

# 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.

क्रमांक	प्रक्रमStage	दिनांकऔरसमयDate &	
SI. No.		Time	
1.	प्रकाशनकादिनांकऔरसमय	06.11.2020 1600hrs IST	
	Publish Date & Time		
2.	दस्तावेजविक्रय / डाउनलोडकाप्रारंभदिनांकऔरसमय	06.11.2020 1600hrs IST	
	Sale/document Download Start Date & Time		
3.	संदेह / सवालपूछनेकीअं□िमदिनांकऔरसमय	13.11.2020 1500 hrs IST	
	Last Date & time for receipt of queries		
4.	बोलीपूर्वसम्मेलन, यदिहो⊡ो	NOT APPLICABLE	
	Pre-bid Conference, if any		
5.	बोलीजमाकरनेकीप्रारंभिकदिनांकऔरसमय	06.11.2020 1600hrs IST	
	Bid Submission Start Date & time		
6.	बोलीजमाकरनेकीअं□िमदिनांकऔरसमय	01.12.2020 1500hrs IST	
	Bid Submission End Date & Time		
7.	बोलीखोलेजानेकीदिनांकऔरसमय	02.12.2020 1500 HRS IST	
	Bid Opening Date & Time		

#### **CRITICAL DATE SHEET**

### **EXPRESSION OF INTEREST**

1	Item Name :	Electrochemical Workstation (Potentiostat/Galvanostat)	
	Technical Specifications:		
	Potential control range:	-10 V to +10 V or better	
	Compliance voltage:	±12 V or better	
	Applied potential resolution:	0.0012% or better	
	Applied potential accuracy:	$\pm$ 1mV, $\pm$ 0.01% of range or better	
	Maximum current:	±250 mA or better	
	Galvanostat applied current range:		
	Measured current resolution:	0.0012% or better	
	Current measurement accuracy:	0.2% or better	
	Scan rate:	1 <i>µ</i> V/s - 1000 V/s or better	
	Potential rise time:	<1 $\mu$ S or better	
	IMP frequency range:	10,µHz- 1MHz	
	Current control range:	±2 A or better	
	Current sensitivity:	<10 pA	
	Frequency range:	10 μHz-1MHz	
	It should comply for following techniques: General Techniques: Cyclic Voltammetry, Open Circuit Potential (OCP), Linear Sweep Voltammetry (LSV), Chrone		
	Amperometry, Chrono Coulometry	, Differential Pulse Voltammetry (DPV), Differential Pulse Voltammetry (DPA), Differential	
	normal pulse voltammetry, Square v	wave voltammetry (SWV), AC Voltammetry	
	Techniques for Corrosion Study	: Open circuit potential, TAFEL, Potentiodynamic Deactivation, Galvanic corrosion, Pitting	
	-	ance (LPR), Corrosion rate, Cyclic polarization,	
	<b>Techniques for Impedance Study:</b> Open circuit potential, AC Impedance, Impedance –time (mott-scottsky), Impedance potential, Potentiostatic /Galvanostatic EIS, Bode and Nyquist plots, Impedance simulation and fitting program, AC Impeda		
	plots with simulation as per following detail:		
	<b>Bode</b> : log Z vs log (freq); Phase vs log (freq); log Z" & Z' vs log (freq); log Y vs log (freq) <b>Nyquist</b> : Z" vs Z'		
	<b>Energy Storage Study:</b> Open circuit potential, Galvanostatic Charge/discharge single/multiple cycle, dynamic capacitance		
	measurements		
	Software: Authenticate and fully updated version software for general electrochemical techniques, corrosion, impedance, ba		
	charge/discharge studies. It should be competent with latest window-based system and can process all results based on these techniques. Updation of software should be provided time-to-time for lifetime. <b>Computer</b> : The system would be integrated with latest window based acquisition system <b>Accessories</b> :		
	Standard cell for Basic Electrochemistry		
	Working Electrodes:	Platinum Electrode (3 mm): 1	
		Glassy Carbon Electrode (3 mm): 2	
	Counter Electrode:	Platinum Wire Electrode: 1	
		AgCI Electrode for aqueous: 2	
		Ag/AgCl Electrode for non-aqueous: 1	
		Saturated Calomel Electrode along with filling solution: 1	
	Polishing kit: 1		
	Flat Corrosion cell including Ag/AgCl reference and Platinum as counter electrodes -1		
	System should compatible with 220 V/ 50 Hz power supply It should include detail technical manuals		
	Two years comprehensive Warranty for electrochemical analyzer		

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 /DSICUSSIONS. 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 & PURCHASEAND 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 MANNUFACTURE 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 DECISIONAT ALL. WE WILL FRAME ITEM SPECIFICATIONS& DETAILED BID DOCUMENTAFTER 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**