must be emailed to lsubids@lsu.edu (*This email address should be used for bid submissions only*). Any bids sent directly to the Buyer of record **will not** be forwarded to the "Return Bid To" email.

When submitting electronically, the RFQ number and solicitation title should be listed in the subject line of the email. An original and redacted copy (if applicable) must be submitted electronically. Hard copies of bids will not be accepted; therefore, they will not be evaluated.

It is the responsibility of the Supplier to ensure the bid is received by LSU Procurement by the indicated due date and time. Any delays that may occur in transmission of the bid is the responsibility of the supplier. A bid will be considered late if it is not received at the "Return Bid To" email address by the indicated due date and time.

The maximum email attachment size accepted is 125 MB. It is the supplier's responsibility to ensure bid submission is sized such that it is successfully transmitted and received by LSU. If the bid response is too large to be emailed as one document, the bid must be sent as separate documents. Each submittal should be labeled. (Example – Bid Submittal 1 out of 3 for RFQ-000000XXXX - Title; Bid Submittal 2 out of 3 for RFQ-000000XXXX - Title, etc.). If any submittal is received late, LSU will not consider the late submittal(s). Only the submittal(s) received by the due date and time will be considered. Late bids will not be accepted per LAC 34:XIII.515.B.

Bid Opening Information:

Bid openings are held electronically. There are no in-person bid openings. To electronically attend the bid opening, use the below link to register in advance:

<https://lsu.zoom.us/meeting/register/tJEqcuCrqzMtH930MhK84-K2IANJOT5kKxWp>

After registering, a confirmation email will be provided containing information about joining the bid opening.

No information or opinions concerning the ultimate contract award will be given at bid opening or during the evaluation process.

If an unforeseen circumstance beyond LSU's control prevents bid opening, the Bid will open at the next scheduled bid opening date.

Additional Terms

Bid prices for shipping are to be quoted FOB LSU/DESTINATION and inclusive of any and all applicable shipping and handling charges.

LSU is a member of the National Association of Educational Procurement (NAEP) and the E&I Cooperative Purchasing Service.

A preference, if applicable, may be allowed for products produced, manufactured, assembled, grown or harvested in Louisiana. Do you claim this preference? Yes _____ No _____. Note: Preferences shall not apply to service contracts. Is your Louisiana business workforce composed of a minimum of fifty percent Louisiana residents? Yes _____ No _____. Specify Item Number and location within Louisiana where the product is/was produced, manufactured, assembled, grown or harvested:

_____ Note: This preference is not applicable for services.

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These standard terms and conditions shall apply to all LSU solicitations, unless otherwise specifically amended and provided for in the special terms and conditions, specifications, or other solicitation documents. In the event of conflict between the General Instructions to Suppliers or Standard Terms & Conditions and the Special Terms & Conditions, the Special Terms & Conditions shall govern.

Bids submitted are subject to provisions of the laws of the State of Louisiana, including but not limited to: the University Procurement Code (LAC 34:XIII. Chapters 3-25) and the terms, conditions, and specifications stated in this solicitation.

1. Supplier Enrollment

Suppliers providing a bid/quote in response to a LSU solicitation must be setup in the University's new procurement system (Workday) for bid tabbing and award of a purchase order. Suppliers should complete the online supplier registration form prior to submitting a bid response and/or the bid due date and time to ensure bid tabbing can be done timely after the bid deadline. This website is used in place of a paper form and must be accompanied with an IRS Request for Taxpayer Identification Number and Certification form (W-9 or W-8 if foreign) to collect the required business and tax information that support the University's reporting and compliance requirements. To inquire if you or your company is setup or for questions regarding setup, email suppliers@lsu.edu. The supplier enrollment form can be located at: http://www.lsu.edu/administration/ofa/procurement/supplier_registration.php

2. Bid Delivery and Receipt

Bids must be received and time-stamped at the "Return Bid To" address no later than the due date and time specified herein. To assure consideration, your bid must be submitted in a sealed envelope or package and should be clearly and prominently marked with the solicitation number and bid due date, or may be submitted in the special bid return envelope if one was furnished for that purpose.

