



BID (PROFORMA INVOICE)

FORM 1

Name of the Bidder:	NMR Service GmbH
Address of the Bidder:	Blumenstr. 70 Haus 3, 99092 Erfurt, Germany
Contact person:	Dr. Oliver Pecher, COO
Contact person's E-mail address:	o.pecher@nmr-service.de

On the basis of your public tender we are pleased to submit the following bid:

BID No. N-QT-2405173

Type of purchasing: Service Equipment Const

No.	Description of the goods	Quantity	Price	Discount %	Value
1	NMR SPECTROMETER FOR MAGNETIC FIELDS UP TO 9.4 T	1 Set	87,020.00	0	87,020.00

TOTAL	87,020.00
Discount	0.00
VALUE without VAT	87,020.00

Payment terms:	<ul style="list-style-type: none"> 50% payment in advance after receipt of the order and signed contract 50% payment payable on receipt of Invoice, upon delivery
Delivery time in weeks:	16 weeks
Delivery term:	DAP Ljubljana (price includes delivery to the client's address)
Validity of the bid:	31 August 2024
Warranty period (at least 1 year):	12 months

MANDATORY ENCLOSURE:

Brochures including a complete technical description and specification of the equipment, and the supplier's Offer/Quotation with technical specifications and a list of components included (please, enclose it to the second part of the tender documentation)

_____ 17.05.24
(place, date)



The Bidder:

_____ (signature of the representative)

Institut "Jožef Stefan"
 Jamova cesta 39
 1000 Ljubljana, Slovenia

Erfurt, 17 May 2024

BID No. N-QT—2405173			Delivery: 16 weeks	
Your inquiry: PUBLIC-TENDER DOCUMENTATION "NMR SPECTROMETER FOR MAGNETIC FIELDS UP TO 9.4 T" (JN20/2024)				
Pos.	Qty.	Description	Unit Price	Price
1	SET	NMR SPECTROMETER FOR MAGNETIC FIELDS UP TO 9.4 T comprising the following items and services	€87,020.00	€87,020.00
1a	1	REDSTONE HF1 (1 – 400 MHz) <ul style="list-style-type: none"> • RF transmitter <ul style="list-style-type: none"> ◦ One channel with frequency range: 1 – 400 MHz ◦ 10 ns 0.0055° phase shifts and 40 ns 96 dB amplitude control ◦ 64 million point waveform memory ◦ 20 ns phase-continuous frequency switching over 20 MHz ◦ High stability oven oscillator with 5×10^{-10}/day stability • Digital Receiver <ul style="list-style-type: none"> ◦ Independent Digital Receiver with 14-bit 50 MHz ADC digitizing directly at the intermediate frequency, oversampling ◦ Digital filtering, and receiver bandwidth of 5 MHz ◦ Fast acquisition recycle time of 50 μs plus one dwell period ◦ Receiver recovery time < 1 μs ◦ 66 dB of variable gain with up to 85 dB of total gain available from 1 – 300 MHz • Signal Averager <ul style="list-style-type: none"> ◦ 256 MB of memory ◦ 10 ns resolution DSP pulse programmer ◦ 10 ns minimum pulse width, unlimited number of loop counters ◦ 3072 sequence events ◦ External trigger and 7 user assignable control lines • Allows future expansion to up to 4 transmitters and/or 8 receivers • Pre-installed computer and software <ul style="list-style-type: none"> ◦ State-of-the-art high-performance PC with MS Win 11 ◦ 16 GB RAM, 1 TB SSD, DVD-ROM, Ethernet ◦ 24" TFT monitor, keyboard, and mouse ◦ TNMR™ software site license (free updates) • Wobble feature: integration of customised board to the console and software/setting updates with the pre-installation of the computer to allow wobbling for one channel at a time 		
1b	1	PROBE INTERFACE KIT <ul style="list-style-type: none"> • Passive transcoupler modules 5 to 400 MHz <ul style="list-style-type: none"> ◦ <u>Nine</u> modules: 5 – 9, 9 – 14, 14 – 30, 30 – 50, 50 – 80, 80 – 150, 150 – 250, 250 – 350, and 350 – 450 MHz ◦ RF power 1 – 1000 W 		

