

# UNIVERSITY OF MISSISSIPPI

## Notice of Intent to Certify Sole Source

#SS 366

**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):**

Thermal CVD by Blue Wave Semiconductors, INC. Model TCVD-2D-2.

**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:**

This equipment is required to advance our research capabilities from 0D to 2D materials synthesis at Center for Graphene Research & Innovation (CGRI) laboratory. Research faculty needs to synthesize monolayer 2D graphene and other transition-metal dichalcogenide materials such as MoS<sub>2</sub>, Ws<sub>2</sub> and WSe<sub>2</sub> using this instrument by chemical vapor deposition technique. Based on all the available options and versatile research needs, the only instrument that could facilitate our synthesis requirement to grow different 2D materials by CVD technique is the Thermal CVD by Blue Wave Semiconductors. Our requirement is to deposit high quality 2D layers of graphene for 2D device fabrication in our lab. This one TCVD system can also be used for graphene as well as other 2D materials including MoS<sub>2</sub> and WSe<sub>2</sub> fabrication. Blue Wave's design allows us to easily exchange quartz tube reactors (exchangeable reactor tube supplied by Blue Wave) including their seals to avoid cross contamination. This is the most important trait among other technical requirements needed for our research. We reviewed features in other competing products in the market. None of the companies contacted and their products meet our requirements satisfactorily compared to Blue Wave TCVD product.

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

Blue Wave Semiconductors, INC., Contact: RD Vispute. RD Vispute. Ph.D. Blue Wave Semiconductors, Inc. 1450 South Rolling Road, BW Tech, UMBC TechCenter-SOUTH, Suite 4064 Baltimore MD 21227, USA Phone: 1 (301) 706 8833, FAX: 1 (240) 414 2607 [www.bluewavesemi.com](http://www.bluewavesemi.com) We have contacted several vendors about our specific needs, which vary in the materials applications and science needs. The only company that could provide such instrument capabilities is the Thermal CVD by Blue Wave Semiconductors, INC. Model TCVD-2D-2.

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

The purchase amount, based on our understanding, price is more favorable compared to similar instruments lacking the necessary features for our research endeavors.

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

We engaged in negotiations with the vendor regarding the ultimate price. Additionally, the vendor graciously extended a favorable discount to us, resulting in a reduction of the overall expenses.

## **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 Wednesday, March 13<sup>th</sup>, 2024 at 10:00 am (Central Time) to Frank Kemp or Jeff Wells at [bids@olemiss.edu](mailto:bids@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 Frank Kemp or Jeff Wells 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.**