Supplier are advised that the U.S. Postal Service does not make deliveries to our physical location. USPS mail is delivered to the University's mail center and is redelivered using internal resources. Suppliers may deliver bids by hand or by a courier service to the Procurement Office. The University shall not be responsible for any delays caused by the supplier's chosen means of bid delivery. Supplier is solely responsible for the timely delivery of its bid, and failure to meet the bid due date and time shall result in rejection of the bid. Late bids cannot be accepted per LAC 34:XIII.515.B.

3. Bid Forms

Bids are to be submitted on the LSU solicitation forms provided, and must be signed by an authorized agent of the supplier in accordance with LAC 34:XIII.517. Bids submitted on other forms or in other price formats may be considered informal and may be rejected in part or in its entirety. Bids submitted in pencil and/or bids containing no original signature indicating the supplier's intent to be bound will not be accepted. Bid submissions should not be spiral bound.

4. Interpretation of Solicitation/Supplier Inquiries

If supplier is in doubt as to the meaning of any part or requirement of this solicitation, supplier may submit a written request for interpretation to the Buyer-of-Record at the address and/or fax number shown above. Written inquiries must be received in the Procurement Office no later than 4:30 pm CST four (4) business days prior to the opening of bids, and shall be clearly crossreferenced to the relevant solicitation/specification in question.

No decisions or actions shall be executed by any supplier as a result of oral discussions with any LSU employee or consultant. Any interpretation of the documents will be made by formal addendum only, issued by the Procurement Office, and mailed or delivered to all suppliers known to have received the solicitation. LSU shall not be responsible for any other interpretations or assumptions made by supplier.

5. Bid Addenda

Bid Addendum is to be signed and returned with your bid. If you have already submitted your bid, and this Addendum creates a need to revise/clarify your original response in any way, you are required to submit such in writing. To be considered, your addendum response must be submitted to and received by LSU Procurement at the "Return Bid To" address stated above. Submittals for price alterations and addenda to bids must be clearly marked with the solicitation number and the bid due date/time and returned via fax, email, courier service, hand delivery, or USPS mail. Bid revisions received after bid opening cannot be considered, whereupon the supplier must either honor or withdraw its original bid.

6. Bid Opening

Suppliers may attend the public bid opening of sealed bids. No information or opinions concerning the ultimate contract award will be given at bid opening or during the evaluation process. Written bid tabulations will not be furnished.

7. Special Accommodations

Any "qualified individual with a disability" as defined by the Americans with Disabilities Act, who has submitted a bid and desires to attend the public bid opening, must notify the Procurement Office 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.

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8. 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. 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. Supplier must specify the brand and model number of the product offered in his bid. Bids not specifying brand and model number shall be considered as offering the exact product specified in the solicitation.

9. New Products/Warranty/Patents

All products bid for purchase must be new, never previously used, of the manufacturer's current model and/or packaging, and of best quality as measured by acceptable trade standards. No remanufactured, demonstrator, used or irregular products will be considered for purchase unless otherwise specified.

The manufacturer's standard published warranty and provisions shall apply, unless more stringent warranties are otherwise required by LSU and specified in the solicitation. In such cases, the supplier and/or manufacturer shall honor the specified warranty requirements, and bid prices shall include any premium costs of such coverage.

Supplier guarantees that the products proposed and furnished will not infringe upon any valid patent or trademark; and shall, at its own expense, defend any and all actions or suits charging such infringement, and shall save LSU harmless.

10. Descriptive Information

Suppliers proposing an equivalent brand or model are to submit with the bid descriptive information (such as literature, technical data, illustrations, etc) sufficient for LSU to evaluate quality, suitability, and compliance with the specifications. Failure to submit descriptive information may cause bid to be rejected. Any changes made by supplier to a manufacturer's published specifications shall be verifiable by the manufacturer. If items bid do not fully comply with specifications, supplier must state in what respect items deviate. Supplier's failure to note exceptions in its bid will not relieve the supplier from supplying the actual products requested.

