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Sole Source Justification

January 29, 2015

Product: Bruker BioSpin Avance III System

Notice:

The University of North Alabama will be entering into a purchase order contract with Bruker BioSpin Corp. for the purchase and installation of an AVANCE III HD 400 Nuclear Magnetic Resonance (NMR) Spectrometer System. Bruker BioSpin offers the most advanced NMR in the industry. The AVANCE III HD 400 NMR is most suited for the academic laboratory in that it provides proven experimental stability and was specially designed and developed for scientific education purposes. This system includes all of the hardware, software, teaching manuals and training required to perform experiments. The patented design and trademarked products supplied by Bruker BioSpin have been extensively evaluated and the University believes to be the only solution possible to provide the most advanced educational environment for University of North Alabama students.

This notice is not an invitation for competition or interest, but is intended to meet the requirement to give public notice of a Sole Source purchase without a formal competitive process.

To be supplied:

AVANCE III HD 400 High Performance Digital NMR Spectrometer System which includes:
Magnet/Shim/Lock system with 5.4cm bore, helium and nitrogen level sensors and magnet stand for very significant reduction of the stray field and reduced cryogen consumption, incorporates advanced External Disturbance Suppression (EDS™) for dramatic reduction of magnetic field perturbations; Bruker Smart Magnet System (BSMS™) shim and 2G DigiLock™ control, including Digital Frequency Generation, Digital Quadrature Receiver, computer-controlled lock regulation and ultra-stable, low current noise Shim Control Boards (SCBs); Bruker Orthogonal Shim System (BOSS™); Bruker Sample Transport (BST); a helium transfer line; Stainless Steel RF Cabinet- HD Nano-Bay 19" rack mounted cabinet with rf shielding and full front access, expandable to three channels, CryoProbe ready; Enhanced 2G Digital Quadrature Detection Receiver (RXAD/2) with integrated high performance ADC's; BLA2BB dual broadband amplifier - two broadband amplifiers providing up to 150 Watt X-frequency (6-163 MHz) and 50 Watts 19F or H frequency; Timing Controller with 12.5 nsec timing resolution; Enhanced RF generation – Signal Generation Unit (SGU/3); Gradient Controller; Digital Receiver Unit (DRU™) with digital filters and Digital Quadrature Detection (DQD™); Pre-Amplifiers – H with D capability and BB preamplifier; Windows Workstation; Bruker TopSpin software package for acquisition and processing of 1D, 2D, 3D, and 4D NMR data, including PLOT, ICON-NMR, NMR guide and NMR-SIM, includes media, on-line hypertext and single license; Highly flexible BBFO Probe™ (5mm sample diameter) with digital tuning; GRASP™II Version including actively shielded Z-gradient coil; Automatic Tuning and Matching (ATM) Accessory; GRASP™ II GRADient SPECTroscopy accessory for the AVANCE series; Deuterium gradient shimming including Deuterium amplifier; Advanced Bruker Smart Variable Temperature (BSVT) control unit, with digital control module – temp accuracy ± 0.2 (with ± 1.0 °C room temperature stability), maximum temperature 200°C; Low temperature accessory for BSVT Variable Temperature control unit including N₂ dewar, heat exchanger and stainless steel transfer line; SampleXpress™ Lite compact automatic sample changer includes interchangeable cartridges that hold at least 18 or 36 sample tubes, includes touchscreen display for control; Set of plastic spinners; full installation and training of system.

Total System Price: \$299,000.00