



**THIS IS NOT  
AN ORDER**

**REQUEST FOR BIDS/PROPOSALS COVERSHEET**  
**THE UNIVERSITY OF SOUTHERN MISSISSIPPI**  
**Procurement and Contract Services**  
**118 College Drive #5003, Hattiesburg, Mississippi 39406-0001**

**Date:** February 10, 2023

Name: \_\_\_\_\_

**BID No. 23-21**

Company: \_\_\_\_\_

THE UNIVERSITY OF SOUTHERN MISSISSIPPI is considering the purchase of the following item(s). We ask that you submit your bid and retain one copy for your files. Right is reserved to accept or reject any part of your bid. Your quotation will be given consideration if received in Bond Hall, Room 214 on or before:

Address: \_\_\_\_\_

2:00 p.m. CT

City/State/Zip: \_\_\_\_\_

TERMS - Bidder should state terms of sale. Our terms are 2% ten days, net 45 days.

March 1, 2023

These terms will apply per Mississippi law.

AWARDING CONTRACT - Cash terms will not be used as a basis for awarding contracts; however, the University will accept cash discounts when earned.

**Buyer:** Deidre Edwards

**NOTE:** If you cannot quote on the exact material shown, please indicate any exception giving brand name and complete specifications of any alternate. If additional space is required, use a separate sheet or letter of transmittal.

ITEM	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL NET PRICE
		<p align="center"><b>BID 23-21 Differential Scanning Calorimeter (DSC)</b></p> <p align="center"><b>RFx # 3160005696</b></p> <p>PROPOSAL MUST BE RETURNED TO THE UNIVERSITY IN ACCORDANCE WITH THE SPECIFICATIONS. RFP NUMBER AND DATE OF BID OPENING MUST BE SHOWN ON THE OUTSIDE OF THE ENVELOPE IF USING THAT METHOD.</p>		

We quote you as above - F.O.B. The University of Southern Mississippi.  
Shipment can be made in \_\_\_\_\_ days from receipt of order. DATE \_\_\_\_\_  
Return quotation to Procurement Services at above address.

**Signature Required** \_\_\_\_\_

**The University of Southern Mississippi**  
**Request for Bids # 23-21**  
**Differential Scanning Calorimeter (DSC)**

## **1.0 Introduction**

The University of Southern Mississippi (USM) is seeking to procure a Differential Scanning Calorimeter (DSC).

## **2.0 Specifications**

### General Performance Specifications:

The DSC must be able to perform measurements for melting point, crystallization point, glass transition temperature and heat capacity.

### Requirements:

The following specifications are to ensure that the Differential Scanning Calorimeter (DSC) will perform the tasks necessary to satisfy the project's objectives. Any deviation from the following specifications must be explained and justified.

Bidder shall meet or exceed the following specifications:

### **General Equipment Description:**

- The DSC should be of the Heat Flux design whereby the sample and reference are measured in the same furnace on separate stages.
- The baseline flatness (-50 to 300°C) must be  $\leq 5 \mu\text{W}$ . The baseline repeatability (-50 to 300°C) must be  $< 10 \mu\text{W}$ . This should be done without baseline subtractions or post-test de-smearing, deconvolution, or other manipulation.
- Temperature accuracy must be within  $\pm 0.025^\circ\text{C}$ .
- Temperature precision must be within  $\pm 0.005^\circ\text{C}$ .
- The heat flow digital resolution must be at least  $0.001 \mu\text{W}$ .
- The indium response ratio must be  $\geq 100$  (height to width ratio of an indium melting peak). This should be achieved without post-test de-smearing, deconvolution, or other manipulation. The following must be directly measured and incorporated:
  - Measured heat flow
  - Thermal resistance imbalance
  - Thermal capacitance imbalance
  - Heating rate imbalance
- The instrument must also be capable of incorporating a sample-pan contact resistance measurement, which improves signal resolution.
- The DSC must be capable of measuring heat capacity directly, from one experimental run.
- The instrument should cover a temperature range of -90 to 550°C using a refrigerated cooling system that eliminates the need for liquid nitrogen.