11. Bids/Prices/F.O.B. Point

- The bid price for each item is to be quoted on a "net" basis and F.O.B. LSU Destination, i.e. title passing upon receipt and inclusive of all delivery charges, any item discounts, etc.
- Bids other than F.O.B. LSU Destination may be rejected.
- Bids indicating estimated freight charges may be rejected.
- Bids requiring deposits, payment in advance, or C.O.D. terms may be rejected.
- Suppliers who do not quote "net" item prices and who separately quote an overall "lump sum" freight cost or discount for all items shall be considered as submitting an "all-or-none" bid for evaluation and award purposes; and risk rejection if award is made on an item or grouped basis.
- Prices shall be firm for acceptance for a minimum of 30 days, unless otherwise specified. Bids conditioned with shorter acceptance periods may be rejected.
- Prices are to be quoted in the unit/package specified (e.g. each, 12/box, etc), or may be rejected.
- In the event of extension errors, the unit price bid shall prevail.

12. Taxes

Supplier is responsible for including all applicable taxes in the bid price. LSU 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.

13. Terms and Conditions

This solicitation contains all terms and conditions with respect to the purchase of the goods and/or services specified herein. Submittal of any contrary terms and conditions may cause your bid to be rejected. By signing and submitting a bid, supplier agrees that contrary terms and conditions which may be included in its bid are nullified.

14. Supplier Forms/LSU Signature Authority

The terms and conditions of the LSU solicitation and purchase order/contract shall solely govern the purchase agreement, and shall not be amended by any supplier contract, form, etc.

The University's chief procurement officer, or authorized designee, is delegated sole authority to execute/sign any supplier contracts, forms, etc, on behalf of LSU. Departments are expressly prohibited from signing any supplier forms. Any such supplier contracts/forms bearing unauthorized signatures shall be null and void, shall have no legal force, and shall not be recognized by LSU in any dispute arising therefrom. Suppliers who present any such forms to department users for signature without regard to this strict LSU policy may face contract cancellation, suspension, and/or debarment.

15. Awards

Award will be made to the lowest responsible and responsive supplier. LSU reserves the right: (1) to award items separately, grouped, or on an all-or-none basis, as deemed in its best interest; (2) to reject any or all bids and/or items; and (3) to waive any informalities.

All solicitation specifications, terms and conditions shall be made part of any subsequent award as if fully reproduced and included therein, unless specifically amended in the formal contract.

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16. Acceptance of Bid

Only the issuance of an official LSU purchase order/contract, a Notification of Award letter, or a Notification of Intent to Award letter shall constitute the University's acceptance of a bid. LSU shall not be responsible in any way to a supplier for goods delivered or services rendered without an official purchase order/contract or award letter. Bid tabulations may be requested after acceptance of bid.

17. Applicable Law

All contracts shall be construed in accordance with and governed by the laws of the State of Louisiana.

18. Awarded Products/Unauthorized Substitutions

Only those awarded brands and numbers stated in the LSU contract are approved for delivery, acceptance, and payment purposes. Any substitutions require prior approval of the Procurement Office. Unauthorized product substitutions are subject to rejection at time of delivery, post-return at supplier's expense, and non-payment.

19. Testing/Rejected Goods

Supplier warrants that the products furnished will be in full conformity with the specification, drawing or sample, and agrees that this warranty shall survive delivery, acceptance, and use. Any defect in any product may cause its rejection. LSU reserves the right to test products for conformance to specifications both prior to and after any award. Supplier shall bear the cost of testing if product is found to be non-compliant. All rejected goods will be held at supplier's risk and expense, and subject to supplier's prompt disposition. Unless otherwise arranged, rejected goods will be returned to the supplier freight collect.

20. Delivery

Supplier is responsible for making timely delivery in accordance with its quoted delivery terms. Supplier shall promptly notify the LSU Department and/or Procurement Office of any unforeseen delays beyond its control. In such cases, LSU reserves the right to cancel the order and to make alternative arrangements to meet its needs.

21. Default of Supplier

Failure to deliver within the time specified in the bid/award will constitute a default and may be cause for contract cancellation. Where the University has determined the supplier to be in default, LSU reserves the right to purchase any or all goods or services covered by the contract on the open market and to surcharge the supplier with costs in excess of the contract price. Until such assessed surcharges have been paid, no subsequent bids from the defaulting supplier will be considered for award.

