



**CSIR – INDIAN INSTITUTE OF PETROLEUM
(COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH)
HARIDWAR ROAD, MOHKAMPUR, DEHRADUN INDIA – 248005**

**EXPRESSION OF INTEREST
for
FINDING / SEARCHING DOMESTIC MANUFACTURERS OR SUPPLIERS FOR
SCIENTIFIC / R&D ITEMS**

IIP REF: IIP/EOI/2020/MII/

HARD COPY of your proposal to be submitted to:

**Controller of Stores & Purchase
CSIR - INDIAN INSTITUTE OF PETROLEUM
(COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH)
HARIDWAR ROAD, MOHKAMPUR, DEHRADUN INDIA – 248005
E-Mail: cosp@iip.res.in, rawats@iip.res.in
Website: <http://www.iip.res.in>**

LAST DATE FOR SUBMITTING WRITTEN PROPOSAL: Dec 1 , 2020, 3.00 P.M

**ENQUIRIES SEEKING NAMES OF INDNETORS / END USERS SHALL NOT BE ENTERTAINED. ALL
INSTRUCTIONS ARE AVAILABLE IN THIS DOCUMENT ONLY. PLEASE READ IT THOROUGHLY.**

CSIR-Indian Institute of Petroleum (IIP), Dehradun, an ISO 9001 Institute, is one of the leading constituent laboratories under Council of Scientific & Industrial Research (CSIR) engaged in R&D work in petroleum refining, natural gas and petro-chemicals and contributing towards creation of state of the art technology & products intends to procure various scientific instruments/ items as per the detailed specifications provided in this document. Normally most of these items with the kind of specifications and parameters required for users in IIP for their research purposes are available through international manufacturers / suppliers. In pursuance of recent policies / guideline /orders issued by various Ministries of the Govt. of India to encourage domestic manufacturing and preference to domestic suppliers under various programs like 'Make in India', 'Atma Nirbhar Bharat' etc. interested firms capable of offering the listed items are requested to respond to this notice.

Firms are requested to refer to the **Order Nos. P-45021/2/2017-PP (BE-II) dt. 15.06.2017 as amended vide order of even number 28.05.2018, 29.05.2019, 04.06.2020, and 16.09.2020** issued by Public Procurement Section of DPIIT, Min. of Commerce & Industry, Government of India in their own interest to know about the provisions related to domestic suppliers for participation in open tenders. Firms may also refer to various other policies / programs of the Govt. related to promoting domestic manufacturing and/or supply.

Following is the list of items with their detailed specifications that are required by users in CSIR-IIP to meet their research requirements. WE STRONGLY ENCOURAGE INDIAN MANUFACTURERS / SUPPLIERS OF SAME / SIMILAR ITMES TO GO THROUGH THE TECHNICAL PARAMETERS AND WRITE TO US EXPRESSING THEIR INTEREST TO MANUFACTURE / SUPPLY THE SAME. WHEREVER IT IS FELT THAT ANY / SOME PARAMETERS ARE RESTRICTIVE OR SUPERFLOUS IN NATURE, DOMESTIC MANUFACTURERS CAN BRING THE SAME TO OUR NOTICE.

DOMESTIC MANUFACTURERS / SUPPLIERS, INDIAN SUBSIDIARIES OR AGENTS OF FOREIGN MANUFACTURERS / SUPPLIERS ARE REQUESTED TO GO THROUG THE PROVISION OF ORDERS ISSUED BY DPIIT, MIN. OF COMMERCE & INDUSTRY OR ANY OTHER ORDER / CIRCULAR ISSUED BY OTHER MINISITRIES TO EXPRESS THEIR INTEREST TO SUPPLY THE ITEMS REQUIRED BY CSIR-IIP IN COMPLIANCE OF THE PROVISIONS OF THE THOSE ORDER(S)/CIRCULARS.

AFTER EVALUATING RESPONSE TO THIS EOI NOTICE, CSIR-IIP WILL DECIDE ABOUT FLOATING GLOBAL TENDER ENQUIRY (GTE) AFTER SEEKING APPROVAL OF THE COMPETENT AUTHORITY ONLY FOR SUCH ITEMS FOR WHICH NO DOMESTIC MANUFACTURER OR SUPPLIER HAS EXPRESSED INTEREST TO SUPPLY THE ITMES WITH THE REQUIRED SPECIFICATIONS IN PURSUANCE OF THE SAID GOVT. CIRCULARS / ORDERS / NOTIFICATIONS.