- The DSC must include at least a 54 position autosampler that is capable of loading and unloading both sample and reference pans.
- Data files must contain measured sensor temperature, not calculated temperature. This allows the user to know what the actual temperature of the sample is during different heating rate experiments and measure accurate and precise transition temperatures.
- The DSC cell should include integrated, temperature-controlled electronics for stable signal processing.
- The DSC should employ area temperature detectors directly beneath the sample and reference positions, not platinum resistance thermometers or thermopiles.
- The instrument must be able to perform Modulated DSC experiments.
- The DSC cell should be easily interchangeable and replaceable for user maintenance.
- The instrument must be equipped with fully integrated, user-friendly instrument operating and analysis software for dynamic, real-time data acquisition.
- System must include a service plan for user assisted repairs that has the option to be renewed annually.
- Final price should include applications support for troubleshooting, method development, and data interpretation via online or phone assistance.
- DSC must come with certified standard reference materials (indium, sapphires, etc.) for internal verifications.

#### **Hardware and Software Requirements:**

- Specifications for the necessary computer must be provided.
- The instrument software should allow for unlimited installations within the University. This allows for data analysis by multiple users.
- The instrument software must be able to open historic USM data files for data comparison, these file types are:
  - .trios
  - .rsl
  - .ua
  - .001 (files opened by TA Universal Analysis or TRIOS)

#### **System Validation:**

- Installation and training upon setup must be provided as well as a test run with a University sample.

#### **The following items shall also be provided with the equipment:**

- Systems operations guide, maintenance manual, and spare parts list
- Online and on-call technician support for software and hardware for the lifetime of the system (free or at cost).

#### Customer Support:

The vendor should be willing to help The University of Southern Mississippi resolve any technical issues associated with the system, not only in the warranty period but also out of the warranty with reasonable service fees and leading time. Online and on-call technical support for software

and hardware for the lifetime of the system shall also be provided. A minimum of three full days of onsite training with university staff at the university facilities. Training to include, system setup, operation, maintenance, and troubleshooting.

Safety:

Safety should be well-weighted in machine design, engineering delivery, and user interface communication. The scanning system shall be equipped with limit switches and mechanical stops for equipment protection and sustainability. Electronic controls shall be enclosed and not exposed to water or the external environment. The system shall be configured with a splash guard and other devices to contain and recirculate water to the test area and reduce the risk of slips and falls. Systems that have a smaller equipment footprint and standard installation requirements are preferred.

Warranty:

Bidder warrants that the machinery shall be free from defects in material and workmanship under normal use and service with an obligation to repair or replace any parts, which are proven defective, with a minimum of one year from delivery with a warranty start date which commences post system installation and verification. Bidder shall also provide free software upgrades.

Delivery:

Vendor should quote the lead time required for delivery of the quoted equipment. Quoted prices should be F.O.B. Destination Freight Allowed. Onsite installation and system check is required.

### **3.0 Point of Contact**

For questions, contact the Buyer listed on the Bid Coversheet at:

[bids@usm.edu](mailto:bids@usm.edu)

### **4.0 Submission Instructions to Bidders**

One (1) signed original, two (2) copies, and one (1) portable virus/malware free electronic version (USB jump drive) of the sealed bid response (if electronic copy is not included, USM reserves the right to request an electronic copy of the exact bid response prior to review of the bid), subject to the conditions made a part hereof, will be received by **2:00 PM CDT on Wednesday, March 1, 2023** in the USM Procurement and Contract Services office, as indicated in the General Terms, Conditions, and Instructions to Bidders described herein. It is the responsibility of the respondent to ensure that the proposal package arrives in the Procurement and Contract Services Office.

Each bid **must** be submitted in a sealed envelope bearing on the outside the name "Bid # 23-21 Differential Scanning Calorimeter (DSC)," the name of the Vendor, and the opening date specified on the coversheet.

