भारतीय सूचना प्रौद्योगिकी संस्थान, इलाहाबाद
Indian Institute of Information Technology, Allahabad
An Institute of National Importance by Act of Parliament
Deoghat, Jhalwa, Prayagraj-211015 (U.P.) INDIA
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# Call for Objection Notice

File No: IIITA/SP/1612/2355/2024

Dated: 06.12.2024

**Subject** :Call for Objection against "Procurement of FT-IR Spectrometers at IIIT-Allahabad, from M/s INKARP INSTRUMENTS PRIVATE LIMITED under proprietary article certificate.

The Department of Electronics and Communication Engineering, IIIT-Allahabad has indented for procurement of FT-IR Spectrometers under proprietary article basis as per provision of GFR 2017, directly through M/s INKARP INSTRUMENTS PRIVATE LIMITED, 1-2-45/1, Street No. 2, Habsiguda,Kakateeya Nagar, Hyderabad, TN (India) against their proposal and accepting their claim that they are fully authorized distributor of Bruker Products and execute sales contracts on behalf of BRUKER, Bruker Optics GmbH & Co. KG, Germany being OEM of FT-IR, FT-NIR,Raman Spectrometers which satisfies all requirements of being a proprietary item.

Relevant documents are enclosed herewith for inviting objection /claims / comments, if any, from eligible manufacturer/supplier, before accepting the claim of earlier said manufacturer and accordingly making procurement under proprietary articles.

Objection/claim/comments, should be sent in through email with all relevant supporting documents to info.purchase@iiita.ac.in with CC to the ar.sp@iiita.ac.in by mentioning above subject in subject line of email within 21 days from the date of publication of this notice i.e. on or before 27/12/2024 upto 12.00 Noon. After the due date, it will be assumed that no distributor/manufacturer/supplier has any objection/claim against the above said/article and the same will be considered as a proprietary article.

Indian Institute of Information Technology ALLAHABAD

**Joint Registrar**
(Store & Purchase)
IIIT-Allahabad, UP

**Enclosure:**

1. Proprietary Article certificate signed by M/s Bruker, Bruker Optics GmbH & Co. KG, Germany.
2. Price quotation by Authorized partner of M/s Bruker, Bruker Optics GmbH & Co. KG, Germany.

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BRUKER

Bruker Optics GmbH & Co. KG
Rudolf-Plank-Str. 27
76275 Ettlingen
Germany
Tel.: +49 (0)7243-504-2000
E-Mail: info.bopt.de@bruker.com
www.bruker.com/optics

Bruker Optics GmbH & Co. KG · Rudolf-Plank-Str. 27 · 76275 Ettlingen

The Director
Indian Institute of Information Technology- Allahabad
Devghat, Jhalwa
Prayagraj-211015
U. P.
India

## PROPRIETARY CERTIFICATE

We, Bruker Optics GmbH & Co. KG are the manufacturers of FT-IR, FT-NIR, Raman spectrometers and related accessories in Molecular spectroscopy range.

The proprietary item Bruker FTIR, Model ALPHA II of this variety code is manufactured by us. Some technologies used are protected by one or more of the following patents: DE 102004025448; DE 19940981, US 5923422.

Herewith, we would like to state that the FT-IR (model ALPHA II) is a proprietary model manufactured by us with following specifications:

1) Spectral range: 350 - 8000 $cm^{-1}$ (with KBr optics), optional 6000 – 500 $cm^{-1}$ with ZnSe optic
2) Spectral resolution: better than 2 $cm^{-1}$, optional better than 0.75$cm^{-1}$ Apodised, free adjustable resolution from 0.75 $cm^{-1}$ to 256 $cm^{-1}$
3) Wave number accuracy: <0.05 $cm^{-1}$ @ 1,576 cm-1, Repeatability <0.0005 $cm^{-1}$ @ 1,576 $cm^{-1}$ (standard deviation of 10 repeated measurements)
4) Interferometer: 60 degree RockSolid, gold-coated mirrors, permanently aligned, United States Patent Number 5,309,217 ROCKSOLID layout
5) Detector: DLATGS
6) Instrument qualification: automated instrument test functionality
7) Available measurement techniques: Transmission, DRS, ATR, Reflection
8) Weight: Approximately 7 kg
9) Temperature range: 5 - 35°C
10) Computer interface: Ethernet
11) PermaSureTM
    - Automatic recognition and individual calibration of QuickSnapTM modules and performance assurance: ATR-crystal plates
    - Automatic performance test and load of appropriate measurement parameters when changing the configuration.
12) Performance GuardTM
    - Continuous electronic monitoring of all spectrometer components, system diagnostics: performance, humidity and temperature