CRITICAL DATE SHEET

क्रमांक Sl. No.	प्रक्रमStage	दिनांक और समय Date & Time
1.	प्रकाशनकादिनांक और समय Publish Date & Time	06.11.2020 1600hrs IST
2.	दस्तावेजविक्रय / डाउनलोडकाप्रारंभदिनांक और समय Sale /document Download Start Date & Time	06.11.2020 1600hrs IST
3.	संदेह / सवालपूछनेकीअंतिमदिनांक और समय Last Date & time for receipt of queries	13.11.2020 1500hrs IST
4.	बोलीपूर्वसम्मेलन, यदिहोतो Pre-bid Conference, if any	NOT APPLICABLE
5.	बोलीजमाकरनेकीप्रारंभिकदिनांक और समय Bid Submission Start Date & time	06.11.2020 1600hrs IST
6.	बोलीजमाकरनेकीअंतिमदिनांक और समय Bid Submission End Date & Time	01.12.2020 1500hrs IST
7.	बोलीखोलेजानेकीदिनांक और समय Bid Opening Date & Time	02.12.2020 1500 HRS IST

EXPRESSION OF INTEREST

1	Item Name :	Online and offline Gas analyzer for CO, CO2, O2, C2-C5 hydrocarbons and its isomers including BTX (qualitative)		
Tentative Specifications:				
	Element	Specifications		
1	Chromatography Performance	i) Retention time repeatability < 0.008% or <0.0008 min or better ii) Area repeatability <1% RSD		
2	Oven	i) Ambient temp +4°C to 425°C. ii) Maximum achievable temp rates: 40°C/min or better for all voltages iii) Oven cool down time from 400°C to 50°C in less than 5.0 min or better iv) should have 24 rapms and 25 plato or better		
3	Heated gas sampling Valve (GSV)	i) Heated GSV 70°C or above		
4	Valve	Valco made suitable valve		
5	Injector	i) Split/splitless Inlet system with pneumatics control, Maximum temp : 400°C, 0-150 psi or better operation with 0.1psi increments, split ratio up to 7000:1 or better to avoid column overload. ii) All injection ports should be independently heated		
6	Thermal Conductivity Detector (TCD)	i) Linear dynamic range: > 10 ⁵ or better & with automatic bridge balancing ii) Maximum temperature: 400°C or better iii) Minimum detectable level: 400 pg tridecane or 300pg butane or > 20,000 mVxmL/mg(dk) with He carrier gas. iv) Thermal conductivity detector with EPC. Includes adapters/connectors for capillary, 1/8" and 1/4" columns.		
	Flame Ionization Detector (FID)	i) FID with pneumatic control ii) Maximum temp: 450°C iii) Minimum Detectable level ≤ 1.2pg C/s iv) Linear dynamic range : > 10 ⁺⁷ vi) Data rates 500 Hz or better with 25 ms half height		
7	Flow control system	i) The EFC/EPC/PPC/AFC/APC should be able to set the pressure to a minimum accuracy of 0.1 or better ii) EPC /EFC for Capillary Inlet iii) Provides two channels of EPC. One channel is either flow or Pressure, the second is pressure only		
8	Columns	Suitable column for our applications		
9	Accessories	Install Kit (should include at least Includes leak detection fluid, swage-type fittings, copper tubing, syringes, screw-drivers, Tube Cutter, wrenches) for GCs		
10	Chromatography Management Software	The chromatography software should be dual channel and compliant with latest windows based operating system. The software should have standard GC software features like interactive graphics, tool bar for online editing, batch data processing, automated baseline correction, peak integration, overlay, baseline compensation, S/N ratio adjustment		
11	PC	The system should be supplied with a branded computer, having latest and required configuration for running the system software for data acquisition, data processing and data storing and printing purpose.		
12	Warranty	Minimum 1 years of warranty and AMC for 2 year after completion of warranty		
13	Service Support	10 Year service support with required accessories		
	The system should be factory tested at the vender side as per our applications. Schematic diagram of the customised analyser along with the chromatogram of the compounds of our required gases/hydrocarbons should provide before shipment of the instrument. The TCD should detect and separate 500ppm to 80 % of the gases and FID should detect and separate 50ppm to 100 % of the hydrocarbons and gases.			
	Required analysis details We want to analyze the following component through online channel in GC by using N2 (Nitrogen) as well as He (Helium) as a carrier gas.			
	Component	Conc. Min. (*)	Conc. Max.	Concentration Units (wt%, vol%, ppm, ppb, etc.)
	METHANE	5	100	Vol%
	ETHANE	1	5	Vol%

	ETHYLENE	1	5	Vol%
	PROPANE	0.5	5	Vol%
	PROPYLENE	0.5	5	Vol%
	n-BUTANE	0.5	5	Vol%
	propylene oxide	0.5	10	Vol%
	Propanol	0.5	5	Vol%
	Acetylene	0.5	5	Vol%
	i-butane	0.5	5	Vol%
	1- butane	0.5	5	Vol%
	sys 2 butene	0.5	5	Vol%
	Propadiene	0.5	5	Vol%
	iso- petane	0.5	5	Vol%
	n-pantane	0.5	5	Vol%
	1,3, butadiene	0.5	5	Vol%
	2 methyle 2 butane	0.5	5	Vol%
	t-2-butene	0.5	5	Vol%
	ACETYLENE	0.5	5	Vol%
	BENZENE			
	TOLUENE			
	XYLENE			
	OXYGEN	5	100	Vol%
	CO2 (CARBON DI OXIDE)	1	50	Vol%
	CO (CARBON MONO OXIDE)	1	10	Vol%
	N2	1	40	Vol%