For regular mail:

The University of Southern Mississippi  
Attn: Deidre Edwards, Buyer  
118 College Drive, Box 5003  
Hattiesburg, MS 39406  
BID 23-21

For FedEx, UPS, or other express couriers:

The University of Southern Mississippi  
Attn: Deidre Edwards, Buyer  
2609 W. 4th Street  
Hattiesburg, MS 39401  
BID 23-21

Hand-carried responses should be brought to:

The University of Southern Mississippi  
Attn: Deidre Edwards, Buyer  
214 Bond Hall  
Hattiesburg, MS 39406  
BID 23-21

As an alternative to traditional sealed proposals in envelopes, the University of Southern Mississippi is capable of receiving electronic bid responses. While this option is available, it is not required and we ask that all potential respondents keep in mind that with any electronic system there could be delays or glitches with the submission process; therefore the University *highly encourages traditional sealed responses* which are either mailed or submitted in person. Additionally, the University will not be responsible for issues with attempted submissions of bids using the electronic method.

Should a vendor choose to submit their response electronically, please follow the instructions below using the following website:

[https://www.ms.gov/dfa/contract\\_bid\\_search/Home/Sell](https://www.ms.gov/dfa/contract_bid_search/Home/Sell).

On this site you will find helpful links to procurement opportunities, as well as a link to supplier registration. If not already registered in this system, potential bidders will first need to click on 'Supplier Registration' and follow the steps outlined (a one-time process). Once registered, suppliers can return to the original website and click on 'Procurement Opportunities' where they can either search by keyword for the bid they desire to respond to or leave the search box blank and click 'Search' for a listing of all current bids and proposals for the various State of Mississippi offices.

**Please note that emailed bids will not be accepted.**

Any bid may be withdrawn prior to scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified will not be considered.

The University of Southern Mississippi reserves the right to accept or reject any or all proposals and to waive any formalities.

Vendors are responsible for examining all specifications, terms, conditions, and instructions of this request. Failure to do so will be at Vendor's risk.

In order to ensure all interested bidders receive any addenda that may be issued, proposers must email their intent to propose using the Intent to Bid link on the USM Bid Listing under RFP 23-21 prior to the deadline to submit:

<https://www.usm.edu/procurement-contract-services/current-bids-and-sole-source-notices.php>

#### **5.0 USM General Terms, Conditions, and Instructions for Bids/Proposals**

- 1.) Failure to examine any drawings, specifications, and instructions will be at bidder's risk.
- 2.) Samples of items when called for must be furnished free of expense and if not destroyed in testing, will, upon request, be returned at the bidder's expense. Request for the return of samples must be made within ten (10) days following opening bids. Each individual sample must be labeled with bidder's name and manufacturer's brand name and number.
- 3.) As a public entity of the state, we use sealed bidding to ensure "fair and open competition" to ensure no one in the buying organization can influence the bidding process or steer the selection of a particular company by sharing competitive bid information during the solicitation process. Generally, all bids must remain sealed until they are opened publicly at the time stated in the notice—advance disclosure of the terms of a bid may be cause for rejection of said bid. Bidders should never send advanced copies of a sealed bid via email or screenshots of electronic bids. Bidders must submit sealed bids to be opened at the time and place stated in the solicitation for the public opening of bids and must not be revealed to the buyer before that time. Bids must be signed and sealed with bidder's name and address on the outside of the envelope, and the date and time of the bid opening and the bid file number shown in the lower-left corner of the packages, envelopes, express mailing labels, boxes, etc.
- 4.) In order for your bid to be considered, it must be received and time stamped in our office by 2:00 P.M. of the bid opening date. It is the responsibility of the vendor to ensure their bid is received within the appointed time. If your bid package is not received in Bond Hall, Room 214, by 2:00 P.M. of the bid opening date, it will not be considered.

If you are delivering your bid, you need to hand carry the bid package to:

The University of Southern Mississippi  
Procurement Dept. (Bid)  
Bond Hall, Room 214  
Hattiesburg, Mississippi  
BID # 23-21

If you are mailing your bid package via U.S. Postal Service, mail to:

The University of Southern Mississippi  
Procurement Dept. (Bid)  
118 College Drive #5003  
Hattiesburg, MS 39406-0001  
BID # 23-21

If you are express mailing your bid package via Federal Express or UPS, or any other delivery service which requires the use of a physical address, deliver to:

