

Mississippi State University
Notice of Proposed Sole Source Purchase
234-106

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):

A Thermo Scientific Nicolet Smart iXT attenuated total reflectance (ATR) Accessory made for an Si50 FTIR Spectrometer.

This is a single bounce attenuated total reflectance device that enables the full capabilities of the FTIR with diamond, ZnSe, or Ge plates. This allows the FTIR to analyze solid or liquid materials rather than only in-line gas effluents. This unit has an automatic set up and recognition chip for the software.

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:

The FTIR currently in use is capable of in-line gas sampling and analysis. In order to use this FTIR for solid materials and liquid sample types, the ATR accessory must be used. Many of our materials are aerosol particles in line with an airflow system; however, the need for analyzing solid and liquid particles produced by certain processes after retention is part of our scope of work for the soot and combustion studies, the salt deliquescence studies, and the degradation profile studies.

The Nicolet Smart iXT ATR accessory is the only unit made for use with the Nicolet Si50 FTIR Spectrometer that features a recognition chip for immediate setup and proper software and hardware use. This oven is the only option for instrument compatibility and communication with software.

Additionally, the instrument has increased throughput that is necessary for our sampling requirements. The monolithic and AR-coated diamond's higher energy throughput (variable based on sample type) is the ratio of the energy transmitted of the accessory compared to the open beam path, and for all sample types, exceeds other accessories for other FTIR units.

Compared to laminate diamond in other accessories and systems, the expanded range and throughput without spectral loss are unique.

This accessory also comes with a validated package to enable traceability of our measurement uncertainty calculations, as required by our Quality Assurance program.

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

ThermoScientific is the vendor for the Thermo Scientific Nicolet. Our sales representative is King Chambers.

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

Our quoted price for this item is \$10,090.50 This is the validated instrument for our QA needs.

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:

All searches for any source and vendors for Thermo Scientific Nicolet products revealed no options for purchase other than the manufacturer. Email confirmation of the only source from the manufacturer of the unit was provided and is attached.

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.