For and on behalf of CSIR

Sd/-

Controller of Stores & Purchase

IMPORTANT INSTRUCTIONS

- INTERESTED FIRMS NEED TO SUBMIT PROPOSALS IN HARD COPY FORMAT LATEST **BY Dec.1, 2020**. WE MAY NOT BE ABLE TO CONSIDER PROPOSALS RECEIVED AFTER THIS DATE. THIS WILL NOT HOWEVER PREVENT YOU FROM PARTICIPATING IN THE OPEN TENDERING PROCESS, IF DONE SUBSEQUENTLY THROUGH GeM OR CPPP PORTAL.
- PLEASE NOTE THAT CSIR-IIP'S ITEM SPECIFICATIONS / PARAMETERS ARE BASED ON USERS RESEARCH REQUIREMENTS AND FUNCTIONAL NEEDS AND MAY INVITE THE FIRMS FOR PRE INDENT MEETING / PRESENTATION /DISCUSSIONS. INTIMATION RE. THAT SHALL BE SENT SEPARATELY BY EMAIL ONLY AND ALSO HOSTED ON CSIR - IIP WEBSITE. THERE IS NO NEED TO FOLLOW UP TELEPHONICALLY AND/OR THROUGH EMAIL.
- WRITE ON THE MAIN ENVELOPE 'EXPRESSION OF INTEREST' FOR 'ITEM NAME' WITH 'REF. NO.' AS GIVEN IN THIS BID DOCUMENT. THE ENVELOPE MUST BE ADDRESSED TO THE **CONTROLLER OF STORES & PURCHASE** AND SENT TO THE ADDRESS PROVIDED ON THE TITLE PAGE OF THIS DOCUMENT.
- SEND ONLY TECHNICAL LITERATURE / BROCHURE. THERE IS NO NEED TO ENCLOSE RECOMMENDATION LETTERS OR ANY OTHER DETAILS NOT CONCERNED WITH THE TECHNICAL ASPECT OF THE ITEM AT THIS STAGE. **PLEASE NOTE THAT NO FORMAL OPENING WILL TAKE PLACE AT A SPECIFIED DATE OR TIME FOR THE OFFERS RECEIVED AS THIS BEING PROSPECTING ACTIVITY IS JUST AN INFORMATION GATHERING / SEEKING EXERCISE AND NOT A TENDERING PROCESS.**
- THIS EXERCISE IS BEING CARRIED OUT TO GET DETAILED IDEA ABOUT THE TYPE OF SPECIFICATIONS, TECHNICAL PARAMETERS INDIAN MANUFACTURERS ARE WILLING AND ABLE TO MANUFACTURE AND / OR SUPPLY (IN PURSUANCE OF VARIOUS GOVERNMENT POLICIES / GUIDELINES / INSTRUCTIONS) FOR THE TYPE OF EQUIPMENT DESIRED TO BE PROCURED BY CSIR – IIP SO THAT CSIR – IIP CAN AVOID GOING FOR GLOBAL TENDERING AND ENCOURAGE DOMESTIC MANUFACTURING AND COMPETITION.
- **BEING A PUBLIC FUNDED ORGANIZATION CSIR-IIP IS ENTITLED TO CONCESSIONAL GST @5% AND CONCESSIONAL CUSTOMS DUTY PAYABLE UNDER...**
- OPTIONALLY FIRMS MAY ALSO ENCLOSE 'BUDGETARY OFFER' TO ENABLE US TO GET BROAD IDEA ABOUT THE PRICING. **PLEASE NOTE THAT THIS IS NOT A TENDER OR BIDDING PROCESS AND THE PRICES SENT BY YOU SHALL NOT BE USED TO MAKE PURCHASE DECISION AT ALL.** WE WILL FRAME ITEM SPECIFICATIONS & DETAILED BID DOCUMENT AFTER WHICH TENDERING PROCESS SHALL BEGIN. YOU MAY GET OPPORTUNITY TO PARTICIPATE IN OUR TENDERING PROCESS WHERE BID PRICES ARE ALSO REQUIRED TO BE QUOTED. **DISCLOSING BUDGETARY PRICES AT THIS STAGE IS PURELY OPTIONAL & FIRMS MAY SKIP THIS IF THEY FEAR LOSING COMPETITIVE ADVANTAGE AT THE TENDERING STAGE LATER.**
- WARRANTY, EXTENDED WARRANTY AND AMC OFFERINGS AVAILABLE (PERIOD OF COVERAGE AND ESTIMATE) SHOULD BE PROVIDED FOR ALL ITEMS.

For and on behalf of CSIR
Sd/-

CONTROLLER OF STORES & PURCHASE

