



**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.
  - 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 mailed 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: [https://www.ms.gov/dfa/contract\\_bid\\_search](https://www.ms.gov/dfa/contract_bid_search) 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](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: 20-44/RFX#3160003539**

**Opening Date: April 15, 2020 @2:00 p.m.**

**Description: Circular Dichroism/Linear Dichroism Absorbance Spectrophotometer system**

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

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

Telephone Number: \_\_\_\_\_

Days the Offer is Firm: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

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

Title: \_\_\_\_\_

Item	Quantity	Description	Unit Price	Total Price
1	1	Circular dichroism/linear dichroism absorbance spectrophotometer system		

**Scanning range:** 163-900nm, optional in-field upgrade to 1650nm

**Scanning speed:** 1 – 10,000nm/minute

**CD Resolution:** 0.00001 millidegrees

**RMS Noise:** SBW 1nm, Digital Integration Time 4 Seconds, LESS THAN  
0.004mdeg (185nm)  
0.007mdeg (200 and 500nm)

**Wavelength accuracy:** 0.1 nm from 180 to 250 nm  
0.2 nm from 250 to 500 nm  
0.5 nm from 500 to 600 nm

**Wavelength repeatability:** 0.05 nm from 163 to 500 nm  
0.1 nm from 500 to 800 nm  
0.5 nm from 800 to 1600 nm

**Stray light:** Less than 0.0003% at 200nm

**Calibration:** Instrument must be equipped with an integrated Mercury lamp for wavelength calibration by which the wavelength is defined by physics and need no external verification or tractability. The instrument should also be supplied with NIST traceable NH4CSA scale calibration standard

**Scan modes:** To allow measurement parameters to be optimized the instrument should be supplied with three user selectable wavelength scanning modes including:

- Step-scan mode
- Auto-scan mode
- Continuous scan mode for fastest data acquisition.

**Optical beam:** Parallel, easy for sample placement and working with scattering samples as well as allowing placement of magnets and stopped flow units anywhere in optical beam.

**Measurement modes:**

Simultaneous measurement of Circular Dichroism, Linear Dichroism, UV/Vis Absorbance

**Temperature control:**

**Integrated Peltier based temperature control systems**

Temperature range: -30 to 130 degrees C

Temperature accuracy: +/- 0.1 degrees C

Temperature probe for in-cell and in-holder for safety

Should include heat exchanger for cooling Peltier elements

**Automated Titration:****Two independently stepper motor controlled syringes**

Standard syringe of 2ml volume interchangeable from 1ml to 20ml

Step sizes as small as 1 microliter increments

PC controlled valves to re-fill or empty syringes

Software includes automated concentration correction for sample dilution.

**Micro-sampling accessory:**

System should include microcells allowing measurement on samples as small as 2ul in volume.

**Software features:**

Windows 10 Pro/Enterprise 64 bit based control, acquisition and manipulation software package. Software should include integrated (not online) methods of protein secondary structure analysis Automated macro control software allows complex experiments to be set up and actuated by a single mouse click for unattended operation.

**Quality:**

The instrument must be manufactured to internationally recognized quality standards as designated by ISO-9000