

# UNIVERSITY OF MISSISSIPPI

## Notice of Intent to Certify Sole Source

#SS 313

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

**Commodity or commodities to be purchased (manufacturer, model, description):**

**Hitachi SU7000 variable pressure Schottky field emission scanning electron microscope (SEM) manufactured by Hitachi High-Tech America**

**The need to be fulfilled by this item(s) and why it is the only one that can meet the specific needs of the department:**

The nature of graphene as a material requires a microscope with specific capabilities that only the Hitachi SU7000 can provide including: 1-Guaranteed resolution specification (SE resolution not worse than 0.9nm @ 1kV, 0.8nm @ 15kV) is fulfilled without the application of a negative stage bias. 2-Accelerating voltage from 10 V to 30kV without the application of a negative stage bias. 3-Magnification from 20 to 2,000,000x 4-Capable of 200nA probe current. 5-Hybrid (electrostatic / magnetic) objective lens, not leaking a magnetic field into the sample chamber at any operating condition. 6-All detectors – including EDX – can be simultaneously used at a common working distance of 6mm for highest productivity. No negative stage bias is required to feed the in-column detectors. 7-Up to 6 signal channels can be simultaneously acquired from at least 5 different detectors, displayed and saved into individual graphics files. 8-High definition capture up to 10240 x 7680 pixels can be applied to preserve fine details of surface information. 9-Maximum sample size for stage-door-loading of 200mm diameter or 80mm height. 10-The stage has an X/Y traverse range of not less than 135x100mm<sup>2</sup>. The Hitachi SU7000 is the only SEM that provides these features, and it is highly needed for our various research activities. The research faculty have different material research needs, and examples of the materials intended to be analyzed by the instrument are: nanocomposites, cement-based materials and cement components, asphalt, polymers, and biowaste.

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

Hitachi High-Tech America, Inc. Chris Watters ([chris.watters@hitachi-hightech.com](mailto:chris.watters@hitachi-hightech.com)). Hitachi High-Tech America, Inc is the only authorized seller of the SU7000 in the USA.

**Why the amount to be expended for the commodity is reasonable:**

The price quoted is comparable to the price other customers have paid adjusted for inflation from the time of purchase.

**Efforts that the agency went through to obtain the best possible price for the commodity:**

A further reduction in price was negotiated.

## **Submission Instructions and Format of Response from Objecting Parties:**

**Interested parties who have reason to believe that the item(s) above should not be certified as a sole source should provide information in the following format for UM to use in determining whether or not to proceed with awarding the Sole Source purchase.**

### **1.1 Interested Party Information**

**1.1.1 Contact Name, Phone Number, Address and email address**

**1.1.2 Company Website URL, if applicable**

### **1.2 Objection to Sole Source Certification**

**1.2.1 Interested parties must present specific objections to the Sole Source certification using the criteria listed above.**

**1.2.2 A statement regarding the Interested Party's capabilities as related to this Sole Source Certification Request.**

**1.3 Comments will be accepted at any time prior to Monday, May 22, 2023 at 10:00 am (Central Time) to Frank Kemp at [fbkemp@olemiss.edu](mailto:fbkemp@olemiss.edu) (with Cc: to [purchase@olemiss.edu](mailto:purchase@olemiss.edu)) at The University of Mississippi Procurement Services Department, 164 Jeanette Phillips Drive, PO Box 1848, University, Mississippi 38677. Responses may be delivered by hand, via regular mail, overnight delivery, or e-mail. The envelope or email should reference the sole source number. U M WILL NOT BE RESPONSIBLE FOR DELAYS IN THE DELIVERY OF RESPONSES. It is solely the responsibility of the Interested Parties that responses reach UM on time. Interested Parties may contact Katherine Jones to verify the receipt of their Responses. Responses received after the deadline will be rejected.**

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

**If UM determines after review that there is only one (1) source for the required commodity, then UM will appeal to the Public Procurement Review Board for approval to purchase.**