

Granted IN425562

Nanoparticles reinforced hollow fiber membrane



NEED

Despite graphene oxide's potential as an adsorbent, its recovery is challenging due to stable colloids hindering phase separation in water treatment.

SOLUTION

The invention focuses on composite hollow fiber membranes containing rGO nanoparticles for efficient water purification, addressing prior limitations.

INNOVATION

Developing hollow fiber membranes reinforced with reduced metal oxide nanoparticles, enhancing water purification efficiency and overcoming previous recovery challenges.

MARKET ANALYSIS

Market: Environmental and wastewater treatment industry

CAGR: estimated to be around 7% to 8%.

Potential Indian Clients: Textile industries, municipal wastewater treatment plants, industrial wastewater treatment facilities, environmental engineering firms

WHY INVEST?

Hollow-fiber membrane

Nanoparticles

Reduced graphene oxide (rGO)

Water purification



AT A GLANCE

- Current TRL NA
- Funded by NA
- IPC B01D, D06B
- Domain
Water purification technology



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