

## Supporting information file

### **Fabrication, characterization and electrochemical analysis of polyvinylidene fluoride plus zeolites embedded manganese phosphate composite ion exchange membrane**

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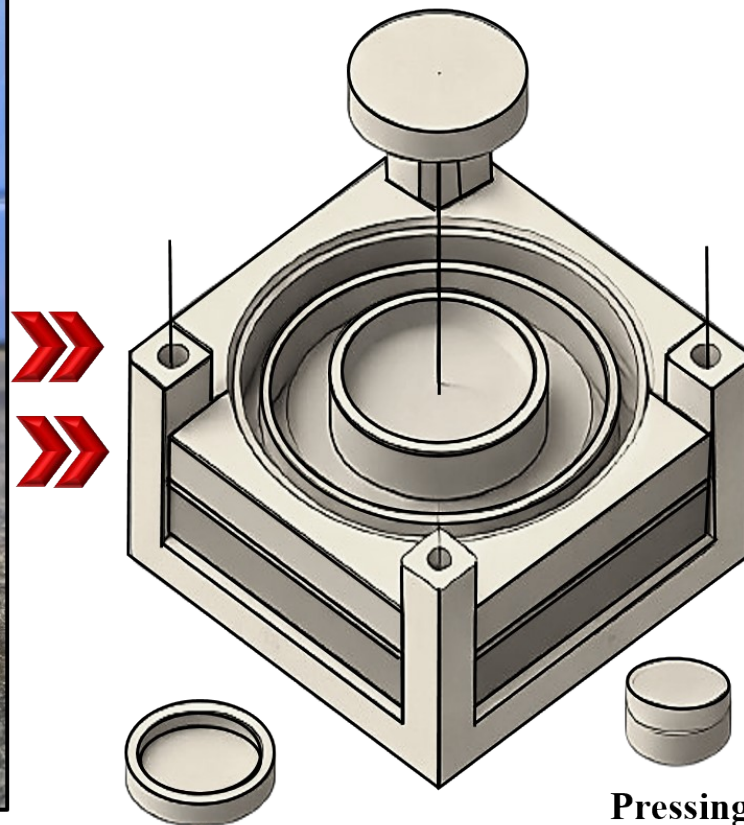
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### **Table of contents:**

<b>Sl. No</b>	<b>Content</b>	
1.	<b>Fig. S1:</b> (a) Composite casting die and (b) hydraulic press apparatus used in the preparation of PVDF+Ze@MP	Fig. S1



**Composite casting die**



**Pressing thickness**



**Hydraulic press**

**Fig. S1: (a) Composite casting die and (b) hydraulic press apparatus used in the preparation of PVDF+Ze@MP**