



INVITATION FOR BIDS
OFFICE OF PROCUREMENT & CONTRACTS

1. INSTRUCTIONS FOR BIDDERS

- a. Sealed bids will be received in the Office of Procurement & Contracts, Mississippi State University, for the purchase of the items listed herein.
- b. All bids must be received in the Office of Procurement & Contracts on or before the bid opening time and date listed herein. Delivery of bids must be during normal working hours, 8:00 a.m. to 5:00 p.m. CST, except on weekends and holidays when no delivery is possible.
- c. Bidders shall submit their bids either electronically or in a sealed envelope. To submit electronically, follow the instructions below. Bids CANNOT be emailed.
 - i. Sealed bids should include the bid number on the face of the envelope as well as the bidders' name and address. Bids should be sent to: 245 Barr Avenue, 610 McArthur Hall, Mississippi State, MS 39762.
 - ii. At this time we only accept non-ITS bids electronically. For electronic submission of bids, go to: portal.magic.ms.gov and use the RFX number on the next page as your reference number.
- d. All questions regarding this bid should be directed to the Office of Procurement & Contracts at 662-325-2550.

2. TERMS AND CONDITIONS

- a. All bids should be bid "FOB Destination"
- b. Bidders must comply with all rules, regulations, and statutes relating to purchasing in the State of Mississippi, in addition to the requirements on this form. General Bid Terms and Conditions can be found here:
https://www.procurement.msstate.edu/procurement/bids/Bid_General_Terms_May_2019_V2.pdf
- c. Any contract resulting from this Invitation for Bid shall be in substantial compliance with Mississippi State University's Standard Contract Addendum:
<https://www.procurement.msstate.edu/contracts/standardaddendum.pdf>

Bid Number/RFX Number: 25-44/RFX #3160007341

Opening Date: May 6, 2025 at 2:00 p.m.

Description: NWR (nuclear magnetic resonance)

Vendor Name: _____

Vendor Address: _____

Telephone Number: _____

Days the Offer is Firm: _____

Authorized Signature: _____

Name: _____

Title: _____

Item	Quantity	Description	Unit Price	Total Price
1	1	NMR (nuclear magnetic resonance) specifications for use in the Seafood Laboratory		

NMR (nuclear magnetic resonance) specifications for use in the Seafood Laboratory

1: The system must be equipped with the true Broadband capable of tuning between the full range of frequencies of ^{29}Si to ^{31}P and be installed pre-configured for ^1H , ^{19}F , ^{13}C , ^{31}P , ^{23}Na , ^{11}B , ^7Li , ^{29}Si , ^{27}Al , ^{59}Co .

2: The system must have the ability to manually tune and match to the sample to gain maximum SNR on the broadband channel, as well as have two nuclei on the broadband channel that can be dual tuned for auto switching.

3: The system must be equipped with 3 Axis pulsed field gradients

4: The system must be equipped with pulsed field gradients equal to or greater than $0.5 \text{ Tm}^{-1}\text{s}$:

The magnet temperature must be stabilized within $<0.001^\circ\text{C}$ for optimum shim stability

6: The probe must be fully removable by the end user for cleaning and easy access for custom research modifications.

- 7: The system must be supplied with a broadband probe ^1H SNR > 130:1 with the option available to purchase an additional interchangeable high SNR proton fluorine probe ^1H SNR > 200:1
- 8: The system must have the option available to purchase a true gas variable temperature probe with a temperature range of 0°C to 65°C that does not require changing the magnet temperature.
- 9: The system should have a separate electronics module to make for easy servicing and better heat management when conducting high duty cycle experiments.
- 10: The magnet should have a field strength equal to or greater than 60MHz
- 11: The system should have high resolution (50% FWHM) < 0.35 Hz and (0.55% of peak height) < 10Hz
- 12: The system should allow for the end user to easily write their own pulse sequences in PYTHON scripting and make quick edits to pulse sequences without involvement from the manufacturer
- 13: The system should be able to use standard 5mm NMR tubes without adapters, depth gauges or spinners.
- 14: The System should be equipped with an external deuterium lock channel.
- 15: The magnet should consist of a flat pole design to allow for future interchangeable custom probe designs.
- 16: The system should be supplied with a top-mounted auto-sampler with a minimum of 25 positions.
- 17: Ability to analyze protein (polypeptide) folding and unfolding and potential interactions with lipids or carbohydrates in a complex food system.
- 18: An imaging capability is preferred but not required.