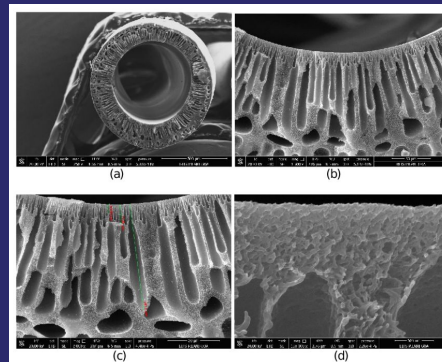


Granted IN487584

Hollow fiber membrane and preparation thereof



NEED

The presence of an inherent air gap within highly hydrophobic membranes hinders efficient water vapor transfer in osmosis processes, necessitating improvements for enhanced performance.

SOLUTION

The invention provides a method for manufacturing semi-permeable hollow-fiber membranes to enhance water vapor transfer efficiency.

INNOVATION

Introducing a hydrophilic inner surface and a hydrophobic outer surface to the hollow fiber membrane optimizes water vapor transfer, addressing osmosis process inefficiencies.

MARKET ANALYSIS

Market: Water purification, desalination, osmotic power generation

CAGR: Moderate to high, driven by increasing demand for sustainable water treatment solutions

Potential Indian Clients: Municipalities, industrial wastewater treatment plants, desalination plants, power generation companies

WHY INVEST?

Semi-permeable membranes
Hollow-fiber membrane
Water treatment
Membrane separation



AT A GLANCE

- Current TRL NA
- Funded by NA
- IPC A61B, B01D
- Domain
Water treatment, membrane separation technology



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