22. Supplier Invoices

Invoices shall reference the LSU purchase order number, supplier's packing list/delivery ticket number, shipping/delivery date, etc. Invoices are to be itemized and billed in accordance with the order, and submitted on the supplier's own invoice form. Invoices submitted by the supplier's third party supplier are not acceptable.

23. Delinquent Payment Penalties

Delinquent payment penalties are mandated and governed by Louisiana R.S. 39:1695. Supplier penalties to the contrary shall be null and void, shall have no legal force, and shall not be recognized by LSU in any dispute arising therefrom.

24. Assignment of Contract/Contract Proceeds

Supplier shall not assign, sublet or transfer its contractual responsibilities, or payment proceeds thereof, to another party without the prior written consent and approval of the Procurement Office. Unauthorized assignments of contract or assignments of contract proceeds shall be null and void, shall have no legal force, and shall not be recognized by LSU in any dispute arising therefrom.

25. Right to Piggyback

Where this solicitation may name one department as the primary contract user, LSU reserves the right to authorize additional departments/campuses to use the contract as their needs arise; and Vendor shall honor all such purchase orders.

26. Contract Cancellation

LSU has the right to cancel any contract for cause, in accordance with procurement 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 supplier; (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. LSU has the right to cancel any contract for convenience at any time by giving thirty (30) days written notice to the supplier. In such cases, the supplier shall be entitled to payment for compliant deliverables in progress.

27. 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.

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28. Equal Employment Opportunity Compliance

By submitting and signing this bid, supplier agrees to abide by the requirements of the following as applicable: Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972; federal Executive Order 11246; federal 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 Act of 1975; the Americans with Disabilities Act of 1990. Supplier agrees not to discriminate in its employment practices, and will render services under any contract entered into as a result of this solicitation without regard to race, color, religion, sex, age, national origin, veteran status, political affiliation, handicap, disability, or other non-merit factor. Any act of discrimination committed by supplier, 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.

29. Mutual Indemnification

Each party hereto agrees to indemnify, defend, and hold the other, its officers, directors, agents and employees harmless from and against any and all losses, liabilities, and claims, including reasonable attorney's fees arising out of or resulting from the willful act, fault, omission, or negligence of the indemnifying party or of its employees, contractors, or agents in performing its obligations under this agreement, provided however, that neither party hereto shall be liable to the other for any consequential damages arising out of its willful act, fault, omission, or negligence.

30. Certification of No Suspension or Debarment

By signing and submitting this bid, supplier certifies that its company, any subcontractors, or principals thereof, are not suspended or debarred under federal or state laws or regulations. A list of parties who have been suspended or debarred by federal agencies is maintained by the General Services Administration and can be viewed on the internet at www.sam.gov.

31. Right to Audit

The University shall be entitled to audit the books and records of a supplier or any subcontractor under any negotiated contract or subcontract to the extent that such books and records relate to the performance of such contract or subcontract. Such books and records shall be maintained by the supplier for a period of five (5) years from the date of final payment under the prime contract and by the subcontractor for a period of five (5) years from the date of final payment under the subcontract, pursuant to LAC 34:XIII.1603.

32. Diverse Supplier

(a) Supplier understands that LSU, as the state's flagship university, has an interest in providing entrepreneurial opportunities to diversity-owned businesses. The university is dedicated to promoting the growth and development of minority, women, and small and historically underutilized businesses ("Diverse Businesses") by providing opportunities to participate in university contracts.

(b) In support of this commitment, the supplier shall use good faith and best efforts to provide opportunities to Diverse Businesses that are either certified by the state or another certifying agency in a diverse category, as a subcontractor or supplier under this agreement.

(c) If applicable, supplier shall provide LSU with a list of diversity-owned businesses during each contract year, the list of businesses should identify: (1) the name of the business; (2) its principal office or address; (3) the owner(s); and (4) the services or goods that it may provide or supply and the value of the goods or services procured from the businesses included on supplier's list.

