



**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: November 22nd, 2021

Bid No. 22-19

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:

2:00 p.m. CST

December 9th, 2021

Buyer: John Leggett

Name: _____

Company: _____

Address: _____

City/State/Zip: _____

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

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.

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
		BID 22-19 FTIR & IR Microscope RFx: 3160004715		
		<small>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.</small>		

We quote you as above-F.O.B. The University of Southern Mississippi. Shipment can be made in _____ days from receipt of order. DATE _____ TERMS _____

Return quotation to Procurement Services at above address.

Signature Required _____

Bid # 22-19
University of Southern Mississippi
FTIR & IR Microscope

1.0 Introduction

The University of Southern Mississippi (USM) is looking to procure a FTIR & IR Microscope.

2.0 Specifications

2.1 GENERAL PERFORMANCE SPECIFICATIONS

The microscope must be capable of providing a visualization of a smaller sample as an analysis of the components is being done.

2.2 REQUIREMENTS

The following specifications are to ensure that the FTIR & IR Microscope 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:

- The FTIR spectrometer must be able to accommodate USM Polymer Science and Engineering existing FTIR sampling accessories. The sample compartment size and beam geometry of the spectrometer must be compatible with these attachments and automatically recognize them without requiring modification.
- Software on the FTIR must be able to recognize and open our existing FTIR files (*.spa) and both purchased and lab-developed spectral libraries. No reformatting or spectral processing should be required for our current library to function on the new system. Our purchased and laboratory FTIR libraries include:
 - Aldrich Condensed Phase Sample Library
 - Aldrich Vapor Phase Sample Library
 - Commercial Materials Painter Minerals
 - Georgia State Crime Lab Sample Library
 - HR Aldrich Aldehydes and Ketones
 - HR Aldrich Esters, Lactones, and Anhydrides
 - HR Aldrich Organometallic, Inorganic, Silanes, Boranes, and Deuterated Compounds
 - HR Aldrich Phosphorus and Sulfur Compounds
 - HR Aldrich Polymers
 - HR Coatings Technology
 - HR Nicolet Sampler Library
 - HR Nicolet TGA Vapor Phase
 - HR Rubber Compounding Materials

- Hummel Polymer and Additives
 - Hummel Polymer Sample Library
 - Industrial Coatings
 - Synthetic Fibers by Microscope
 - The Resin Kit Library
- The emissivity enhanced, migration-free, infrared source must have at least a 10-year warranty and must be user replaceable. The system must also be able to support a white light source to be used for near-IR or visible operations. This source should be able to be mounted in a similar manner to the infrared source also user-replaceable.
 - The specialized interferometer must be a dynamically aligned, Michelson design with a scan velocity that provides collection capabilities of up to 95 scans per second. The interferometer must be capable of spectral resolution better than 0.09 cm^{-1} with boxcar apodization. The spectrometer must have a motorized, continuously variable aperture, for optimal peak shape collection of data.
 - The interferometer must have at least a 10-year warranty and permit a wide range of user changeable beamsplitters. The beamsplitters must be available for the instrument to cover the spectral range from 27,000 to 50 cm^{-1} .
 - The instrument must be capable of at 55,000:1 peak to peak signal to noise with a wavelength precision within 0.01 cm^{-1} with no need for software intervention or calibration.
 - The instrument must include touch point buttons for single press operations for all sampling locations, to automatically adjust optics for a specific sampling location and select the correct experimental parameter file.
 - The spectrometer must include a motorized validation wheel with a NIST traceable standard to conduct automated, system suitability, and instrument performance verification.
 - The system must be able to provide left and right external beams for supporting additional sampling modules.
 - The spectrometer must include a ruggedized, built-in diamond attenuated total reflection (ATR) accessory. The built-in diamond ATR must be capable of covering from 4000 to 50 cm^{-1} with appropriate beamsplitters and be equipped with automatic, software-controlled motorized optics.
 - The built-in ATR pressure device must deliver up to 60 lbf and be equipped with a slip-clutch design to prevent accessory damage.
 - The spectrometer must support the addition of an optional sample compartment for a FT-Raman module. No external connections or sample compartment extension must be required for operation of the FT-Raman module.
 - The spectrometer must be able to accept an optional, NIR module with sampling via an integrating sphere or fiber optics with an internally mounted InGaAs detector.
 - The instrument software must be fully compatible with Microsoft Windows 10 (64-bit).
 - Software must support Preview Data collection and must allow the user to perform a search on the spectrum when previewing and during data collection.
 - The software must include multi-component spectral searching and peak identification tools
 - The IR microscope must have a binocular or trinocular with a video camera allowing simultaneous direct observation through the eyepieces and computer video capture of the sample image.

