

Sub: Recommendations of purchase committee meeting held on 30/04/2018 for the purchase of X-ray Diffractometer (XRD)

As part of the start-up research grant, multifunctional **X-ray diffractometer (XRD)** is one of the major equipment to be procured and established as a central facility in SRM University-AP, Amaravati campus. Inquiries were sent to the following vendors inviting quotations for XRD:

- 1) **Rigaku Corporation, Japan** (Indian representative: I. R. Technology Services Pvt. Ltd., Mumbai.)
- 2) **Malvern Panalytical, The Netherlands** (Indian representative: Spectris Technologies Pvt. Ltd., Hyderabad.)
- 3) **Bruker AXS, US** (Indian representative: Bruker India Scientific Pvt. Ltd., Secunderabad.)

The following quotations were received from the above vendors:

1. Quotation number: **Q-79391R1/RIC-XRD/PKP** dated 27-04-2018 from I. R. Technology Services Pvt. Ltd., Mumbai (on behalf of **Rigaku Corporation, Japan**).
2. Quotation number: **IN1804072000_00** dated 09-04-2018 from **Spectris Technologies Pvt. Ltd, Hyderabad** (on behalf of **Malvern Panalytical, B.V. Almelo, The Netherlands**).
3. Quotation number: **IN-18-06-21-SRM-XRD** dated 11-04-2018 from Bruker India Scientific Pvt. Ltd., Secunderabad (on behalf of **Bruker AXS, US**.)

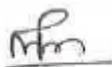
We had sent a detailed specification list to all the three vendors by **12-03-2018**, and all the three vendors attended the meeting of the purchase committee held on **30-04-2018**. Representatives from I. R. Technology Services Pvt. Ltd., Mumbai (on behalf of Rigaku Corporation, Japan), Spectris Technologies Pvt. Ltd, Hyderabad (on behalf of Malvern Panalytical, UK) and Bruker India Scientific Pvt. Ltd., Secunderabad (on behalf of Bruker AXS, US.) attended the purchase committee meeting held on **30-04-2018**.

The quotations received from the above three vendors were placed before the purchase committee for its perusal. The details of these three quotations are given in the Comparative Statement - I.

The purchase committee discussed the technical specifications, price, and commercial terms & conditions individually with all the three vendors. Based on the discussion in the purchase committee meeting, revised quotes were received from the Rigaku Corporation, Japan (revise quote no: Q-79391R2/RIC-XRD/PKP dated 01-05-2018), Malvern Panalytical, UK (revise quote no: IN1804072000_01 dated 04-05-2018). Bruker AXS, US was inclined to revise the price but the revised quote was not received within the promised date. A comparison has been made in the enclosed Comparative Statement – II among the revised quotations from Rigaku Corporation, Japan Q-79391R2/RIC-XRD/PKP dated 01-05-2018, Malvern Panalytical, UK (revise quote no: IN1804072000_01 dated 04-05-2018) and the original quote from Bruker US (IN-18-06-21-SRM-XRD dated 11-04-2018). Technically, all the three vendors were found similar and suitable. However, as per the feedback from various experts and users (please see attached sheet), we find that the currently configured XRD instrument from **Malvern Panalytical, UK** meets all of our requirement, user friendly, and easily upgradable to the advanced versions. It can be seen from the comparative statement-II that the revised price of XRD instrument with the required specifications offered by **Malvern Panalytical, UK**, CIP Hyderabad/Chennai by air is **100,000 EURO** (Hundred

thousand euros only) which was discussed during the purchase committee meeting and has the lowest price (L1). The Rigaku Corporation, Japan has offered a revised quote of 14300000 JPY (one crore, twenty-two lakh Japanese Yen only) which is higher than the price set at the purchase committee meeting (L2). The customs clearance and other charges will be extra and will be borne by SRM University, AP – Amaravati.. The terms of payments are irrevocable and confirmed letter of credit (LC). Delivery of the equipment will be within 120 days from the date of LC opening. Warranty period is 36 months from the date of installation and commissioning. Instrument installation, on-site training and maintenance for instrument for 36 months will be done by the Spectris Technologies Pvt. Ltd, Hyderabad at free of cost. Spectris Technologies Pvt. Ltd, Hyderabad has also offered **Water Chiller (Werner Finley make)** at **INR 2,80,000** (two lakhs eighty thousands rupees only) with 3 years of warranty.