(d) To the extent that any federal or state law, rule, or regulation would require that this section be modified or voided, the parties agree that such provision can be amended or severed from the agreement without affecting any of the other terms of the agreement.

33. Data Privacy

By signing and submitting this bid, I hereby authorize that all information provided in this solicitation, including any and all personal or company data may be shared with LSU departments, suppliers and other governmental agencies to facilitate procurement transactions. This data will be retained according to LSU's retention schedule. To learn more about privacy at LSU, please see the [LSU Privacy Statement](#).

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ITEM NO.	ITEM DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED AMOUNT
<p>UNLESS SPECIFIED ELSEWHERE, SHIP ALL ITEMS TO: LSU 6980 Jefferson Hwy Baton Rouge, LA 70806</p>					
1	<p>BASE BID - Size-exclusion Chromatography (SEC), Multi-angle light scattering (MALS), Refractive Index detector (RI) per specifications.</p> <p>Specify Manufacturer / Brand Bid: _____</p> <p>Specify Model / Number Bid: _____</p>	1	Each	\$ _____	\$ _____
2	<p>ALTERNATE BID A - Autosampler per specifications.</p> <p>Specify Manufacturer / Brand Bid: _____</p> <p>Specify Model / Number Bid: _____</p>	1	Each	\$ _____	\$ _____
3	<p>ALTERNATE BID B - Size-exclusion Chromatography (SEC) per specifications.</p> <p>Specify Manufacturer / Brand Bid: _____</p> <p>Specify Model / Number Bid: _____</p>	1	Each	\$ _____	\$ _____
4	<p>ALTERNATE BID C - Size-exclusion Chromatography (SEC) with autosampler per specifications.</p> <p>Specify Manufacturer / Brand Bid: _____</p> <p>Specify Model / Number Bid: _____</p>	1	Each	\$ _____	\$ _____

Specifications for Size Exclusion Chromatography Multi Angle Light Scattering (SEC-MALS) Instrument

Purpose/Scope of Purchase:

The size exclusion chromatography multi-angle-light scattering (SEC-MALS) instrument will be coupled with a small angle X-ray scattering (SAXS) beamline as an additional measurement method downstream of the whole SEC-MALS setup.

Due to spatial constraints at the beamline (column close to the X-ray sample chamber), the setup must fit in an area of 35 cm width and 70 cm depth. Or, if able to be split in two parts, one stack of the setup must fit in the above mentioned 35 cm times 70 cm area. The area available for the second stack is 40 cm wide and 70 cm in depth.

The user must be able to update/upgrade the firmware for all devices.

In order to clean the SAXS flow-through cell, besides the solvent of the sample, four additional solvents are required (water, aqueous Hellmanex solution, acetone, and isopropanol) - some in large quantities (several mL). Therefore, there must be the option to bypass the SEC columns and for a cleaning run of the downstream connected SAXS flow-through cell. This can be achieved for example by a cleaning routine of the autosampler and/or a quaternary pump. An alternative is to use preexisting equipment (MUX 10-way switching valve (Elveflow), Masterflex L/S peristaltic pump with a 77200-60 pump head (Cole-Palmer)) or an alternative pump and selection valve setup that can be controlled by the software.

Award Information:

Base Bid is outlined below. There are three alternates listed. The University reserves the right to accept Alternate Bid A, Alternate Bid B, or Alternate Bid C OR a combination of any of the three - whichever it deems in its best interest.

Base Bid:

- **Size-exclusion Chromatography (SEC) per specifications below.**
- **Multi-angle light scattering (MALS) per specifications below.**
- **Refractive Index detector (RI) per specifications below.**

Alternate Bids:

- **Alternate Bid A: Autosampler per specifications below instead of the manual injection valve.**
- **Alternate Bid B: Size-exclusion Chromatography (SEC) per specifications below, but made with bio-inert components and materials.**
- **Alternate Bid C: Size-exclusion Chromatography (SEC) with autosampler, but made with bio-inert components and materials.**

