

Government eProcurement System		Government eProcurement System			
Tender Details		Date : 27-Jun-2022 02:57 PM			
Print					
<b>Basic Details</b>					
Organisation Chain	Council of Scientific and Industrial Research  CSIO-Chandigarh - CSIR  Purchase-CSIO - CSIR				
Tender Reference Number	CSIO-3-4-2021-Pur				
Tender ID	2022_CSIR_120412_1				
Tender Type	Open Tender	Form of contract	EOI		
Tender Category	Goods	No. of Covers	1		
General Technical Evaluation Allowed	No	ItemWise Technical Evaluation Allowed	No		
Payment Mode	Not Applicable	Is Multi Currency Allowed For BOQ	No		
Is Multi Currency Allowed For Fee	No	Allow Two Stage Bidding	No		
<b>Cover Details, No. Of Covers - 1</b>					
Cover No	Cover	Document Type	Description		
1	Fee/PreQual/Technical/Finance	.pdf	Expression of Interest for procurement of Spin Coating Photoresist Coating System		
		.xls	Expression of Interest for procurement of Spin Coating Photoresist Coating System		
<b>Tender Fee Details, [Total Fee in ₹ * - 0.00]</b>				<b>EMD Fee Details</b>	
Tender Fee in ₹	0.00	Fee Payable To	Nil	Fee Payable At	Nil
Tender Fee Exemption Allowed	No	EMD Amount in ₹	0.00	EMD through BG/ST or EMD Exemption Allowed	No
		EMD Fee Type	fixed	EMD Percentage	NA
		EMD Payable To	Nil	EMD Payable At	Nil
<a href="#">Click to view modification history</a>					
<b>Work / Item(s)</b>					
Title	CSIO-3-4-2021-Pur				
Work Description	Expression of Interest for procurement of Spin Coating Photoresist Coating System				
Pre Qualification Details	Please refer Tender documents.				
Independent External Monitor/Remarks	NA				
Show Tender Value in Public Domain	No				
Tender Value in ₹	0.00	Product Category	Laboratory and scientific equipment	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	90	Period Of Work (Days)	45
Location	CSIR-CSIO Sector 30 Chandigarh	Pincode	160030	Pre Bid Meeting Place	Online meeting through BOQ LINK

<b>Pre Bid Meeting Address</b>	CSIR-CSIO through online link given in BOQ	<b>Pre Bid Meeting Date</b>	15-Jul-2022 10:00 AM	<b>Bid Opening Place</b>	CSIR-CSIO Sector 30 Chandigarh
<b>Should Allow NDA Tender</b>	No	<b>Allow Preferential Bidder</b>	No		

<b>Critical Dates</b>			
<b>Publish Date</b>	27-Jun-2022 03:00 PM	<b>Bid Opening Date</b>	19-Jul-2022 03:30 PM
<b>Document Download / Sale Start Date</b>	27-Jun-2022 03:00 PM	<b>Document Download / Sale End Date</b>	18-Jul-2022 03:00 PM
<b>Clarification Start Date</b>	27-Jun-2022 03:00 PM	<b>Clarification End Date</b>	14-Jul-2022 03:00 PM
<b>Bid Submission Start Date</b>	27-Jun-2022 03:00 PM	<b>Bid Submission End Date</b>	18-Jul-2022 03:00 PM

<b>Tender Documents</b>				
<b>NIT Document</b>	<b>S.No</b>	<b>Document Name</b>	<b>Description</b>	<b>Document Size (in KB)</b>
	1	Tendernotice_1.pdf	Expression of Interest for procurement of Spin Coating Photoresist Coating System	412.09
<b>Work Item Documents</b>	<b>S.No</b>	<b>Document Type</b>	<b>Document Name</b>	<b>Description</b>
	1	BOQ	BOQ_131308.xls	Expression of Interest for procurement of Spin Coating Photoresist Coating System

<b>Auto Extension Corrigendum Properties for Tender</b>		
<b>Iteration</b>	<b>No. of bids required for bid opening a tender</b>	<b>Tender gets extended to No. of days</b>
1.	2	7

<b>Bid Openers List</b>			
<b>S.No</b>	<b>Bid Opener Login Id</b>	<b>Bid Opener Name</b>	<b>Certificate Name</b>
1.	ramesh.eproc@csir.res.in	Ramesh Kumar	RAMESH KUMAR
2.	sunder.eproc@csir.res.in	Sunder Lal	SUNDER LAL
3.	jayantao.eproc@csir.res.in	Jayant Mohan Rao	JAYANT MOHAN RAO
4.	anilyadav.eproc@csir.res.in	Anil Kumar Yadav	ANIL KUMAR YADAV

<b>GeMARPTS Details</b>	
<b>Reason for non availability of GeMARPTS ID</b>	Urgent nature of Procurement
<b>Remarks</b>	Expression of Interest
<b>Document Name</b>	SpinTPC.pdf
<b>Document Size (in KB)</b>	378.15