It is recommended that the approval may be accorded for placing purchase order on **Spectris Pte Ltd 31 Kaki Bukit Road 3, #06-04/05 Techlink, Singapore 417818**, who are the principals of Malvern Panalytical, B. V. Almelo, The Netherlands, for one number of XRD machine (Model **Empyrean High Resolution Multifunctional XRD**) for **100,000 EURO (Hundred thousand Euros only) CIP Hyderabad/Chennai** by air and one number of water chiller (Make Werner Finley) for **INR 2,80,000** (two lakhs eighty thousands rupees only). Custom duty and other levies at Chennai airport including transportation from Hyderabad/Chennai airport to SRM University, AP - Amaravati will be borne by SRM University, AP - Amaravati.


(Dr Pranab Mandal)


Deputy Registrar

Faculty members in-charge

Sabyasachi Mukhopadhyay


Registrar
31-7-19

Invited Faculty-member


(Prof. D. Narayana Rao)
Pro-Vice Chancellor



SRMUniv/AP/18-19/PO-0018

Dt: 10.07.2018

To
M/s. Spectris Pte.Ltd.,
31 Kaki Bukit Road 3,
#06-04/05 Techlink,
Singapore – 417818.
Mr. Jitendra Kumar - 7306859789
jitendra.kumar@panalytical.com

Gentlemen,

Sub: SRM University AP – Supply, Installation & Demo of “Empyrean model of Powder X-ray Diffractometer” at Amaravati, Andhra Pradesh, India order - Issued Reg,

Ref: Quotation No : IN1804072000_02 dated 22.06.2018

With reference to the above and discussion we had with you, we are pleased to issue this order for the purchase of “Empyrean model of Powder X-ray Diffractometer” at Amaravati, Andhra Pradesh, India is accepted for a value of € 100,000.00 (Euro One Hundred Thousand Only/-) Vide - Annexure Enclosed.

Payment Terms:

1. 100% through LC at sight against dispatch documents (LC will be established within 15 days of release of PO). Bank charges for LC establishment within India will be borne by SRM University and bank charges outside India will be borne by Spectris Pte. Ltd.,

Shipment Terms : CIP Chennai Airport by Air

In case of any modifications in this regard the rates offered by you will be taken into account for such modifications.

Kindly contact Dr. Nimai Mishra (7003239796) – Assistant Professor and arrange to take up the work and complete it at an early date.

Kindly acknowledge receipt of this order and return copy of this order enclosed as token of your acceptance.

Yours faithfully,


Authorized Signatory



Copy to the Accounts Dept, Copy to Dr. Nimai Mishra – Assistant Professor



WU
10/7/18

ANNEXURE

Sl.No.	Description	Qty.	Price in Euro
1	Powder X-ray Diffractometer Model: Emptyrean Make: Malvern Panalytical B.V., The Netherlands (specifications as per your quotation)	1 no.	€ 1,00,000.00

Euro One Hundred Thousand Only

Note:

- 1. Delivery:** 4 months from the date of technically and commercially clear order and receipt of Letter of Credit (LC).
- 2. Delivery terms:** CIP (Air) Chennai Airport.
- 3. Warranty:** 36 months from date of installation and commissioning or 37 months from date of shipment whichever is earlier. During warranty period if any part is required same to be supplied free of cost on CIP basis.
- 4. Installation, commissioning and training** will be arranged FREE of cost by Malvern Panalytical.
- 5. Shipping & Billing Address**

SRM Univeristy AP,
Neerukonda Village,
Mangalagiri Mandal,
Guntur District - 522502.
Andhra Pradesh.



Authorised Signatory

[Handwritten Signature]

[Handwritten Signature]

[Handwritten Signature]

SPECTRIS PTE LTD
31 Kaki Bukit Road 3
No. 06-04/05 Techlink Singapore 417818
Tel : +65 6741 2868 / Fax : +65 6741 2166
GST Reg M2-0043390-4