Size-exclusion Chromatography (SEC) must include -

- a. Manual injection valve:
 - The manual injection valve must have a minimum loop volume of 0.2mL.
 - The cleaning process of the SAXS capillary needs the four solvents, mentioned in the scope of purchase. If the cleaning process is handled through the manual injection valve, a quaternary isocratic pump or any other pump and selection valve combination compatible needs to be added allowing the automation of the cleaning process by the software.
- b. Pump, degasser, and solvent tray:
 - The isocratic pump must be able to reach 600 bar.
 - A degasser for the solvent must be available, either as a separate component or included in the isocratic pump compartment.
 - The flowrate range must be between 0.001 to 10.0 ml/min.
 - The cleaning process of the SAXS capillary needs the four solvents, mentioned in the scope of purchase. If the cleaning process is handled through isocratic pump, it must be possible to supply the four solvents by a quaternary pump.
 - It must be possible to use the setup without the chromatography part/ bypassing the columns. This can be achieved for example by an automated switching valve.
 - The setup must include a solvent tray.
 - An easy switch between two sets of columns with an (manual) switching valve is preferable.
- c. Columns:
 - The SEC-setup must include a pre-column and a column for aqueous environments with a molecular separation range of 100 Da - 1.2 MDa. These columns will be mainly used for proteins and polymers in aqueous solution.
 - An additional filter in front of the column for aqueous solution must be included.
- d. Column oven
 - The temperature range must be between 4 to 80°C. A chiller for counter cooling/heating is on site.
 - The column oven must be able to fit 2 sets of columns with a column length of 30cm including the connectors of these columns.

Multi-angle-light scattering (MALS) detector must include -

- The Multi-Angle Light Scattering (MALS) detector must perform static light scattering measurements at 8 or more angular locations, simultaneously, in order to quantify molar mass of macromolecules in solution from 200 Da to 100 MDa and to determine the radius of gyration from 10 nm to 500 nm.
- The calibration of the MALS instrument should be absolute using a uniform fluid such as toluene, commonly available with high quality, rather than calibrating against a molar mass standard. Because the latter technique is relative and depends on precise knowledge of concentration and refractive index increment of the standard in each specific solvent.
- The MALS instrument should be suitable for operation at an extended temperature range (same as the RI detector). In case of temperatures below ambient, down to temperatures of 4 °C, condensation due to the air humidity must be avoided.
- The MALS-detector and the corresponding software must be able to be utilized for triple detection in future upgrades.
- The MALS detector and software must provide a means of accepting external signals from a GPC, FPLC, HPLC, SEC or FFF system in order to utilize auto-inject triggers or UV analog signals. This permits synchronization between any brand of liquid chromatography system and the MALS detection, as well as utilization of the UV signal for determination of concentration and conjugate or copolymer composition.
- The MALS instrument must be capable of interfacing to commercially available hardware and software suitable for carrying out automated composition-gradient or concentration-gradient measurements, acquiring and analyzing the data to determine molar mass, rms radius, second virial coefficient, third virial coefficient, dn/dc (differential refractive index), reaction kinetics, and the affinity and stoichiometry of macromolecular interactions.
- The MALS instrument should preferably provide a means of removing particles adhering to the MALS flow cell interior surfaces so as to minimize detector noise due to light scattering from these particles, and to prolong time between manual maintenance.

Refractive Index detector (RI) must include -

- The refractive index detector must be able to measure concentrations and dn/dc which are required as input for the MALS data analysis.
- Besides the ambient condition an extended temperature control range is preferred. It would be best that the temperature range matches the one available for the autosampler/ column oven.
- The RI-detector and the corresponding software must be accessible for a triple detection option in the future.

Maintenance and accessory kits for the SEC-MALS setup: The maintenance and accessory kits needed for operation and maintenance of the SEC-MALS must be included.

Software:

- In order to run the SEC-MALS setup with the SAXS beamline, the software/setup must be able to synchronize with the SAXS software with a computer or physical trigger signal to indicate the start a predefined SEC-MALS run. The programming for the synchronization of this signal with the SAXS software will be implemented by the buyer.
- The software must be able to synchronize the autosampler or manual injection valve, the chromatography, and the RI- and MALS- detectors in order to provide an automatic run of the SEC-MALS setup. The cleaning of the SAXS flow through cell should bypass the column and must be run by a script or software. Alternatively, a software and hardware platform for connection with other devices (like the Elveflow switch valve) must be included.
- The software must include operation of the refractive index detector and the MALS-detector.
- The software must be able to analyze RI- and MALS-detector signals to calculate the molecular weight distribution and the radius of gyration.
- The software must be able to perform triple detection when other standard detectors like viscosimetry and UV are added in the future. The software must be able to analyze the data to obtain the variables from the combination of methods, like the co-polymer composition.
- Software updates for a minimum of 5 years must be included.

