#### Mississippi State University Notice of Proposed Sole Source Purchase 234-53

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 Unisoku CoolSpek cryostat for spectrophotometers, model USP-203, with liquid nitrogen reservoir, temperature controller, magnetic stirrer, and adapter for Perkin-Elmer Lambda 900 spectrometer.

# 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 is a cryostat which is made to be used with standard glass cuvettes for absorption spectroscopy measurements while the cuvette is still accessible so that reagents can be added in order to monitor reactions and detect transient intermediates. This will allow us to study reaction mechanisms of transition metal complexes in more detail. It comes with an adapter so that it easily mounts into the spectrometer (Perkin-Elmer Lambda 900) which we already own.

This cryostat is unique from all other options because it is the only commercially available cryostat which meets all of these criteria which are necessary for our application: (i) can be used at controllable temperatures down to -80 °C and up to 100 °C; (ii) can be used with liquid samples in standard cuvettes; (iii) can be mounted in commercial spectrometers; and (iv) the sample remains accessible after cooling so that reagents can be injected at low temperature during the measurement. The last criteria is particularly important; although other cryostats that can measure liquid samples at low temperatures exist, in all other cases the sample must be removed from the cryostat and instrument in order to access it to add reagents, which is inadequate for our purposes. For this reason the CoolSpek cryostat is used universally in our field for this type of experiment.

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

The distributor for the instrument is Worldwide Exchange, LLC. The Unisoku company is based in Japan and Worldwide Exchange, LLC is the only US distributor for this product.

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

\$18,106; this amount is comparable to the cost of other instrumentation and equipment of similar complexity.

## 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:

We have searched for other companies that sell low-temperature cryostats, and after researching in detail and contacting several of these companies, we have confirmed that none of the available equipment from other companies meets the needs of our application as described above. We have contacted researchers in other universities in the US who carry out similar experiments and who have purchased this equipment and confirmed that it was purchased at a similar price and from the same source.

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 Interim Deputy Director of Procurement & Contracts <u>jmayfield@procurement.msstate.edu</u> 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.