Ship To
SRM TRUST AP
RK GALLERIA, 2ND FLOOR,
SRINIVASA NAGAR, BANK
COLONY, NEAR MAHANADU SIGN

Bill To
SRM TRUST AP
RK GALLERIA, 2ND FLOOR,
SRINIVASA NAGAR, BANK
COLONY, NEAR MAHANADU SIGN

Invoice Date
10.12.2018

Page
1 of 1

Commercial Invoice

186411IN

LC Number
0007818FL0525007

Freight Prepaid/Collect
FREIGHT PREPAID

Airport Of Loading
AMSTERDAM AIRPORT

Country Of Origin
NETHERLANDS

LC Date
18.09.2018

Mode Of Transport
VIA AIRFREIGHT

Airport Of Discharge
CHENNAI AIRPORT

Currency
EUR

PO Number / Date
SRMUNIV/AP/18-19/PO-0018 /
10.07.2018

Incoterms
CIP CHENNAI AIRPORT

Country Of Destination
INDIA

Our Reference
13026411 / 33024937

DESCRIPTION OF GOODS	QUANTITY	VALUE (EUR)
POWDER X-RAY DIFFRACTOMETER MODEL EMPYREAN MAKE MALVERN PANALYTICAL B.V. THE NETHERLANDS CIP CHENNAI AIRPORT - INCOTERM AS PER PO NO. SRMUNIV/AP/18-19/PO-0018 DATED 10.07.2018	1 UNIT	100,000.00

TOTAL VALUE 100,000.00
=====

Please make payments to account number 260-327101-183 (EUR) or 260-327101-182 (USD)
with The Hongkong And Shanghai Banking Corporation Ltd 20 Pasir Panjang (East Lobby)
Mapletree Buisness City #12-21 S'pore 117439 Swift : HSBCSGSG

SERVICE COMPLETION / HANDOVER / ACCEPTANCE CERTIFICATE				Page 1 of 1		
Case No.		WO No.		Cust Ref: _____ Date: 22-08-2019		
Customer: SRM University AP Address: SRM University, AP-Amravati, Guntur Dist, Andhra Pradesh-522502		VISIT DATES: 22-08-2019				
End User: Dr. Pranab Mandal Phone No: 9851406353 e-Mail: pranab.m@srmap.edu.in		Work Code: <input type="checkbox"/> CM <input type="checkbox"/> PM <input checked="" type="checkbox"/> IN <input type="checkbox"/> PreIN <input type="checkbox"/> Training				
HOURS SPENT: 6 Hours + TRAVEL 14 hrs.						
		Installation	Commissioning		Services <input checked="" type="checkbox"/>	
Type No. / Version		S.R. No.	Pre inst/Inst hrs	On training	Comm.Sup.	Calibration
Empyrean X-Ray Diffractometer		DY 2341	Call Date:	Call Attended	Call Completed	
		System ID:		22-08-2019	22-08-2019	
Type of Call: BILLABLE <input type="checkbox"/> NON-BILLABLE <input checked="" type="checkbox"/>		JOB COMPLETED →	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO, If No, reason:			
AMC Period:						
Customer has reported for: Positioning of XRD equipment.						
Action taken:						
<ol style="list-style-type: none"> 1. Taken the system to installation location. 2. Unpacked the XRD instrument and checked for tip n tell indicator, found not activated. 3. Checked for any external damage, found none. 4. Positioned and levelled the instrument. 5. Since the civil work for chiller is not yet completed, chiller not unpacked. 6. Did not unpack the accessories as the cupboard with lock and key not available. 7. Electrical connection for XRD and peripheral accessories still needs to be done. 8. Room Air-conditioning is OK. 9. We will visit for installation, once all the pre-installation requirements are fulfilled. 						
Remarks:						
Customer Remarks:						
Engineer: Mr. Sushant Addla Design: Customer Support-SR. 			Customer: SRM University, Amravati Name: Dr. Pranab Mandal / <i>Dr. Nimoi Mishra</i>			
Sign: _____			Sign:  		Date: 22-08-2019	
Date: 22-08-2019						
For Internal Use Only		Work Code:		For Problem:	For Severity	
Type of Exp	HOURS	Value				
Labor Cost						
Traveling Exp + ticket						
Other expenses						