The following applies to all parts of Base Bid:

- **Delivery, Onsite Installation, and Onsite Training:** Supplier must deliver all outlined items and provide onsite installation of all equipment, hardware, and software. Supplier must provide onsite training of all equipment, hardware, and software to faculty members and equipment users. Training shall last a minimum of 1 day.
- **Warranty:** Supplier must provide at least a one-year warranty that includes parts and labor.

Alternate Bid A:

Autosampler:

- Must have temperature control between 4°C and 40°C. A range of 4°C to 80°C is preferable. A chiller for counter cooling/heating is already on site.
- An operational range of pH 1 - 12 must be covered.
- Must be able to operate with sample vials.
- Must have a needle wash and low carry over (40 ppm or less).
- The cleaning process of the SAXS capillary needs the four solvents, mentioned in the scope of purchase. Therefore, the materials in the autosampler must be able to withstand these solvents.
- Must be able to inject a volume of 0.2mL.

Alternate Bid B:

Size-exclusion Chromatography (SEC) per specifications above, but made with bio-inert components and materials.

Alternate Bid C:

Size-exclusion Chromatography (SEC) with autosampler per specifications above, but made with bio-inert components and materials.

The following applies to all parts of Alternate Bids:

- **Delivery, Onsite Installation, and Onsite Training:** Supplier must deliver all outlined items and provide onsite installation of all equipment, hardware, and software. Supplier must provide onsite training of all equipment, hardware, and software to faculty members and equipment users. Training shall last a minimum of 1 day.
- **Warranty:** Supplier must provide at least a one-year warranty that includes parts and labor.



Insurance Minimum Limits and Requirements for Standard Contractor/Vendor Agreements

INSURANCE

The Board of Supervisors of Louisiana State University and Agricultural and Mechanical College (henceforth referred to as "University") requires contractors/vendors to procure the below minimum limits. The insurance must be maintained for the duration of work performed for or on behalf of the University, and for the length of any agreement with the University. Failure to maintain the required insurance throughout the term of the Agreement shall be a material breach, and shall entitle University to all remedies provided for in the Agreement, or by operation of law. The minimum insurance requirements described herein do not in any way limit the contractor/vendors' financial responsibilities as outlined in the agreement's Indemnification requirements. Therefore, the contractor/vendor may opt to have broader coverage and limits to satisfy its financial obligations.

Workers' Compensation

Workers' Compensation insurance shall be in compliance with the laws of the state in which the company is domiciled. Employer's Liability shall be included with a minimum limit of \$1,000,000 per accident/per disease/per employee. If Contractor/vendor is exempt from workers' compensation or fails to provide appropriate coverage, then the Contractor/vendor is or agrees to be solely responsible and hold harmless the University for the injuries of any owners, agents, volunteers, or employees during the course of the agreement.

Commercial General Liability (CGL)

Commercial General Liability insurance shall be maintained on an "occurrence" basis, including property damage, bodily injury, products & completed operations, and personal & advertising injury with limits not less than \$1,000,000 per occurrence and \$2,000,000 aggregate on Insurance Services Office Form CG 00 01, ISO 2007 edition or equivalent.

Automobile Liability

Automobile Liability Insurance shall have a minimum combined single limit per accident of \$1,000,000 on ISO form number CA 00 01 or equivalent. This insurance shall include third-party bodily injury and property damage liability for owned, hired and non-owned vehicles.

Excess Insurance

Umbrella or Excess insurance may be used to meet the minimum limit requirements for liability insurance.

