

## **Membrane and Separation Technology Division**

### **Procurement plan for the year 2024-2025**

1. Thermally controlled feed tank
2. Ultrafiltration module and setup
3. High-pressure pump
4. Ultrasonic probe sonicator
5. Element analyzer for lube and engine oil
6. Viscometer
7. Fermentative membrane reactor prototype
8. Planetary ball mill with four grinding station (500 ml jar capacity)
9. Turbidity Meter
10. Type 1 and Type two Water Purifier
11. Microbiological testing equipment and pump
13. Automatic Film casting machine
14. Portable hydrogen purity gas analyzer

### Procurement plan for next five year

#### For ongoing project number HCP0054, WP20

<i>S.No.</i>	<i>Items</i>
1	<i>Thermally controlled feed tank</i>
2.	<i>Ultrafiltration module and setup</i>
3.	<i>High-pressure pump</i>
4.	<i>Ultrasonic probe sonicator</i>
5	<i>Element analyser for lube oil</i>
6	<i>Viscometer</i>
7	<i>pH meter</i>
8	<i>Analytical weighing balance</i>
9	<i>Auto-titrator</i>
10	<i>Cone &amp; Plate Viscometer</i>
11	<i>Chiller coupled with a condenser</i>
12	<i>Prototype of membrane-based filtration setup</i>

#### For other planned project

<i>Sl. No.</i>	<i>Items</i>
1	<i>Single stage CO<sub>2</sub>/CH<sub>4</sub> separation unit</i>
2	<i>Rapid gas analyzer</i>
3	<i>EDXRF instrument for composition analysis of oil contamination</i>
4	<i>Three stage gas separation system</i>
5	<i>Inline vacuum and compressor system for permeate gas collection</i>
6	<i>Crystallization system</i>
7	<i>Hollow fibre extrusion system</i>
8	<i>Glove box system</i>
9	<i>Catalytic reactor setup</i>