INSTALLATION REPORT				Page 1 of 1	
CASE No.: 00463317 WO No: 00233957 Customer: SRM University Address: SRM University, AP-Amravathi, Neerukonda Village, Mangalgi Mandali, Guntur Dist, AP 522502, INDIA Contact Person: Dr.Pranab Mandal/Dr. Jatis Kumar Dash Phone No: 9851406353 e-Mail: pranab.m@srmap.edu.in		Cust Ref: _____ Date: 21-09-2019 VISIT DATES: 17 th September 2019 - 21 st September 2019 Work Code: <input type="checkbox"/> CM <input type="checkbox"/> PM <input checked="" type="checkbox"/> IN <input type="checkbox"/> PreIN <input type="checkbox"/> Training HOURS SPENT: 45 Hours + TRAVEL 20 hrs.			
		Installation <input checked="" type="checkbox"/> <input type="checkbox"/> Commissioning <input type="checkbox"/> Services <input type="checkbox"/>			
Type No. / Version		S.R. No.		Pre inst/Inst hrs	
Empyrean X-Ray Diffractometer; FW 8.0F / 20181031		DY 2341 System ID: 208557		Call Date: _____ Call Attended: 17-09-2019 Call Completed: 21-09-2019	
International order no. 11222663 PO number : 33024927, Date : 10.07.2018		Customer ID:		Dell PC with Service Tag: 8Q1LYR2, Express Service tag 18989083694, Air compressor Sr no. 09184256, Werner Finley Chiller Sr no. 3U19011140, PIXcel1D Detector (S.No. DYW 102812),	
Type Of Call: BILLABLE <input type="checkbox"/> NON-BILLABLE <input type="checkbox"/>		JOB COMPLETED 		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO, If No, reason:	
Customer has reported for: Installation of Empyrean XRD with all its accessories. Action taken: <ol style="list-style-type: none"> 1. Visited the site on 17th September 2019 for checking the received XRD consignment and for installation. 2. Checked the Internal Impact indicators for XRD. Found OK. 3. Levelling of the XRD was done and checked with Spirit level and found to be normal. 4. Removed all the transport locks of the XRD system and handed over to customer to store in safe place for future usage. 5. Checked the consignment as per PO and factory specifications sheet and found no short shipment. 6. Engaged the goniometer arms. 7. Fixed all the Prefix Modules i.e., FDS, PIXcel Detector, Sample Stages (Flat Stage & RT Spinner). Also, BBHD was fixed and kept inside the Diffractometer Unit. 8. Ferraris Air Compressor (Model No: SIL-EOL 24/50 with Sr. No 09184256) was Installed successfully. 9. Water Chiller of Make: Werner Finley with Sr no. 3U19011140 was connected to XRD and found the flow to be 6 LPM. 10. Electrical Connections were given to XRD, Air Compressor and Chiller. Water connections from Chiller to XRD were connected and found to the power supply as Phase-Neutral: 230.2V; Phase-Earth: 229.9V and Neutral-Earth: 0.3V. 11. Power was Switched ON to XRD. After Switching ON, observed that Goniometer Initialized normally. Then checked the operation of the Goniometer by moving to different angles and found normal. 12. Switched ON the HT (High Tension) Key, observed X-rays were getting ON without any Errors. Performed the radiation check and found the results 0.015 micro Severt / Hour. 13. After that a Normal Tube breeding was done for X-ray Tube (Serial No: DK 421418) and found to be normal. 14. Then Factory Acceptance Tests (FAT) was carried out with following Optical Modules Tests and Sample stages. <ul style="list-style-type: none"> • Linearity, Modulation Depth and Reproducibility test with Flat Stage • Linearity with Reflection-Transmission Spinner Stage. • BBHD: Direct Beam Check. • SAXS Direct beam check. 15. Found that all the Acceptance Tests passing the criteria and completed successfully. 16. Handed over the remaining XRD Spares, Accessories, Alignment tools and Consumables to customer for future usage and suggested to keep in a safer location near to XRD. The Dell PC Warranty transferred to SRM University on the name of Dr.Pranab Mandal. 17. XRD basic operational training was given to 1) Dr. Pranab Mandal 2) Dr.Jatis Kumar Dash. 18. Customer prepared basic analysis program and one sample analysis was done. 19. The XRD system installation was completed. 					
Remarks: The XRD system was installed successfully with all the Factory Acceptance Test passing the criteria. Warranty of the system has already started and will end on 12 th January 2022. Application Training schedule will informed to customer shortly.					
Engineer: Sushant Addla Designation: Customer Support-PANalytical  Sign: _____ Date: 21-09-2019		Customer: SRM University, AP-Amravathi Name: Dr.Pranab Mandal/Dr. Jatis Kumar Dash Designation : Asst.Professor, Dept. Of Physics. Sign:    Date: 21-09-2019			
For Internal Use, Only		Work Code:		For Problem:	
Type of Exp		HOURS		For Severity	
Labor Cost					
Traveling Exp + ticket					
Other expenses					