Other Insurance Requirements

Additional Insured Status

The University is to be listed as an Additional Insured on the Commercial General Liability (must use an endorsement at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10 and CG 20 37 forms with edition date 2004 if later revisions used). See *Verification of Coverage* section on how the University should be listed as an Additional Insured.

Waiver of Subrogation/Recovery

All insurances shall include a waiver of subrogation/recovery in favor of the University.

Primary Coverage and Limits of Insurance

For any claims related to work performed for or on behalf of the University or related to an agreement/purchase order, the contractor/vendor's insurance coverage shall be primary insurance as respects to the University. Any applicable insurance or self-insurance maintained by the University shall be excess of the Contractor/vendor's insurance and shall not contribute with it.

Subcontractors

Subcontractors of the Contractor/vendor shall be subject to all of the requirements stated herein. Contractor/vendor shall include all subcontractors as insureds under its policies or shall be responsible for verifying insurance coverages and limits and maintaining Certificates of Insurance for each subcontractor. The University reserves the right to receive from the Contractor/vendor copies of subcontractors' certificates.

Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions above \$25,000 must be approved by the University or reduced prior to the commencement of work. The University may require the Contractor/vendor to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A- VII, unless otherwise approved by the University.

Verification of Coverage

The University shall be listed as Additional Insured and Certificate Holder as follows:

**The Board of Supervisors of Louisiana State
University and Agricultural & Mechanical College
213 Thomas Boyd Hall
Baton Rouge, LA 70803**

Certificates of Insurance shall be furnished to the University evidencing the insurance required herein including amendatory endorsements. The University's failure to obtain the required documents prior to the work beginning or acceptance of a non-compliant certificate shall not waive the Contractor/vendor's obligation to have in place the required insurances or to provide the certificate. The University reserves the right to require certified copies of all the insurance policies, including endorsements.

Special Risks or Circumstances

LSU reserves the right to consider alternate coverage or limits and to modify these requirements, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.



Insurance Minimum Limits and Requirements for Standard Supplier Agreements (no services to be performed)

The Board of Supervisors of Louisiana State University and Agricultural and Mechanical College (henceforth referred to as "University") requires contractors/vendors to procure the below insurance. The insurance must be maintained for the duration of work performed for or on behalf of the University, and for the length of any agreement with the University. Failure to maintain the required insurance throughout the term of the Agreement shall be a material breach, and shall entitle University to all remedies provided for in the Agreement, or by operation of law. The minimum insurance requirements described herein do not in any way limit the contractor/vendors' financial responsibilities as outlined in the agreement's Indemnification requirements; therefore, the contractor/vendor may opt to have broader coverage and limits to satisfy its financial obligations.

Workers' Compensation

Workers' Compensation insurance shall be in compliance with the laws of the state in which the company is domiciled. Employer's Liability shall be included with a minimum limit of \$1,000,000 per accident/per disease/per employee. If Supplier is exempt from workers' compensation then the Supplier is or agrees to be solely responsible and hold harmless the University for the injuries of any owners, agents, volunteers, or employees during the course of the agreement.

Commercial General Liability (CGL)

Commercial General Liability insurance shall be maintained on an "occurrence" basis, including property damage, bodily injury, products & completed operations, and personal & advertising injury with limits not less than \$1,000,000 per occurrence and \$2,000,000 aggregate on Insurance Services Office Form CG 00 01, ISO 2007 edition or equivalent.

Automobile Liability

Automobile Liability Insurance shall have a minimum combined single limit per accident of \$1,000,000. This insurance shall include third-party bodily injury and property damage liability for owned, hired and non-owned vehicles.

Excess Insurance

Umbrella or Excess insurance may be used to meet the minimum limit requirements for liability insurance.

Other Insurance Requirements

Additional Insured Status

The University is to be listed as an Additional Insured on the Commercial General Liability policy.

Primary Coverage

For any claims related to an agreement/purchase order, the suppliers' insurance coverage shall be primary insurance as respects to the University. Any applicable insurance or self-insurance maintained by the University shall be excess of the supplier's insurance and shall not contribute with it.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A- VII, unless otherwise approved by the University.

Special Risks or Circumstances

LSU reserves the right to consider alternate coverage or limits and to modify these requirements, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.