REQUEST FOR BIDS/PROPOSALS COVERSHEET

THE UNIVERSITY OF SOUTHERN MISSISSIPPI
Procurement and Contract Services
118 College Drive #5003, Hattiesburg, Mississippi  39406-0001

Date:            April 10, 2017

Bid No. 17-33

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

May 2, 2017

Buyer:________________________

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.

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<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT PRICE</th>
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DESCRIPTION

RFB 17-33
Custom Glove Box with Remote Monitoring

PROPOSAL MUST BE RETURNED TO THE UNIVERSITY IN A
SEALED ENVELOPE.  RFP NUMBER AND DATE OF BID OPENING
MUST BE SHOWN ON THE OUTSIDE OF THE ENVELOPE.

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

AA/EOE/ADA/
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.

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.) 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.

AA/EOE/ADAi
General Specifications:

The University is requesting a custom Glove Box with Remote Monitoring to meet the following specifications:

- Glove box should be a dual user (double sided) type, constructed of 304 stainless steel or equivalent.
- Glove box should possess inner box dimensions at the floor of at least 125 (W) x 120 (D) x 90 (H) (cm).
- Glove box should have front and back polycarbonate windows that are chemical and scratch resistant and fitted with right and left glove port feed-throughs with butyl rubber gloves.
- Glove box should be equipped with a cylindrical main ante chamber with dimensions of at least 39 (dia.) x 60 (L) (cm) with sliding tray and manually operated doors, and automatic evacuation/refill control
- Glove box should be equipped with a mini ante chamber of at least 15 (dia.) x 40 (L) (cm)
- Glove box should be equipped with a gas purification system, moisture and oxygen analyzers, and electrical and gas feed-throughs.

In addition to the above features, the glove box should be customized for cationic polymerizations as follows:

- A cooling well (cold bath) should be incorporated into the floor of the box. The well should be equipped with two sets of cooling coils, one for liquid nitrogen and one for chilled, re-circulating methanol.
- A stainless steel solvent reservoir is to be supplied with the glove box, positioned below the cooling well, such that solvent from the well can be gravity fed into the reservoir. The reservoir should be fitted with a pressurized line to introduce dry N\textsubscript{2} gas when needed to raise the solvent back into the well.

Detailed Specifications:

_Glovebox module with main antechamber (right)_

- Design: double-sided
- Front and back window: sloped by approximately 7\(^o\)
- Dimensions workspace: at least 1250 width x 900 height x 1200 depth [mm]
- 1 pc. glovebox, 304 stainless steel
- 1 pc. stand, height approximately 1000 mm; including castors and machine feet (height adjustable)
- 2 pc. window, Polycarbonate with hard coating (resistant to scratches and many chemicals)
- 2+2 pcs. gloveport feedthroughs; round, diameter approximately 220 mm including gloves (Butyl rubber, 0.4 mm thickness, size L) mounted at front and backside
- 2 pc. lighting (front and backside)
- 2 pcs. hanging shelves (box ceiling)
- 2 pcs. dust filter HEPA H13 inside box at gas in and outlet
- 5 pcs. flange DN40KF (Aluminum, single-sided) for mounting of, e.g., power feedthroughs / media supply lines (vacuum/gases/liquids)
- 1 pc. power feedthrough 115V, 1 ph
- 1 pc. main antechamber, diameter at least 390 mm, length at least 600 mm; should include sliding tray and manual operated doors; position: right sidewall

**Mini antechamber, right end panel**
- Mini antechamber, diameter at least 150 mm, length at least 400 mm; type: 1/3 inside, 2/3 outside of the glovebox
- Cover: hinged cover inside and outside
- Operation: manual 3-way valve, for mounting on right end panel, including sliding tray

**Gas purification system**
- Gas purification system for closed cycle circulation of glovebox
- Removal: oxygen and moisture, <1 ppm (referring to gloveboxes with max. leak rate O₂ = 0.05 vol%/h, according to ISO 10648-2)
- Maximum effective purifying volume: at least 4 m³
- Filter: 1-filter column gas purifier
- Capacity blower: max. 84 m³/h, including heat exchanger (water-cooled)
- Operation panel: 7'' touch panel, color
- Regeneration program: automatic, PLC-controlled
- Control (PLC)
- Pressure control (automatic): -15 to +15 mbar including pressure sensor for glovebox (Box operation at positive- or negative pressure)
- Main valves: electro-pneumatic, PLC-controlled automatic box purging with flow control (200 l/m)
- Vacuum pump: at least 10 cfm, oil-sealed with gas ballast and oil mist filter
- Operation main antechamber (glovebox): semiautomatic evacuation/refill on touch panel (option: full automatic control)
- Piping: stainless steel

**Auto Antechamber Control**
- Automatic antechamber control system, PLC integrated, including sensors and software
- System should allow users to program antechamber pump down and refill cycles to preset vacuum and pressure limits as well as number of cycles and should include a vacuum leak check step
**N₂ Purge for Main Antechamber**
- Glove box should have capability for manual N₂ purge of antechamber. A mechanical overpressure device shall also be supplied.

**Solvent adsorber LMF-II, regenerable**
- Regenerable solvent filter system should be integrated into gas purification system, PLC controlled
- Adsorber: molecular sieve, 8.1 kg

**Feedthrough, 3/8”**
- 8 ea required, 2 on main antechamber side and 6 on opposite side
- 3/8" stainless steel bulkhead feedthrough assembly including 3/8" stainless steel tube and ball valve; for gas or vacuum

**Internal Glove Port Cover**
- One internal glove port cover should be supplied with glove box

**H₂O analyzer**
- Solid state H₂O analyzer, PLC controlled, measuring range: 0-500ppm

**Oxygen analyzer**
- electro-chemical cell

**Custom Heptane Cooling Well**
- Oval heptane cooling well (approximately 630mm long axis x 355mm short axis x 290mm deep) with two sets of cooling coils and center drain with valve.
- Well floor should be sloped toward drain to allow all heptane to drain.
- Conceptual drawing shall be submitted with proposal.

**Custom Heptane Reservoir**
- Heptane reservoir tank. Approximate internal vol. = 75 L.
- Tank should be equipped with heptane delivery port with dip tube, N₂ pressure inlet port, pressure relief valve port.
- Tank should be equipped with removable inspection port to allow for cleaning.
- Conceptual drawing shall be submitted with proposal.

**Monkey Bars**
- Vertical stainless bars (9), fixed to box floor and ceiling, spaced along far side of cooling well.

**Flange KF40 feedthrough**
- Flange KF40 should be located in box ceiling above cooling well and used for infrared cable pass-through of customer-supplied Mettler Toledo ReactIR instrument.
- Vendor should determine with end-user precise location during design phase.
**Mobile web application and interface**
- Hardware to be installed in electrical cabinet to allow data communication between the glovebox and mobile web application for Android or OS (Apple iphone) devices. Device must be able to remotely monitor the glovebox conditions 24 hours a day / 7 days a week and also provide maintenance reminders to the mobile device.

**Quality**
- Please provide proof of current certification of any quality programs that you may have such as ISO9001:2008, Underwriters Laboratory, etc.

**Shipping**
- Vendor is responsible for all shipping costs.

**Installation and training**
- Vendor must complete all on-site installation, set-up, and commissioning, and provide instruction of users in operation and maintenance of system. Vendor must provide preventative maintenance on existing gloveboxes (2) during this visit at no additional charge.