WORK ORDER

Supplier Details:		P.O No. : COM-SRM/UNIV/AP/Aug/23-24/WO-00103
M/s Spectris Technologies Pvt Ltd		Date : 16-Aug-2023
Unit No 560, 560A, 561, 562, 5th Floor, JMD Megapolis, Sector 48, Sohna Road, Gurgaon - 122001, Haryana.		Invoice To : SRM University-AP, Andhra Pradesh Neerukonda Village Mangalagiri Mandal Guntur 522502 GST No. 37AASTS4359N1ZD
GST No : 06AAGCS6654R1ZJ	Supplier Reference No : PAN/HYD/SRM/AMC/XRD/070723	Delivery At : SRM University AP, Neerukonda Village, Mangalagiri Mandal, Guntur - 522 502.
Quotation Received on : 07-Jul-2023	Contact Person :	
Contact No. : 9003073567	Contact No. :	
Email Id : austin.	Email Id :	

SI No	Description	Delivery period	Qty	Unit	Price /Unit[Rs.]	Discount /Unit[%]	Tax /Unit	Extra Charges	Total Price [Rs.]
1	AMC for X-Ray Diffractometer(Make: Malvern Panalytical B.V, Model No: Empryan.)	16-Aug-2023	1.00	Nos	318540.00	0.00	18.000	0.00	375877.20
Gross Total :									375877.20
Roundoff Amount :									-0.20
Total Purchase Amount :									375877.00

Rupees in Words : Three Lakh Seventy Five Thousand Eight Hundred Seventy Seven Only

Terms and Conditions:

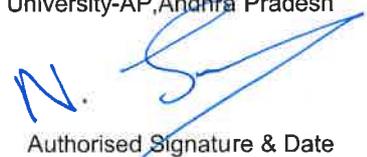
Purchase Terms	1. The total price is inclusive of GST.
Payment Terms	1. Half yearly advance against submission of invoice.
P.O. Note	1. Type of AMC: Non Comprehensive. 2. Two Preventive maintenance and one breakdown visits should be provided. For additional visits Rs.48,000/- day plus GST will be charged. 3. Remote diagnosis for 2 hours should be provided whenever it is required. Additional hours will charged extra Rs.2,000/- per hour. 4. Spare parts and consumables required for the servicing will be procured by SRM University AP. 5. AMC Period: Aug 2023-2024. 6. Contact Person: Dr. Pranab Mandal - Physics Dept - AMC for X-Ray Diffractometer - PR No:284.

Purchase Order Generated By: Anil Kumar Naradasu

Acknowledged By

SRM University-AP, Andhra Pradesh

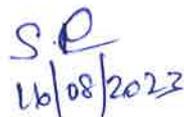
Supplier Seal, Signature & Date


 Authorised Signature & Date

Copy To

Accounts Dept.,




 16/08/2023

Quote Ref: PAN/HYD/SRM/AMC/XRD/070723

Date: 07.07.2023

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To

M/s. SRM University AP

Neerukonda Village
Mangalagiri Mandal
Guntur DT 522502
Andhra Pradesh
India

Spectris Technologies Pvt Ltd.,

Unit No 560, 560A, 561, 562,
5th Floor, JMD Megapolis,
Sector 48, Sohna Road,
Gurgaon - 122001
Haryana
GST: 06AAGCS6654R1ZJ

Kind Attn: Dr. Pranab Mandal

Sub: Annual Maintenance Contract for your Empyrean-DY2341

Type of AMC: Normal (Covers Labour only)

Dear Sir,

Greetings from Malvern Panalytical!

We trust that the above-mentioned system installed at your site is working to your satisfaction.

Enclosed please find our AMC for your kind consideration. The offer includes only the XRD system.

Thanking you

Yours truly

For SPECTRIS TECHNOLOGIES PVT.LTD.



B. Rajalakshmi

B. Rajalakshmi

Back Office Executive

Quote Ref: PAN/HYD/SRM/AMC/XRD/070723

Date: 07.07.2023

Page: 2 of 7

IMPORTANT NOTE

The previous AMC/warranty period ends which cannot be changed even if the financial and CONTINUATION OF AMC: For renewal of contract, The period of this contract starts as soon as the previous AMC/warranty period ends which cannot be changed even if the financial and administration process delays for renewal of this contract. If there will be a gap for new contract renewal/warranty conversion date, then before taking the system into contract, there will be an 2 Days inspection visit by the Panalytical Engineer at a cost of 48K per day+ Taxes applicable only to verify whether to accept the contract or not. The acceptance of the contract is discretion of M/S Panalytical only.

