

UNIVERSITY COLLEGES OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF CHEMISTRY



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QUOTATION NOTICE

No.: CU/CHEM/DST-NG/Equip/Valve-Driver/ 1 / 2017

Dated: 22.12.2017

Quotations are invited from authorized parties to supply one "Commercial Pulsed Valve Driver" for the operation of DST-SERB sponsored project under Prof. Nikhil Guchhait (PI). Specifications of the items are given below. Suppliers are hereby requested to submit their quotations along with proper documents (Current trade licence, Service Tax registration certificate, PAN No., copy of registration certificate with statutory authorities and other credentials) in a sealed envelope addressed to the PI of the project on or before 05.01.2018. The price should be inclusive of relevant taxes/charges, showing break-up. Warranty, on-site service/support should be mentioned clearly. The authority reserves the right to accept/reject any quotation without showing any reason thereof.

**Note:** - Parties must mention make & model no. of the equipment offered by them with detailed specification. Also provide a list of Indian users with similar type of specification.

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## Specification of the Instrument

Name of the Items: **Commercial Pulsed Valve Driver (Iota One Pulse Driver)**

Items No.	Particulars/ Items	Description of items	Quantity
1.	<b>Commercial Pulsed Valve Driver</b>	<p>Model : <b>IOTA ONE</b></p> <p>Made by: <b>Parker Hannifin Corporation</b></p> <p>IOTA ONE pulsed valve driver, Power cord, Valve cable, IOTA ONE remote software for PC, Operator's manual.</p> <p>Specification: Pulse duration ranges in microseconds, milliseconds or minutes can be selected; Both ON TIME and OFF TIME settings can be changed while running; The instrument is capable of repetition rates up to 250 Hz; The unit can be triggered both internally or externally and has "one shot" capability; Both input and output logic-level (TTL) signals are through the front panel BNC jacks; and Voltage input: 90 – 250 VAC, 47 – 63 Hz,</p>	1

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QUOTATION NOTICE

No.: CU/CHEM/DST-NG/Equip/Rotavapor/ 2 / 2017

Dated: 22.12.2017

Quotations are invited from authorized parties to supply one "Rotary Evaporator System" for the operation of DST-SERB sponsored project under Prof. Nikhil Guchhait (PI). Specifications of the items are given below. Suppliers are hereby requested to submit their quotations along with proper documents (Current trade licence, Service Tax registration certificate, PAN No., copy of registration certificate with statutory authorities and other credentials) in a sealed envelope addressed to the PI of the project on or before 05.01.2018. The price should be inclusive of relevant taxes/charges, showing break-up. Warranty, on-site service/support should be mentioned clearly. The authority reserves the right to accept/reject any quotation without showing any reason thereof.

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## Specification of the Instrument

Name of the Items: **Rotary Evaporator System**

Items No.	Particulars/ Items	Description of items	Quantity required or quote
1	Rotary Evaporator System	<p><b>Rotavapor</b></p> <ul style="list-style-type: none"> <li>* Vertical condenser for standard applications with cooling surface area 1460 cm<sup>2</sup>.</li> <li>* Angle adjustable from 0 – 35 °</li> <li>* Stroke distance 150 mm (+ 100 mm extendable)</li> <li>* Rotation speed 20 – 280 rpm</li> <li>* Flask size range 50 – 4000 mL can be used on the same joint adapter without additional connections.</li> <li>* Heating Power 1300 W</li> <li>* Controlled temperature range 20 – 95 °C</li> <li>* Temperature regulation accuracy ± 2 °C or better</li> <li>* Temperature display Digital allows adjusting set temperature and indicates actual temperature</li> <li>* Over-temperature protection Power cut off when actual temperature exceeds set temperature or by rapid temperature increase</li> <li>* Carry handles Two integrated handles facilitate carry, re-filling and emptying the heating bath</li> <li>* All glass components must be made of Borosilicate 3.3 glass.</li> <li>* Protection class IP21</li> <li>* Approval CE</li> </ul>	1
		<p><b>Vacuum Pump:</b></p> <ul style="list-style-type: none"> <li>* Chemically resistant PTFE diaphragm vacuum pump with a space saving design.</li> <li>* Should be regulated by the Digital Controller and to be delivered with a silencer and 2 m of vacuum tubing.</li> <li>* Suction capacity: 1.5 m<sup>3</sup>/h or better</li> <li>* Number of steps (heads): 2 (2)</li> <li>* Final vacuum (absolute): 10 mbar (± 2 mbar) or better</li> <li>* Power consumption: 150 W</li> <li>* Sound level: 40 – 52 dB(A)</li> <li>* Pump should have ECO-mode that should get automatically activated after 1 hour of</li> </ul>	1

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		operation. Pump should not work on its full capacity and consumes less electrical power and works under reduced stress.	
		<p><b>Digital Vacuum Controller:</b>  Easy to use interface that controls the vacuum digitally. It is optimally suited to on/off-regulate the Vacuum Pump.</p> <ul style="list-style-type: none"> <li>*Measurement range 1400 – 1 mbar</li> <li>*Control range 1100 – 1 mbar</li> <li>*Measuring accuracy <math>\pm 2</math> mbar (<math>\pm 1</math> digit) - after calibration at constant temperature</li> <li>* Temperature compensation 0.07 mbar/K</li> <li>* Hysteresis Automatic or 1 – 500 mbar</li> <li>* Display Digital, monochrome, 4.0 in</li> <li>* Timer function to stop the process after pre-set time</li> <li>* Overpressure prevention - Automatic aeration when pressure above 1400 mbar</li> <li>*Vacuum regulation of set pressure - Adjust and keep pressure stable within hysteresis</li> </ul>	1

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