		<ul style="list-style-type: none"> • NMR/NQR preamplifier module 0.7 to 150 MHz <ul style="list-style-type: none"> ◦ Input frequency: 0.7 – 150 MHz ◦ Maximal input peak power: 30 dBm (20 Vpp / 1 W) ◦ Noise figure: ≤ 1.3 dB ◦ Signal gain: +35 dB (min.) ◦ Recovery time: < 9 µs (after 10 µs 30 dBm pulse) ◦ Input / output impedance 50 Ω nominal ◦ Input / output VSWR ≤ 1.4 • NMR/NQR preamplifier module 20 to 1200 MHz <ul style="list-style-type: none"> ◦ Input frequency: 20 – 1200 MHz ◦ Maximal input peak power: 30 dBm (20 Vpp / 1 W) ◦ Noise figure: ≤ 1.5 dB ◦ Signal gain: +20 dB (min.) ◦ Recovery time: < 1.6 µs (after 10 µs 30 dBm pulse) ◦ Input / output impedance 50 Ω nominal ◦ Input / output VSWR ≤ 3.0 • Dummy load for RF power testing/calibration • Cable kit • RF accessories kit 		
1c	1	SHIPPING/HANDLING (DAP LJUBLJANA, SLOVENIA)		
			Net Total	€87,020.00
Price/VAT:		All prices are, if not explicitly addressed otherwise, net prices. This quote considers a tax-free intra-community delivery within the European Economic Area (EEA). Our VAT No.: DE 259462822. All out of state sales/use tax, VAT, import duties, and related costs are the responsibility of the customer.		
Currency:		All prices in Euro (EUR, €).		
Validity:		This quotation is valid until 31 August 2024.		
Shipping:		Prepaid and added. Incoterms® 2020: DAP Ljubljana, Slovenia via carrier. Note, import formalities and duties (if applicable) as well as buyer location unloading remain responsibility of the customer.		
Warranty:		We provide 12 months warranty on goods and labour after delivery.		
Liability:		Our liability is limited to the value of the delivered goods.		
Order:		Signed contract and receipt of advanced payment.		
Delivery:		16 weeks.		
Payment:		50% on order and 50% upon delivery. NET 14 days. All goods remain property of NMR SERVICE until paid in full.		
<p>Warranty: The equipment to be provided comes with a <u>12-month warranty</u> (after delivery) for the material and manufacturing to be without failure. The liability of NMR Service GmbH under this warranty is limited to replace and/or repair the equipment, components and/or parts as long as these have not been misused, neglected, improperly repaired, changed and/or involved in an accident. NMR Service GmbH holds the right for the final error determination regarding the presence and/or reason for malfunctions/defects of the equipment. NMR Service GmbH is not and under no circumstances liable for collateral and/or consequential damage of the equipment. This warranty is valid in place of any other warranty expressed (implied or statutory) and no agreement extending or modifying this warranty is binding on NMR Service GmbH unless in writing and signed off by NMR Service GmbH. Equipment returned for repair shall be shipped prepaid to the facilities of NMR Service GmbH (Blumenstr. 70 Haus 3, 99092 Erfurt, Germany). NMR Service GmbH will repair and ship back the equipment as soon as possible.</p>				

Thank you very much for your inquiry. Please do not hesitate to contact me if you have further questions.

Sincerely yours,



Dr. Oliver Pecher
 – Prokurist/COO –





2. TECHNICAL DOCUMENTATION OF THE PUBLIC TENDER

1. Technical characteristics

The NMR spectrometer for magnetic fields up to 9.4 T must contain: a radiofrequency transmitter, a digital receiver, a signal averager, a computer with pre-installed software, a customized board with wobble feature, and a probe interface kit. The system must allow for the future expansion to at least 2 transmitters and 2 receivers. The components must meet the following **minimum requirements**:

Radiofrequency transmitter:

- at least one channel with minimal frequency range 5 MHz to 400 MHz
- phase shifting with 16-bit resolution (0.0055°) in 10 ns or faster
- amplitude control over 96 dB in 50 ns or faster
- minimum 64 million point waveform memory

Independent digital receiver:

- minimum 14-bit digitizing, minimum 50 MHz ADC
- digital filtering, receiver bandwidth of at least 5 MHz
- acquisition recycle time of 50 μ s or faster
- receiver recovery time 1 μ s or faster

Signal averager:

- minimum 256 MB memory
- minimum pulse width of 10 ns or shorter
- DSP pulse programmer resolution 10 ns or shorter
- external trigger with a minimum of 6 user assignable control lines

Computer and software:

- state-of-the-art high performance PC running Microsoft Windows 11
- minimum 16 GB of RAM, 1 TB SSD, DVD-ROM, ethernet
- 24" monitor
- necessary software with the appropriate licences (allowing free updates) to run the equipment must be installed

Wobble feature:

- customized board with wobble feature must be integrated into the spectrometer
- software allowing wobbling must be installed on the computer

NMR probe interface:

- passive transcoupler modules together covering the frequency range from 5 MHz to 400 MHz
- NMR preamplifier module for the frequency range from 5 MHz to 150 MHz with the minimal signal gain of +35 dB, noise figure below 1.5 dB and recovery time below 10 μ s
- NMR preamplifier module for the frequency range from 20 MHz to 400 MHz with the minimal signal gain of +20 dB, noise figure below 1.5 dB and recovery time below 2 μ s
- dummy load for power testing
- all the necessary radiofrequency cables

OTHER REQUIREMENTS:

- The equipment must be CE marked.





- The equipment must operate in the electrical grid 220/400 V.
- Documentation and manuals should be provided, including the maintenance documentation to achieve all technical characteristics.
- Price must include transportation costs.
- The provider is responsible for technical support and service.
- Technical support and remote help by phone, electronic mail and remote access to the instrument.
- Warranty and Out-of-warranty support:
 - Warranty at least 1 year.
 - Response time at most 5 working days after the problem notice.
 - After expiration of the warranty the bidder must provide payable after-warranty support for at least 10 years after the initial warranty period.