During the contract period, in case of System comes under breakdown due to the failure of third party items or non-procurement of required spares for the system/any other reason at customer side Panalytical will not be responsible for the down time and the AMC payment to be made for that period even if the service not taken by the customer from Panalytical for the above reasons and AMC period will not be extended for the downtime of system happened during the in procurement of spares. "If any spares failed during maintenance, Malvern Panalytical will not be responsible as all the service has to be performed in good faith and the procurement of the spares will be as per the contract's Spare parts condition" If any spares failed during the service of the system also to be arranged by the contract holder.

Note: The final PO to be registered with us before the contract (AMC) start period.

In case of more than one Equipment under AMC contract Individual AMCPO for each Equipment to be provided.

Order to be Placed on "Spectris Technologies Pvt. Ltd, Unit No 560, 560A, 561, 562, 5th Floor, JMD Megapolis, Sector 48, Sohna Road, Gurgaon 122001, Haryana".

Communications regarding this contract to be sent to our Chennai Office address and mail id mentioned below.

Chennai Office Address : Spectris Technologies Pvt Ltd.,
5th Floor, Arihant Nitco Park,
90, Dr.Radhakrishnan Salai, Mylapore,
Chennai - 600 004. India. Tel.No. 044-43518676
M : +91 9599982956

Contact Person: B. Rajalakshmi, [E : rajalakshmi.babu@panalytical.com](mailto:rajalakshmi.babu@panalytical.com)

NOTE: This contract is to be executed by the holder, in duplicate, one copy to be returned to Spectris Technologies Pvt. Ltd. and second copy to be retained by the customer.

Yours truly

For SPECTRIS TECHNOLOGIES PVT.LTD.



B. Rajalakshmi

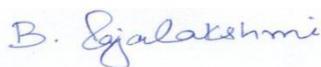
B. Rajalakshmi
Back Office Executive

OFFER FOR ANNUAL MAINTENANCE CONTRACT FOR Xpert 3 Powder

An AMC package consisting of **best response** time, labour charges for the XRD maintenance.

Description	Amount (Rs)
Annual Maintenance Contract Charges for XPERT 3 Powder for period of one year	3,18,540.00 + GST 18%
Package Details	
Call Logging	Response can be either by means of telephonic support or remote support or engineer visit support". AMC registration at our end will take approx.10 working days on receipt of final PO at our end and response time for PM & CM site visits will start after the PO registration. Response time for Corrective maintenance will be minimum 5 working days (Weekends / Holidays not included).The service complaint has to be logged with by an E MAIL to our customer Support Desk having e mail SR.India@panalytical.com . PM visit schedule to be shared to us before one month in prior.
No of Visits	Two Preventive Maintenance visits One emergency breakdown visit on requirement. Remote diagnosis for 2 hours are free in the AMC period
Scope of work	The scope includes work mentioned in annexure for regular maintenance. Diagnosis and problem solving during breakdowns.
Spares & Consumables	Spares & consumables required for servicing shall be procured and stocked by customer based on regular advice by our engineer. The AMC contract does not cover supply the same.
Third party contract	Third party items like Vacuum Pump, Computer, Monitor, Printer, Compressor, Chiller & other accessories are not included in this contract. Servicing of third party items to be arranged by contract holder (customer) end. If the non-ambient chambers/controllers/cryodrives need to be exported/imported for/after repair, the repair and logistics charges are of the customer's scope
Payment terms	100% in advance against our invoice. Invoice will be provided on receipt of PO. Payment to be done within 30 days from invoice date. Escalation of price shall be permitted during the consecutive year's renewals
Tax	GST 18% EXTRA
Extra visits	For additional visits, (apart from the AMC visits) shall be charged @ Rs 48,000 / day along with applicable service taxes. Also, If problem is not solved out of non-availability of spare parts, then the subsequent calls will also be treated as breakdown calls and will be charged accordingly. If any Application support is required it will be charged extra ASAP. "Software/hardware upgradations are not covered under this contract. Remote support for additional hours will be charged Rs.2000 per hour.

For SPECTRIS TECHNOLOGIES PVT.LTD.