Ettlingen, Germany, October 17th, 2024

**BRUKER OPTICS GmbH & Co. KG**

Indian Institute of Information Technology ALLAHABAD

Mario Eck
Business Development Manager FT-IR Spectroscopy

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Our Ref: INK/Bruker/Del/RG/IIIT-A/105
Dated : 29.11.2024

To
The Director
Indian Institute of Information Technology- Allahabad
Devghat, Jhalwa, Prayagraj-211015, U. P. INDIA

Kind Attn:- Dr. Sunny Sharma

Sub: Special prices Offer for Bruker ALPHA II - Eco FT-IR Spectrometer with Eco ZnSe-ATR

| Sr No | Part No. | Item Description | Qty | Total Prices in Rs |
|---|---|---|---|---|
| 1 | ALPHAII-E | **Bruker**<br>**ALPHA II - Eco FT-IR Spectrometer with Eco ZnSe-ATR**<br>**QuickSnap Sampling Module**<br><br>ALPHA II is a very compact FT-IR spectrometer for quick, easy and reliable IR-analysis. The design of its hard- and software is highly integrated for an intuitive and comfortable operation.<br><br>All spectrometer components are built for continuous availability and a long lifetime.<br><br>Bruker's permanently aligned RockSolid interferometer, and the reliable diode laser guarantee an accurate and precise data acquisition. Due to the CenterGlow IR-source technology and a temperature controlled DTGS detector the ALPHA II provides a constantly high performance, independent from ambient temperature and for many years.<br><br>The need for maintenance is minimized and running costs are kept very low due to the long lifetime of the relevant components like interferometer, IR-source and laser.<br><br>The ALPHA II - Eco includes the single reflection Eco-ATR sampling module that allows the analysis of most solids and liquids without any sample preparation. It is equipped with a versatile high throughput ZnSe ATR crystal for solids and liquids, that is applicable in the pH range from pH 4 to pH 8. The ATR crystal is protected against damage by a slip clutch pressure applicator.<br><br>A wide range of QuickSnap sampling modules is available for the ALPHA II, providing a perfectly matching measurement setup for a large variety of samples and applications. With the push of a button, the exchange of the sampling modules is performed quickly and easily. The PermaSure function | 1 | **Rs. 15,25,000/-** |

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| | | automatically recognizes each change of the setup and performs a quick self-test ensuring a proper instrument performance. Suitable measurement settings for the used configuration are automatically loaded. The PerformanceGuard continuously monitors the spectrometer electronics as well as optical and mechanical components to permanently assure the correct functioning of the complete instrument.<br><br>OPUS provides the right software user interface for the most efficient FTIR-analysis. From the measurement via evaluation to the final analysis report the user is guided in few steps through the analytical workflow. Therefore, ALPHA II is easily operated even by spectroscopic inexperienced personnel. Powerful but<br><br>easy to use functions for verifying and identifying IR-spectra and performing quantitative analysis are included in the software.<br><br>The included Bruker ATR-IR library "BPAD" is a helpful tool for identification of unknown material in daily routine analysis. The library includes a collection of mid-IR reference spectra of basic polymers and plastics.<br><br>System specifications:<br>- Compact ALPHA II FT-IR spectrometer with ZnSe ATR-measurement interface<br>- Robust metal housing<br>- Small footprint: 22x30cm (including sampling module)<br>- Weight: approx. 7kg<br>- Spectral range: 350-8,000cm-1 (ALPHA II base spectrometer)<br>- Spectral resolution: better than 2cm-1<br>- RockSolid interferometer: gold mirrors, high throughput, permanent alignment, long life time >10 years<br>- Diode laser, high wavenumber accuracy and precison, long life time >10 years<br>- IR-Source: CenterGlow technology for continuously optimized light flux, long life-time > 5 years.<br>- Detector: DTGS, temperature-controlled, high stability against external temperature changes<br>- Sealed and desiccated optics<br>- Internal validation unit (IVU) with reference standards for automated instrument tests of every ALPHA II setup and every measurement mode<br>- Automated instrument tests for operational and performance qualification (OQ; PQ)<br>- Easy exchange of ALPHA QuickSnap sampling modules<br>- PermaSure: Automatic recognition and individual calibration of QuickSnap modules and ATR-crystal plates, automatic performance test and load of appropriate measurement parameters when changing the configuration<br>- PerformanceGuard: continuous monitoring of all | | |

