

Mississippi State University
Notice of Proposed Sole Source Purchase

256-003

Mississippi State University anticipates purchasing the item(s) listed below as a sole source purchase. Anyone objecting to this purchase shall follow the procedures outlined below.

1. Commodity or commodities to be purchased (make, model, description):

Shimadzu Preparative Spectrofluorophotometer SFC HPLC System, RF-6000 Instrument. These are manufacture refurbished product that means it comes with free installation and 1 yr warranty.

2. Explanation of the need to be fulfilled by this item(s), how is it unique from all other options, and why it is the only one that can meet the specific needs of the department:

Currently, the department lacks a preparative Supercritical Fluid Chromatography (prep-SFC) system, which represents a critical gap in our ability to efficiently and economically separate complex mixtures of organic and inorganic compounds. Prep-SFC offers a greener, faster, and more cost-effective alternative to traditional chromatography methods, using significantly less solvent and enabling high-throughput purification. Its acquisition will directly support a wide range of synthetic and analytical research programs and greatly enhance our ability to isolate pure compounds essential for both fundamental research and applied innovation.

In addition, we have successfully secured a state-of-the-art Shimadzu RF-6000 spectrofluorophotometer—an advanced instrument that significantly expands our fluorescence spectroscopy capabilities. This system offers high-speed 3D measurements, ultrafast scanning, and exceptional sensitivity, enabling a broad array of experiments that are currently beyond our reach. Its superior performance and reliability make it an essential tool for research areas including photochemistry, materials science, biochemistry, and trace-level detection.

Beyond the new capabilities they provide, both instruments integrate seamlessly with our existing infrastructure. A large portion of our departmental instrumentation is already based on Shimadzu platforms and operates using Shimadzu's proprietary LabSolutions software. Adding these systems ensures full compatibility, minimizes training and maintenance overhead, and creates a cohesive and user-friendly analytical environment for faculty and students.

Together, these acquisitions represent a strategic investment that not only fills critical gaps in our current instrumentation suite but also future-proofs our research infrastructure by expanding our capacity in key growth areas. No comparable instruments currently exist within the department or on campus that meet this specific combination of technical performance, compatibility, and long-term strategic value.

3. Name of company/individual selling the item and why that source is the only possible source that can provide the required item(s):

Shimadzu Scientific Instruments. Shimadzu is the only manufacturer that meet the requirements for the needs and quality of the department.

4. Estimated cost of item(s) and an explanation why the amount to be expended is considered reasonable:

The total cost for the proposed Shimadzu instruments is approximately **\$55,000**, which reflects a **limited-time discount of nearly 78%** off the list price (originally valued at ~\$245,000). This significant cost reduction has been made possible through a special offer available only during **July 2025** for certified refurbished systems.

We believe this expenditure is highly reasonable and represents exceptional value for several reasons:

- **Cost-effectiveness:** Purchasing refurbished equipment allows us to access advanced analytical capabilities at a fraction of the cost of new instruments, enabling the department to stretch limited funds while maximizing research capacity.
- **Performance and reliability:** These instruments have been professionally refurbished and are known for their robustness and long service life. Shimadzu is a highly reputable vendor with a track record of producing durable, high-performance systems.
- **Warranty and support:** The purchase includes a full **1-year warranty** and **free installation**, providing us with the same service and operational assurance typically associated with new instruments.
- **Strategic fit:** These refurbished instruments integrate seamlessly into our existing Shimadzu-based infrastructure, which further reduces training costs and ensures long-term support.

In sum, the decision to invest in refurbished equipment reflects both **fiscal responsibility** and **strategic planning**, offering the department enhanced capabilities without compromising quality or support.

5. Explanation of the efforts taken by the department to determine this is the only source and the efforts used to obtain the best possible price:

The department conducted a thorough review of available options from multiple vendors to ensure both cost-effectiveness and technical suitability. As documented in the attached competing quotes, the offer from Shimadzu for the refurbished instruments is **several-fold less expensive** than comparable new systems from other manufacturers, without compromising essential performance features.

This particular offer is the result of **direct negotiation with the vendor**, who extended a **limited-time, heavily discounted package**—including a 1-year warranty and free installation—for professionally refurbished units. No other vendor was able to match this combination of price, performance, warranty, and compatibility with our existing Shimadzu-based infrastructure.

Given the urgency to enhance our analytical capabilities within a constrained budget, and after comparing multiple quotes, it was determined that this is the **only viable source** that meets both our technical and financial requirements. Additional quotes are included for reference and to demonstrate the cost-effectiveness of this purchase.

Any person or entity that objects and proposes that the commodity listed is not sole source and can be provided by another person or entity shall submit a written notice to:

Jennifer Mayfield, CPPO

Director of Procurement Services, Chief Procurement Officer

jmayfield@procurement.msstate.edu

Subject Line must read “Sole Source Objection”

The notice shall contain a detailed explanation of why the commodity is not a sole source procurement. Appropriate documentation shall also be submitted if applicable.

If after a review of the submitted notice and documents, MSU determines that the commodity in the proposed sole source request can be provided by another person or entity, then MSU will withdraw the sole source request publication from the procurement portal website and submit the procurement of the commodity to an advertised competitive bid or selection process.

If MSU determines after review that there is only one (1) source for the required commodity, then MSU will appeal to the Public Procurement Review Board. MSU will have the burden of proving that the commodity is only provided by one (1) source.

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