B. Rajalakshmi
Back Office Executive

Quote Ref: PAN/HYD/SRM/AMC/XRD/070723

Date: 07.07.2023

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SCOPE OF WORK DURING PREVENTIVE MAINTENANCE – XRD EMPYREAN SYSTEM

1. CHECK THE FOLLOWING

- X-ray Tube
- Goniometer operation
- Detector operation
- Alignment of the system
- Water circuit
- Fuses, HT lamps.
- Cooling fans working condition.

2. Checking the tube filter. Changing/cleaning the filter. Cleaning the tube/tube shield deposits.
3. Check/adjust the water flow. Change/Clean the external water filter.
4. Check the Goniometer gear wheels and greasing them.
5. Cleaning dust layer formed over the Optical encoder disc of DOPS. Checking the micro switches of Goniometer.
6. Checking the Spinner stage for smooth operation and other stages.
7. Check the resolution of each detector by Pulse Height Distribution test and adjustment for optimal operation of detectors.
8. Check and clean all circuit boards.
9. Check operation of HT and tube breeding if required.
10. Check all safety circuits of the XRD unit
11. Maintaining/back-up of parameter bank of the system.
12. Applying stage offsets if more than one stage is there. Updating the configurations after alignment.
13. Running the Silicon standard to compare with the standard pattern.

REMOTE DIAGNOSTICS: *

We can also provide service/diagnosis of the equipment through Remote Diagnostics facility where the equipment can be diagnosed by the engineer located in his office or any other part of the country. This reduces downtime and also the engineer can come prepared to the site in case of a major breakdown.

* The facility can be implemented with certain hardware arrangements required such as a data modem and reliable & adequate bandwidth telephone line at site.

Calibration	Instrument Calibration with available standard sample supplied along with the instrument for maintenance & performance check will be covered under AMC. Application calibration, Application training, Performance calibration etc will not be covered under AMC.
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Quote Ref: PAN/HYD/SRM/AMC/XRD/070723

Date: 07.07.2023

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Annual Service Contract

This contract provides holders of Spectris Instruments with a standard form of service on a year to year basis for the reasonable normal life of the instrument in accordance with the terms set forth below. This contract becomes effective immediately upon acceptance and signature by Spectris Technologies Pvt. Limited and the holder of the contract.

Contract Period: ONE YEAR

Contract Holder:

M/s. SRM University AP

Neerukonda Village, Mangalagiri Mandal

Guntur DT 522502, Andhra Pradesh

India

A. EQUIPMENT:

This contract covers only the equipment listed below and does not include items that are not of Philips manufacture unless otherwise specified.

Type No. Emyrean Serial No. DY 2341

B. INSPECTION: Each instrument covered by this contract shall be inspected and tested 2 (Two) times of 12 months at reasonably spaced intervals to be agreed upon between the parties to this contract. Repairs and adjustments will be made provided that the need arises from normal usage and not from the abuse, labor disputes, fire, water, and explosion or as a result of improper power, water or environmental conditions which are the responsibility of the contract holder. These inspections, in addition, shall consist of a complete check of the instrument and calibration when considered necessary by the Service Engineer.

C. SPARE PARTS: All spare parts, imported or otherwise, required for the servicing the instruments, would be provided by the contract holder and should be genuine Malvern Panalytical parts. In case the same is not available with them it would be imported / procured by the contract holder under their own arrangements. In case any spare parts are supplied by Spectris Technologies Pvt. Limited, the cost of the same would be chargeable extra. In case the instrument is out of service period the supply of all the parts from Spectris Technologies Pvt. Limited supply center is subject to its availability.

D. EMERGENCY: In addition to the regularly scheduled inspection visits, the holder of this contract may call one visit at no additional cost in case of emergency breakdown. The term emergency breakdown as used here shall not apply to the normal replacement of expendable items. Every reasonable effort will be made in such circumstances to give preferred attention as early as possible.

E. CONTRACT FEE: The contract fee shall cover the services mentioned above and also shall include transportation and living expenses of service engineer for inspection and emergency visit made while the contract is in force.

F. ASSISTANCE: The holder of the equipment shall, for his part, give reasonable co-operation in providing manual labor /equipment to assist in moving or transport of heavy items and services of electricians, plumbers, masons, carpenters or other craftsmen where such services may be necessary for modifying or correcting the customer's facilities. Such services are to be provided promptly.