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| | | spectrometer components, performance and humidity.<br>- Validated OPUS/IR software, prepared to work fully compliant to GLP and GMP regulations<br>- Software-wizard for IR-spectroscopic quality control. Guides the operator through the complete analysis procedure from measurement, via spectrum evaluation to the final generation of the report<br>- Eco-ATR QuickSnap sampling module with ZnSe ATR-crystal, single reflection<br>- Spectral range: 500-8,000cm-1 (Eco-ATR)<br>- Slip Clutch pressure applicator<br>- Working distance (max. sample height): >20mm<br>- Perfect for analysis of large samples: appr. 350° free working area around crystal<br>- Easy cleaning due to 360° rotation of pressure applicator<br>- Exchangeable ATR crystal plate with electronic recognition<br>Included:<br>- BPAD BRUKER ATR Polymer Spectra Library, 234 spectra (of 117 polymers) recorded with diamond- and germanium-ATR technique.<br>- Desiccant<br>- Set of tools | | |
| 2 | O/IR8+ | **OPUS/IR, FT-IR Spectroscopy Software Package version 8: newest released OPUS version 8.x for this spectrometer type.**<br>OPUS is integrated software for the acquisition, processing, evaluation and reporting of IR-spectroscopic data in laboratory and process environments and is compliant with cGMP/GLP/GAMP regulations.<br><br>OPUS is easy to use:<br>- Configurable user interface and access to executable functions<br>- Automatic consistency-test of measurement parameters<br>- Multi Tasking: Measurement and data manipulation/evaluation at the same time<br>- Step-by-step analysis assistant for quality control applications<br><br>OPUS delivers reliable measurement results in a short time:<br>- Single and repeated measurements<br>- Auto sampler support<br><br>OPUS provides versatile functionality for efficient data analysis:<br>1.) Interactive functions for comfortable data processing, such as<br>- Automated atmospheric correction for water vapor and CO2 in MIR without the need for reference spectra<br>- Normalization, baseline correction, derivative calculation and spectra subtraction<br>- Averaging of spectra<br>- Spectrum calculator<br>2.) Wide range of data evaluation methods for generation of | 1 | Included |

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| | | clear results, e.g.:<br>- Single and multiple peak picking, interactive and automated modes<br>- Spectra comparison method for material verification<br>- Library search for material identification, User specific library set- up<br>- Free starter libraries<br>- Spectra interpretation tool<br>- Analyze peak areas and heights, quantitative analysis (Lambert-Beer's Law)<br>- Automated multi-step and multi-method evaluation of spectra (MultiEvaluation)<br>- Curve fit<br>3.) Easy-to-use tools for reporting and data exchange<br>- Analytical report generation with predefined print layouts, customizable<br>- Easy export of spectral data and evaluation results to other programs<br>- Option to store spectral data and evaluation results either in an internal or a user-defined database<br><br>OPUS is validated software and supports the validation of the spectrometer:<br>- Fully automated test routines for operational and performance qualification (OQ, PQ)<br>- Permanent instrument status indicator, online monitoring of system performance<br><br>OPUS supports user during daily routine work:<br>- Run, create and edit macros and VB scripts<br>- Automated execution of repeated actions via calendar<br>- Lab journal functionality<br>- Online help<br>- Multimedia FT-IR tutorial<br>**Note:** 32 Bit Microsoft Office versions are not compatible with OPUS 8 and must not be installed on the same computer. | | |
| 3 | S881 | **Warranty Extension to 10 Years for Interferometer**<br><br>Covers material costs on the replacement of defective parts of the scanning mechanism of the interferometer. The warranty starts with delivery of the spectrometer.<br><br>The warranty starts with delivery of the spectrometer.<br>Below are the details under warranty:<br>• Scanner/Rocker = covered<br>• Scanner/Coil = covered<br>• Scanner/Connecting cable = covered<br>• Scanner/Laser = covered<br>• Electronic board = not covered<br>• Beam splitter = not covered<br>• Mirrors = not covered<br>• The fogging of the BMS will not be covered | 1 | Included |

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| 4 | S881-S | **Warranty Extension to 5 Years for MIR source**<br>Covers material costs in case of source defects.<br>The warranty starts with delivery of the spectrometer. | 1 | Included |
| 5 | S881-L | **Warranty Extension to 10 Years for laser**<br>Covers material cost in case of laser defects.<br>The warranty starts with delivery of the spectrometer. | 1 | Included |
| 6 | W303/D-U | Extension of the ALPHA base spectrometer | 1 | Included |
| | | **TOTAL QUOTATION VALUE** | | **Rs. 15,25,000/-** |
| | | **ADD: GST@18%** | | **Rs. 2,74,500/-** |
| | | **TOTAL FOR VALUE** | | **Rs. 17,99,500/-** |

**Note: Above quoted prices are very special Discounted prices extended**

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**Below Local Accesorreis to be procued from your end**

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| 1 | **Computer Data system with below configuration needs to be arranged**<br>Data System, Mini PC<br>Specifications:<br>- "Intel" processor, 3GHz or better<br>- 4GB RAM<br>- 500GB HDD or better<br>- CD/DVD writer<br>- 21.5" TFT display<br>- USB 3.0, RJ-45 Network (1 + 1 USB-Ethernet Adapter), DisplayPort<br>- Operating System: Windows 10 Enterprise. 64 Bits | 1 |