- The infrared microscope condenser must be demountable and user changeable.
- The sampling stage must allow for manual or automated mapping, heating, or rotatable stages.
- The IR microscope detector compartment must be designed for single or optional dual detector operation (software controlled). A wide range of MCT detectors must include a stainless-steel body design and provide an 18-hour liquid nitrogen hold time.
- The IR microscope must incorporate continuous view of the sample and surrounding medium through both the eyepieces and video display even during data collection. The optics must provide a full field of view for “real time” spectral data preview mode while moving the sample stage and displaying the aperture size.
- The IR microscope must include a slide-mounted ATR accessory must be easily user-exchangeable with no need for tools or realignment providing ease of cleaning and must allow for the use of optional micro-ATR crystals such as germanium, silicon, and diamond.
- The IR microscope must be able to accept optional optical devices including DIC, fluorescence illumination, visible polarizers, and infrared polarizers.
- The IR microscope software must include video image collection and a software ruler (to measure sizes and distances) with the ability to annotate and print video images, save video images, and cut/paste operations for report generation.
 - The infrared imaging software must provide physical and chemical information extraction tools including: chemometric analysis (Principal Component Analysis and PCA reconstruction, Multivariate Curve Resolution (MCR) and RGB analysis); classical chemical analysis (peak analysis or ratio, functional groups, spectral correlation) and image analysis applicable to infrared or video image (binarization, filtering, and measurement of particles or fiber size, distribution, center of mass or other physical properties).
 - The software must also include a fully integrated and interlinked-displaying of spectral data, contour display (2D), tri-dimensional display (3D) and hyperspectral cube functions.

2.4 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 fee and leading time. It is preferred that the vendor can provide technical service through remote access and/or on-site technical support.

2.5 SAFETY

Safety should be well weighted in the machine design, engineering delivery and user interface communication.

Safety measures and appropriate designs for any moving parts.

Emergency stop systems should be available.

2.6 WARRANTY

Bidder warrants that the machinery shall be free from defects in material and workmanship under normal use and service with obligation to repair or replace any parts, which are proven defective, within one year from delivery.

2.7 DELIVERY

Vendor should quote the lead time required for delivery of the quoted equipment. Quoted prices should be F.O.B. Destination Freight Allowed.

4.0 Points of Contact

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

bids@usm.edu

5.0 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 Thursday, December 9th, 2021** 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 #22-19 FTIR & IR Microscope," the name of the Vendor, and the opening date specified on the coversheet.

The proposal should be addressed as follows:

For regular mail:

The University of Southern Mississippi
Attn: John Leggett, Buyer
118 College Drive, Box 5003
Hattiesburg, MS 39406
Bid 22-19

For FedEx, UPS, or other express couriers:

The University of Southern Mississippi

Attn: John Leggett, Buyer
2609 W. 4th Street
Hattiesburg, MS 39401
Bid 22-19

Hand-carried responses should be brought to:

The University of Southern Mississippi
Attn: John Leggett, Buyer
214 Bond Hall
Hattiesburg, MS 39406
Bid 22-19

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.

Please note that emailed bids will not be accepted.

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.

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.

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 bids and to waive any formalities.

The University of Southern Mississippi reserves the right to accept or reject optional line items included in the bid response.

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 Calendar under Bid 22-19 prior to the deadline to submit:

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

**THE UNIVERSITY OF SOUTHERN MISSISSIPPI
PROCUREMENT SERVICES
118 COLLEGE DRIVE #5003
HATTIESBURG, MS 39406-0001**

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.) Bids must be signed and sealed with bidder' s name and address on the outside of the envelope, and the time and date 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 Services
Bond Hall, Room 214
Hattiesburg, Mississippi

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

The University of Southern Mississippi
Procurement Services
118 College Drive #5003
Hattiesburg, MS 39406-0001

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
Receiving Department
2609 West 4th Street
Hattiesburg, MS 39401

- 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. 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.

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