<b>Tender Properties</b>			
<b>Auto Tendering Process allowed</b>	No	<b>Show Technical bid status</b>	Yes
<b>Show Finance bid status</b>	Yes	<b>Show Bids Details</b>	Yes
<b>BoQ Comparative Chart model</b>	Normal	<b>BoQ Compative chart decimal places</b>	2
<b>BoQ Comparative Chart Rank Type</b>	L	<b>Form Based BoQ</b>	No

<b>Tender Inviting Authority</b>



<b>Name</b>	Controller of Stores and Purchase
<b>Address</b>	The Director CSIR-CSIO Sector 30 Chandigarh
<b>Tender Creator Details</b>	
<b>Created By</b>	Ramesh Kumar
<b>Designation</b>	Assistant
<b>Created Date</b>	27-Jun-2022 02:53 PM

## **Expression of Interest (Eoi) for procurement of Spin Coating/Photoresist Coating System**

Documents to be submitted by the OEM or Authorized Representative of OEM:

1. Model number(s) of the instrument which meets the specifications (or very closely matches the specifications).
2. Brochures/Catalogues with respect to point no.1.
3. Compliance sheet of the specifications mentioned in the Eoi. The compliance sheet must be vetted by the OEM. If any of the specifications is not complying, then mention the actual parameter value that the instrument Model mentioned in point no. 1 offers.
4. Valid authorization letter from OEM.
5. Domestic user list of similar system with Model No.

## Expression of Interest

Expression of interest is required for Spin Coating/ Photoresist Coating System for MLP 2027 with the following tentative specifications:

<b>I. Spin Coater specifications</b>		
<b>1. Substrate Details</b>		
a)	Suitable substrate type	Si, Glass, Quartz, Sapphire etc.
b)	Substrate size	<ul style="list-style-type: none"> <li>▪ 5mm to 200 mm round (Suitable substrate adaptors and vacuum chucks should be provided)</li> <li>▪ Desirable substrate holder/chuck for 50 mm, 100mm, 150 mm, 200 mm diameter substrate sizes</li> <li>▪ Suitable Fragment Adapter for substrate size: 5mm to 50 mm</li> </ul>
c)	Substrate thickness	The system should be able to handle thickness of 0.1mm to 10 mm or higher
d)	Substrate weight	The system should be able to hold a substrate of 650 grams or more
<b>2. Spin Coater type</b>		
a)	Type of spin coater	Semi-automatic spin coating system capable of automatically dispensing & coating the resist using programmable electronic media arm.
<b>3. Photoresist</b>		
a)	Suitable materials	All generic resists including SU-8 or related polymers
b)	Viscosity	The system should be suitable for a wide range material viscosity: 1 – 500Cps
<b>4. Motor Requirements</b>		
a)	Motor spin speed	100 to 8000 rpm (+/- 1 rpm) for above mentioned size and weight substrate
b)	Motor acceleration	4000 rpm/sec or higher
c)	Acceleration & Deceleration	Programmable acceleration & deceleration ramp
<b>5. Resist Dispenser Details</b>		
a)	Dispensing pump	Should be integrated into the system
b)	Dispense Arm	Motorized dispense arm should be programmable both in speed and position
c)	Programmable dispense volume	Between 0.1 to at least 10 ml or more
d)	Dispense reservoir	Exchangeable dispense reservoir of min. 0.5 litre or more
e)	Standard resist bottle	The system should be able to connect to standard resist bottle of 0.5 litre or more
f)	Dispense nozzle	Full stream type nozzle should be provided with a media valve
g)	No. of media lines/ nozzles	Minimum 4 nos.
h)	Home position	Drip pan in home position
i)	Suck back valve	Required with the nozzle
j)	Dispense time	Programmable dispense time in 0.1 seconds
k)	Z- axis lift	Servo motor driven z-lift for electronic media arm
l)	Media arm Position control	Target position programmable in 0.1 mm steps
m)	Cleaning of media line	Provision to clean the media line and the bowl to be specified
<b>6. Spin Coater system requirements</b>		
a)	Vacuum control method	Vacuum generated should be sufficient to hold a 200 mm round glass substrate of weight 650 gm at 8000 rpm, quote suitable accessories required to attain the vacuum
b)	N <sub>2</sub> purging	N <sub>2</sub> Purging Port
c)	Waste tank	5 liter capacity or more to be connected to the drain port
d)	Exhaust	Exhaust is required
<b>7. Spin Coater Controller Information</b>		
a)	Control	Microprocessor based control
b)	Storage	Process controller should be capable of storing at least 20 recipes
c)	No. of steps per recipe	The system must be capable to program min. of 20 steps per recipe
d)	Vacuum switch	Integrated Vacuum Release Switch with On/Off Indicator
e)	Trial run	Provision for trial run before the start of final recipe to check if the substrate is properly held on to the vacuum chuck or not
f)	Spinning time	Spinning time: 1 second to 99 minutes 59.9 seconds in 0.1 second increment
g)	Display screen	LCD interface screen to see real time spinning speed v/s time & other parameters
h)	Process cover	Plastic lid resistant to chemicals with safety interrupt sensor
i)	Process bowl material	Polypropylene or equivalent

