वै0औ0अ0प0 – केन्द्रीय औषधीय एवं सगंध पौधा संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

पोस्ट ऑफिस– सीमैप, लखनऊ–226015, भारत

CSIR-CENTRAL INSTITUTE OF MEDICINAL & AROMATIC PLANTS

(Council of Scientific & Industrial Research)

P.O. CIMAP, Lucknow - 226 015, (U.P.) INDIA

CORRIGENDUM

File No. CIMAP/PUR-10(1)2021.

Date 22.11.2021

In reference to our Tender No. CIMAP/PUR-10(1)2021. dated 03.11.2021 having tender ID 2021_CSIR_93272_1, following amendments have been made by the Technical Sub Committee (TSC) after conducting the Pre Bid Conference on 16.11.2021.

Sr. No.	Description	Existing	Amended
01.	Supply and Installation of Automated Flash cum preparative HPLC system with accessories.	-----	-----
02.	Date of Submission of Tender	14.12.2021 at 11:00 AM	21.12.2021 at 11:00 AM
03.	Date of Opening of Tender	15.12.2021 at 11:00 AM	22.12.2021 at 11:00 AM
04.	Specifications	5(A) specifications	As per attached Annexure 5 (A)
05.	Delivery Schedule		Delivery: Within 03 Months from the Final LC
			Installation: 15 days after the delivery of the equipment.

All the bidders are requested to submit the tender accordingly to the above amendments. Others terms & conditions of the tender will remain unchanged.

Yours' faithfully,

भण्डार एवं क्रय अधिकारी

For and on behalf of (CSIR)

Council of Scientific and Industrial Research

Director - 0522- 2359623, Fax : 0522-2718509 / COA - 0522-2718641-Telefax : 2718639

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Automated Flash cum preparative HPLC system along with accessories

System Requirement: CSIR-CIMAP requires the supply, delivery and installation of an automated chromatographic system for the separation and purification of phytochemicals from the medicinal plants. Therefore, system must be capable of separation and purification of natural products with preparative HPLC with reverse phase C_{18} prep columns (5.0 µm and 10 µm particle size silica) as well as flash chromatography with normal phase silica columns (20–40 µm particle size silica) by mode switching without major changes in the configuration. Interested bidder/suppler must demonstrate by way of a statement of capabilities that the quoted product meets the following functional requirements:

1. Solvent delivery system	:	a) *Solvent Inlet*-04 b) *Solvent composition*- Isocratic and gradient (binary/quaternary) with linear, step profile c) *Flow rate*-5-200 ml/minor better *d) Flow-accuracy*-±5% or better *e)* Gradient accuracy- ±3% f) *Back pressure capacity*- 200psi or better [Normal-phase (NP) Flash chromatography] and 3500 psi or better (reverse-phase prep HPLC) g) *Reservoir solvent Sensor*- Solvent level sensors both in all solvent inlet & waste bottles for physical solvent management.
2. Detection system	:	a) PDA (wavelength- 200-400 or better)and integrated ELSD b) Wavelength Accuracy- 1 nm or better c) *Peak Detection Modes*- Slope, Threshold, or Time scale d) *Peak Purity*-Real time and post run spectral display with peak purity by spectral ratio
3. Sample Introduction	:	a) Automatic Injection valve for sample loading both solid & liquid b) Sample loading for NP chromatography (Flash)- Solid and liquid load both c) Sample loading for RP chromatography (*prep*HPLC)- loop of 05 ml capacity d) *De-contamination*- System should have automatic self-cleaning of the valve at the end of the run for flash mode & liquid injection by sample loop for *prep*HPLC mode. *e) Automatic air purging*-Feature should be available after end of the run f) *Upgradation*-System should have the provision/scope for advance feature of automation like autoinjector, autosampler & column selector etc. g) *Peak collection*- Should be based on UV and ELSD peak both
4. Fraction Collection	:	a) *Fraction accuracy- ±6% or better* *b)* Sample split ratio should be minimal and defined. c) There should be no or minimal loss when ELSD not is use. d) Necessary carrier gas cylinder/generator should be provided with system e) Fraction collection rack sensor- Should have facility of fractions collection rack sensing for both NP & RP chromatography (Flash &*prep*HPLC mode) f) *Waste Management*-Solvent level sensors in waste bottles for solventmanagement. g) Empty sample loader cartridges for NP- (20 Nos of 5g; 20 Nos of 25g)) along with necessary connectors/frits/luner/adaptors/ ferule for NP mode
5. Sample cartridges, and columns and	:	a) Prepacked reusable Flash Silica column- (20 Nos of 4-6gram; 20 Nos of 10-15 gram)

fraction collection racks		b) Prepacked Reusable C18 Reversed-Phase column, 40-80 gram-02 Nos(particle size 5-10µm) c) Glass column/Stainless steel column - 02 (one each of 50 gm & 100 g capacity) along with necessary connector for NP mode d) Empty Column cartridges for NP- (20 Nos of 20-40g; 20 Nos of 40-80 g)) along with necessary connectors/frits/luner/adaptors/ferule for NP mode e) Flash grade silica of superior quality-500 g f) Fraction collection racks- 2-4 for 20-22 ml; 2-4 for 27-30 ml and 2-4 for 45-50 ml g) Collection tubes- minimum 100 for each rack size h) System should have baseline monitoring during equilibration of column
6. Chromatographic operations, data acquisition and transfer	:	a) System should have software control facility for the real time method parameter editing, method scale up, column size with media sensing for flash chromatography& fraction collection rack. Touch screen based system controller for the operation, data acquisition, processing/transfer and routine maintenance will be preferred. *b)* Preferably with touch screen not less than 25 cm c) System should have processed data transfer facility preferably with USB port d) Safety features- System should have safety feature e.g. over pressure sensor, vapour sensor/ leak detector and grounded solvent path etc. e) System should have Rack RFID and Cartridges RFID/QR Bar code sensors. f) System should be compatible to use the glass columns/steel columns g) System should have the flexibility of using any make flash columns available in the market.
7. Other general requirements	:	*a)* All the modules of instruments should be from same/single manufacturer. Preferably, the cartridges should be from same/single manufacturer *b)* All required accessories like- Tubing, ferula, cap, seal, valves, Injector fill port, blunt tip needle, male luner, female luner etc. should be supplied with system. *c)* Vendor should quote their latest model meeting the technical requirement of the tender. Supplier should also confirm the availability of minimum essential spares and service in the next 10 years after installation. *d)* *Warranty-* 03 Years warranty from the date of installation should be provided. After standard warranty of 3 years AMC from 4thyear onward to 10th year should also be quoted separately. *e)* *On-site Training & Demonstration:* Installation, demonstration and training to users should be given at CSIR-CIMAP, Lucknow by the certified/authorized engineer. One *application on Natural Product Isolation and purification is to demonstrated* *f)* *Compliance:* IQ at the time of installation and OPV (operational & performance validation) in every year of warranty period. *g)* *Service support-* Supplier should clearly mention about their service set up in India (preferably in Northern part ofIndia) for prompt service support.Service should be provided within 72 hrs from the report of technical problem so that machine down time is minimized. In case, the Equipment/System remains non-operational for more than 5 days, then warranty period will be extended for the equivalent period for which Equipment/System remained non-operational. Warranty extension in such case shall be done without prejudice to any other term & condition of the contract. *h)* Technical compliance statement must be enclosed along with supporting literature. In case of proprietary technology, relevant certificate must be enclosed along with offer