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G. RESPONSIBILITY: All services are to be performed in good faith, but no responsibility can be assumed for delays by suppliers in providing material or services, for acts of God, Damages caused due to rats/rodents, decrees or acts of Government, strikes, delays of transportation, interruption of business of either party or other causes beyond control of Spectris Technologies Pvt. Limited.

Repairs of high-tension parts including oil/gas filling, rewinding of transformers, repairs of mechanical parts like vacuum pump, chiller, compressor, etc. which may require expertise of third party technician or electrician are excluded from the scope of this contract.

H. ARRANGEMENT: In case of sites that are located in remote regions where proper conveyance or lodging and boarding facilities of reasonable standard are not available the contract holder will have to arrange for the same.

I. TERMS OF CONTRACT: The contract shall be for the term of 12 months, subject to the cancellation, in accordance with the stipulation, herein after. The fee of the contract will be Rs. 3,18,540.00 (+GST) per annum.

J. MODE OF PAYMENT: Payment to be done through Cheque/DD drawn in favor of "**Spectris Technologies Pvt Ltd**" payable at New Delhi and the Cheque/DD to be forwarded to our below mentioned Head office address with the details of Invoice/Proforma/PO no along with the payment breakup & deduction details.

Spectris Technologies Pvt Ltd

Unit No 560, 560A, 561, 562,
5th Floor, JMD Megapolis,
Sector 48, Sohna Road,
Gurgaon - 122001
Haryana
Kind Attn: Mr. Virender Singh

NEFT/RGTS mode of payment will be accepted.

BANK DETAILS

HSBC Bank
A/C no. 94210713001
IFSC Code. HSBC0110006
Branch: Greater Kailash
MICR No. 110039006
Type: Current A/C

K. RENEWAL: This contract may be renewed for additional successive yearly periods by mutual consent.

L. TERMINATION: This contract may be terminated at any time by either party on 30 days' written notice. Any refunds or additional charges shall be on pro-rata basis.

M. CONTACT DETAILS:

Name: Mr. Austin Maxwell – Mobile 9003073567
Regional Service Manager- South India

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Date: 07.07.2023

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Below items are covered under this contract

S NO	ITEM DESCRIPTION	PART NO	QTY
1	MULTI PURPOSE GREASE SERVICE KIT, PANAL	5322 734 00008	1 no
2	FAN PIXCEL3D 2X2 EI.Unit PANalytical	5322 785 04531	1 no
3	FILTER. WATER	5322 480 54034	4 nos

Note	For AMC as per our Company Policy, we will not issue Performance guarantee/Security deposit etc. LD Clause will not be acceptable. AERB Procedures (Institute registration, License of Operation to be available and NOC for X-ray tube procurement to be available) to be completed at your end to procure spares. The documents to be available to supply the spares from our end under PO/AMC.
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Signed _____

Accepted by: _____

Name : _____ **Designation:** _____

For SPECTRIS TECHNOLOGIES PVT.LTD.

Date: _____



B. Rajalakshmi

Address:

B. Rajalakshmi
Back Office Executive

M/s. SRM University AP
Neerukonda Village, Mangalagiri Mandal
Guntur DT 522502, Andhra Pradesh
India

Usage Rate Chart

Equipment Name	Powder X-Ray Diffractometer
Research Facility	Powder X-Ray Diffractometer
Model and make	Empyrean, Malvern Panalytical Ltd, Spectris company
Year of Instillation and Location	2019, W Block, Room 105
Source of Fund	University Fund

Usage Rate: (as indicated by SRM University-AP)		
S.NO.	USERS CATEGORY	RATE (UNIT SAMPLE) & (IN RUPEES)
1	Academic (External) ¹	300.00
2	Academic (Internal but different department/lab) ²	0.00
3	Academic (Internal) ³	0.00
4	Industry User	500.00
5	National Research Lab User	300.00
6	Start-ups Company	500.00

Note:

1. Academic (External) means researchers belongs to the other institution.
2. Academic (Internal but different department/lab) means researchers belongs to other department/lab or other investigators.
3. Academic (Internal) means researchers belongs to the same institution.

Approved by


Prof. Ranjit Thapa
Professor and Dean - Research
SRM University – AP

Prof. Ranjit Thapa
Dean - Research

SRM University-AP, Andhra Pradesh
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Central Research Facility and I-STEM
SRM University – AP

Prepared for I-STEM portal submission.