The University of Southern Mississippi  
Procurement Dept. (Bid)  
2609 West 4<sup>th</sup> Street  
Hattiesburg, MS 39401  
BID # 23-21

- 5.) Bids or proposals shall not be modified, corrected, altered, or amended after the specified closing time and the opening of such bids, unless otherwise noted in the request for bids or proposals.
- 6.) The University of Southern Mississippi reserves the right to reject any and all bids, to waive any informality in bids, and unless otherwise specified by the bidders, to accept any items on the bid. If the bidder fails to state the time within which bids must be accepted, it is understood and agreed that The University of Southern Mississippi shall have 60 days to accept. The University of Southern Mississippi reserves the right to make an award to this bid on an all or none basis, or on a line by line basis, whichever serves the best interest of The University of Southern Mississippi.
- 7.) Contracts and purchases will be made or entered into with the lowest, responsible bidder meeting specifications.
- 8.) A written purchase order or contract award mailed or otherwise furnished to the successful bidder within the time of acceptance specified in the Invitation for Bid results in a binding contract without further action by either party. The contract shall not be assignable by the vendor in whole or in part without the written consent of The University of Southern Mississippi.
- 9.) Bid files may be examined during normal working hours by bid participants. Non-

participants will be prohibited from obtaining any information relative to the bid until the official award has been made.

- 10.) If purchase orders or contracts are canceled because of the awarded vendor's failure to perform or request for price increase, that vendor shall be removed from our bidders' list for a period of 24 months.
- 11.) No addendum will be issued within a period of two (2) working days prior to the time and date set for the bid opening. Should it become necessary to issue an addendum within the two-day period prior to the bid opening, the bid date will be reset giving bidders ample time to answer the addendum.
- 12.) Alternate bids, unless specifically requested or allowed, will not be considered.
- 13.) Bid openings will be conducted open to the public. However, they will serve only to open the bids. No discussion will be entered into with any vendor as to the quality or provisions of the specifications, and no award will be made either stated or implied at the bid opening. After the close of the bid opening meeting, the bids will be considered to be in the evaluation process and will not be available for review by bidders. Proposal openings are not required to be open to the public; however, the resulting award is open for public inspection.
- 14.) Prices quoted shall be firm for the term of the contract or for the stated time of acceptance.
- 15.) The bidder understands that The University of Southern Mississippi is an equal opportunity employer and, therefore, maintains a policy which prohibits unlawful discrimination based on race, color, creed, sex, age, national origin, physical handicap, disability, or any other such discrimination; and the bidder, by signing this bid, agrees during the term of agreement that the bidder will strictly adhere to this policy in its employment practices and provision of products or services.
- 16.) Bidders must upon request of The University of Southern Mississippi furnish satisfactory evidence of their ability to furnish products or services in accordance with the terms and conditions of these specifications. The University of Southern Mississippi reserves the right to make the final determination as to the bidder's ability.
- 17.) Questions or problems arising from bid procedures should be directed to the Buyer listed on the solicitation at:

The University of Southern Mississippi  
118 College Drive #5003  
Hattiesburg, MS 39406-0001  
Phone: (601) 266-4131



- 18.) All items must equal or exceed the specifications listed. The absence of detail specifications or the omission of detail description shall be recognized as meaning that only the best commercial practices are to prevail and that only first quality materials and workmanship are to be used.
- 19.) It is the intent of the specifications to obtain a product that will adequately meet the needs of the user while promoting the greatest extent of competition that is practicable. It is the responsibility of the prospective bidder to review the entire Invitation to Bid packet and to notify The University of Southern Mississippi if the Specifications, Instructions, General, or Special Conditions are formulated in a manner which would unnecessarily restrict competition.
- 20.) It shall be incumbent upon the bidders to understand the specifications. Any requests for clarifications shall be in writing and shall be submitted to our Procurement Services office at least five (5) days prior to the time and date set for the bid opening, unless otherwise noted in the bid or proposal specifications.
- 21.) The minimum specifications are used to set a standard and in no case are used with the intention to discriminate against any manufacturer. Bidders should note the name and the manufacturer and model number of the product they propose to furnish and submit descriptive literature.
- 22.) Trade names, brand names, and/or manufacturer's information used in these specifications are for the purpose of establishing quality, unless otherwise noted. Bids on products of other qualified manufacturers are acceptable, provided they are demonstrated as equal to those specified in construction, design and suitability. Each bidder shall submit with his bid a complete brochure with pictures on each item and shall point out specifically any deviations from the specified items. Failure to do so may disqualify any bid. Please bid as specified or an approved equal.
- 23.) A copy of the manufacturer's standard guarantee/warranty shall accompany and become a part of this bid.
- 24.) There are no federal or state laws that prohibit bidders from submitting a bid lower than a price or bid given to the U.S. Government. Bidders may bid lower than U.S. Government contract price without any liability as The University of Southern Mississippi is exempt from the provisions of the Robinson-Patman Act and other related laws. In addition, the U.S. Government has no provisions in any of its purchasing arrangements with bidders whereby a lower price to The University of Southern Mississippi must automatically be given to the U.S. Government.
- 25.) All invoices, unless noted otherwise, are to be billed to:

The University of Southern Mississippi  
Accounts Payable

118 College Drive #5104  
Hattiesburg, MS 39406-0001

- 26.) All equipment bid shall be of current production and of the latest design and construction.
- 27.) Where all, or part(s), of the bid is requested on a unit price basis, both the unit prices and the extension of the unit prices constitute a basis of determining the lowest responsible and responsive bidder. In cases of error in the extension of price, the unit price will govern.
- 28.) All bidders/respondents are on notice that USM is a public agency of the State of Mississippi and is subject to the Mississippi Public Records Act, Miss. Code Ann. § 25-6-1, *et seq.* If a public records request is made for any information provided to the USM pursuant to this solicitation, USM shall promptly notify the Disclosing Party of such request. The Disclosing Party shall promptly institute appropriate legal proceedings to protect its information. No party to this agreement shall be liable to the other party for disclosures of information required by court order or required by law. For clarity, documents are not considered public record unless and until an award is made from such solicitation.
- 29.) Should the University of Southern Mississippi close due to inclement weather conditions, or any other unforeseen events on the bid opening date, sealed bids will open the following business day at the same time and location.
- 30.) As an alternative to traditional sealed bids in envelopes, the University of Southern Mississippi is capable of receiving electronic bid responses. While this option is available, it is not required and we ask that all potential respondents keep in mind that with any electronic system there could be delays or glitches with the submission process; therefore the University highly encourages traditional sealed bids which are either mailed or submitted in person. Should a vendor choose to submit their response electronically, please follow the instructions below using the following website: [https://www.ms.gov/dfa/contract\\_bid\\_search/Home/Sell](https://www.ms.gov/dfa/contract_bid_search/Home/Sell). On this site you will find helpful links to procurement opportunities, as well as a link to supplier registration. If not already registered in this system, potential bidders will first need to click on 'Supplier Registration' and follow the steps outlined (a one-time process). Once registered, they can return to the original website and click on 'Procurement Opportunities' where they can either search by keyword for the bid they desire to respond to or leave the search box blank and click 'Search' for a listing of all current bids and proposals for the various State of Mississippi offices. Instructions on how to respond to an RFX in M.A.G.I.C. may be located at the following link:

<http://uperform.magic.ms.gov/gm/folder-1.11.9125?mode=EU&primaryCSH=RFX%2Cresponses>

NOTE: If you experience any problems with submitting your response through M.A.G.I.C. Please email the M.A.G.I.C. IT Helpdesk at [mash@dfa.ms.gov](mailto:mash@dfa.ms.gov).

**\*\*PLEASE NOTE: EMAILED BIDS WILL NOT BE ACCEPTED, AND IT MAY CAUSE YOUR BID TO BE REJECTED FOR EARLY DISCLOSURE. \*\***

With regard to construction bids, there is one additional step required during the bid submission process. Along with the bid response and other attachments, contractors will also need to attach their Certificate of Responsibility (COR), or a statement that the bid enclosed does not exceed Fifty Thousand Dollars (\$ 50,000.00). If their COR or such statement is not attached, the bid will be invalid and not considered.

**AA/EOE/ADA**