<b>8. Other Items required for Spin coater</b>		
a)	Complete EBR (Edge Bead Removal) nozzle assembly adjustable in Position for cleaning edge of 2" to 8" substrate to be quoted	
b)	Complete BSR (Back Side Rinse) nozzle assembly for up to 8" substrate to be quoted	
c)	Substrate holder/ chuck	Desirable substrate holder/chuck for 50 mm, 100mm, 150 mm (Qty-01 each) Desirable substrate holder/chuck for 200 mm diameter substrate sizes (Qty- 02)
d)	Fragment Adapter	Suitable Fragment Adapter for substrate size: 5mm to 50 mm (Qty-02)
e)	Spares & accessories	Set of spares such as O rings for the chucks to be provided (Qty -03 nos. of each type)
f)	Clean room compatibility	The System should be compatible with Class 100 clean room and should be CE certified
<b>9. Performance parameters</b>		
a)	Uniformity	Uniformity of the coated photoresist should be 1.5% or better across the 8" substrate
<b>II. Developer Station specifications</b>		
<b>10. Substrate Details</b>		Refer to point no. 1
<b>11. Developer station type</b>		
a)	Type of developer station	Semi-automatic developer station capable of performing developing, cleaning & drying operations automatically
<b>12. Developer material</b>		
a)	Developer material	The system should be well suited for commonly used aqueous developers
<b>13. Motor Requirements</b>		
a)	Motor spin speed	100 to 8000 rpm (+/- 1 rpm) for above mentioned size and weight substrate
b)	Motor acceleration	4000 rpm/sec or higher
c)	Motor effect desired	Spin motor with chuck oscillation/ wobble effect for smooth development, please specify the type of motor effect included in the system
d)	Acceleration & Deceleration	Programmable acceleration & deceleration ramp
<b>14. Developer Dispenser Details</b>		
a)	Dispense Arm	Motorized dispense arm should be programmable in speed and position
b)	Developer reservoir	Pressurized tank of size 5 litre or more with venting valve with connection to exhaust
c)	Pressure regulation	Pressurization control valve from 0.2 to 2.5 bar or more for developer
		Pressurization control valve from 0.2 to 2.5 bar or more for DI water
d)	Programmable dispense rate	Developer dispense rate controllable: 20 to 400 ml/ min or more, flow meter to indicate the same
		DI water dispense rate controllable: 20 to 400 ml/ min or more, flow meter to indicate the same
e)	N <sub>2</sub> flow rate	Flow meter of 2 - 100 l/min for N <sub>2</sub>
f)	No. of media lines/ nozzles	Minimum 5 nos. (2 puddle nozzles, 1 spray nozzle, 1 DI water rinse, 1 N <sub>2</sub> nozzle)
g)	Developer nozzle	Full stream type nozzle for puddle development should be provided with media valve for the developer, Programmable dispense time in 0.1 second steps
h)	DI water nozzle	Recipe programmable point of use nozzle for DI on the media arm, Recipe programmable dispense time in 0.1 second steps
i)	Nitrogen Nozzle	Nitrogen blow nozzle for drying, Programmable dispense time in 0.1 second steps
j)	Home position	Drip pan in home position
k)	Z- axis lift	Servo motor driven z-lift for electronic media arm
l)	Media arm Position control	Target position programmable in 0.1 mm steps
<b>15. Developer system requirements</b>		
a)	Vacuum control method	Vacuum generated should be sufficient to hold a 200 mm round glass substrate of weight 650 gm at 8000 rpm, quote suitable accessories required to attain the vacuum
b)	Drain requirement	Drain connection port with at least 5 meter long tubing
c)	Exhaust	Exhaust is required
<b>16. Developer Controller Information</b>		Refer to point no. 7
<b>17. Other Items required for</b>		

<b>Developer Station</b>	
a)	Complete BSR (Back Side Rinse) nozzle assembly for up to 8" substrate to be quoted
b)	Substrate holder/ chuck Desirable substrate holder/chuck for 50 mm, 100mm, 150 mm (Qty-01 each) Desirable substrate holder/chuck for 200 mm diameter substrate sizes (Qty- 02)
c)	Fragment Adapter Suitable Fragment Adapter for substrate size: 5mm to 50 mm (Qty-02)
d)	Spares & accessories Set of spares such as O rings for the chucks to be provided (Qty -03 nos. of each type)
e)	Clean room compatibility The System should be compatible with Class 100 clean room and should be CE certified

The specifications will be finalized after expression of interest.

**Note:** All the manufacturers from India as well as from global market are invited.