

Mississippi State University
Notice of Proposed Sole Source Purchase

256-085

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):

Anton Paar Dynamic Mechanical Analysis (DMA) Module:

- Convection Temperature Device (CTD 600 for XX2) – Temperature range: -160 to 600 °C
- Measuring Drive Linear DMA (Part Number 183549)
- EVU 20 - Low Temperature Option (CTD 600 MDR)
- Nitrogen Liquid Container FSB-50S (Part Number 301714)
- Solid Rectangular Fixture SRF5/LD (Complete System for XX2) – For DMA in tension and torsion mode, for configuration with linear drive
- Box for Lower Drive

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:

This DMA module pairs with Anton Paar Modular Compact Rheometer (MCR 702 Evolution (MCR 702e) Rheometer with PTD 180 MD Peltier temperature control system) that Dr. Santanu Kundu (CHE) purchased in Fall 2023. The modular design of the MCR 702e permits the addition of accessories for full linear DMA measurements, including torsional, extensional, three-point bending, cantilever, and compression measurements over a temperature range of -160 to 1000C. These capabilities are not available on other commercially available rheometers and are required to address planned and future research into polymeric and composite materials. The unique capability afforded by the MCR 702e DMA design to directly measure Poisson's Ratio in one sample loading of novel materials developed within the department is not available on any other commercially available device. Thus, by purchasing the Anton Paar DMA Module, we realize a significant cost savings by not having to purchase a stand-alone instrument. In addition, having DMA

capabilities in the Swalm School of Chemical Engineering supports the polymer research goals in both the Kundu and Jessop lab groups.

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

Anton Paar USA (Ashland, VA, USA) is the sole authorized distributor of Anton Paar products in the USA.

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

This Anton Paar DMA Module will cost \$64,800. By purchasing from Anton Paar, we can take advantage of several cost-saving measures:

- 25% Accessory Discount on Anton Paar manufacturing accessories purchased within two years of installation of the MCR rheometer (This Accessory Discount expires on 05/01/2026.)
- Refurbished demo items

We can capitalize on these cost-saving measures for the Anton Paar Dynamic DMA Module as follows:

- Convection Temperature Device – **25% discount**
- Measuring Drive Linear DMA – refurbished demo item at **50% discount**
- EVU 20 - Low Temperature Option – **25% discount**
- Nitrogen Liquid Container FSB-50S – refurbished demo item at **65% discount**
- Solid Rectangular Fixture SRF5/LD (Complete System for XX2) – **25% discount**
- Box for Lower Drive – **100% discount**

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 quote for a stand-alone Anton Paar Modular Compact Rheometer (MCR 503) for high-end quality control, advanced R&D, and entry-level DMA is \$128,837.60, which includes a 30% discount. Once we realized that the Anton Paar Modular Compact Rheometer was already housed in the Swalm Engineering Building, we worked with Dr. Kundu to obtain a quote for the Anton Paar Dynamic DMA Module.

The quote for a stand-alone TA Instruments Academic Discovery DMA850 for research-quality DMA is \$94,900 even after a \$54,000 academic discount.

We contacted Perkin Elmer several times regarding a quote for their DMA but did not receive a response to any of our queries.

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 & Contracts

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.