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Date: 06 Jun 2022

CORRIGENDUM-I TO TENDER NO

No: IISER/PUR/0159/MMS-P/SP/22-23

Sub: Supply and Installation of Rotating Ring Disc Electrode (RRDE)
Ref: Tender Enquiry No. 2022_IISRT_690396_1

1. Serial 3 of technical specification, Ring Disk Electrode (RRDE Electrodes) point 8 is amended as follows:-

For :- Collection Efficiency – 50%

Read :- Collection Efficiency – 35-50%

The revised technical specification sheet is placed at annexure 1

2. The revised dates for submission of bids and date of opening are as follows:-

Due Date: 17 Jun 2022 (3PM)

Date of Opening: 20 Jun 2022 (3:30 PM)

Thanking You,

Yours Faithfully

06/06/2022

Deputy Registrar (P&S)

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Annexure 1 IISER/PUR/0159/MMS-P/SP/22-23

Technical specification: ***Supply and Installation of Rotating Ring Disc Electrode (RRDE) with accessories***

Sl. No:	Specifications	Quantity
1.	**Electrode rotor** 1. Rotation rate from 100-8000 at least accurate with ±2% of display reading. 1. Rotating shaft should be Integrated for RDE / RRDE shaft 2. Outer covering of the shaft should be PEEK (avoid corrosion of the shaft due to electrolyte & solvents used for the experiments). Outer diameter (OD) of the shaft should be in the range 14.0 to 20 mm, and should be compatible at least with 15 mm OD RRDE tips. 3. Ten turn rotation knob for controlling the rpm. 4. Push button for start and stop the motor 5. Digital display for the rotation rate. 6. Indicator required for whether the motor is on or off. 7. Electrical contact for the shaft should be a carbon brush and must not be a Mercury based contact. 8. Motor type should be permanent magnet. 9. Closed loop servo-system (PWM) is required for motor control. 10. Max. Continuous Torque: 18 MilliNewton meter. 11. Rate Control (external): Rate control via input signal on external I/O port with digital motor start / stop input 12. Electrochemical studies should be done in an enclosure- opening from above only- to safe guard experiments from manual interference. 13. Enclosure base and sides should be provided with high density polymers and the windows with transparent polycarbonates. Enclosure should be provided with interlock that prevents rotation when enclosure window is in raised. 14. Temperature-compensated tachometer is required and mounted on to motor shaft. 15. Motor current should be electronically limited.	1
2.	**Electrochemical cell for rotating electrodes** 1. 150-200 mL glass cell. 2. Provided with water jacket. 3. Gas purging facility to be provided. 4. PTFE stoppers and gaskets for fixing electrodes air tightly with the cell. 5. Cell opening and gaskets should be provided with dimension which allows the shaft to rotate without disturbance as well as fix the shaft at the center joint. 6. Gas purged bearing assembly which fits the shaft within the 24/25 center joint	1

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3.	**Ring Disk electrode (RRDE electrodes)** 1. Fixed-Disk RRDE tip with Glassy carbon disc and Pt ring. 2. Disk OD: 5.0-5.5mm 3. Ring OD: 8.0-8.50 mm 4. Ring ID: 6.0-6.50 mm 5. PTFE ring-disk separator 6. Shroud OD: 15.0 mm (at least) 7. Shroud Material: PEEK 8. Collection Efficiency: 35-50%	1
4	**Mercury/ Mercury oxide (Hg/HgO) reference electrode** 1. Single junction Mercury Oxide (Hg/HgO) Reference Electrode 2. reference electrode should fit with the electrochemical cell. 3. Should be provided with O-rings and PTFE adapters. 4. As the electrode is used in strong alkaline media, it should be composed of PTFE or polypropylene (PP) and contains no glass	1
5.	**Other requirements** 1. As the RRDE system will be used along with the potentiostat Biologic (VMP3), the rotor should be compatible with the potentiostat and the software EC lab V11.16	

Pre- Qualification Criteria:

1. Bidders should be the manufacturer/authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) of the same and specific to the tender should be enclosed.

2. An undertaking from OEM is required stating that they would facilitate the bidder on a regular basis with technology/product updates & extend support for the warranty period and for the entire lifetime of the furnace.

3. Non-compliance of tender terms, non-submission of required documents, lack of clarity on the technical specifications, contradiction between bidder specification and supporting documents etc. may lead to rejection of the bid.

4. Equipment offered must be a model from the current serial production range of the manufacturer. Customized or One-off Manufactured Model will not be accepted. Offer should be supported with printed catalogue & depiction on company website.

5. The bidder must have supplied minimum 3 numbers of complete RRDE system to IITs, NITs, CSIR Labs and other Govt. of India Institutes in last 3 years. PO Copies received in last 3 years need to be enclosed supporting the same.

8. Supplier should mention the details of service setup and man powers who are responsible for after sales support. Response time should be within 24 hrs.