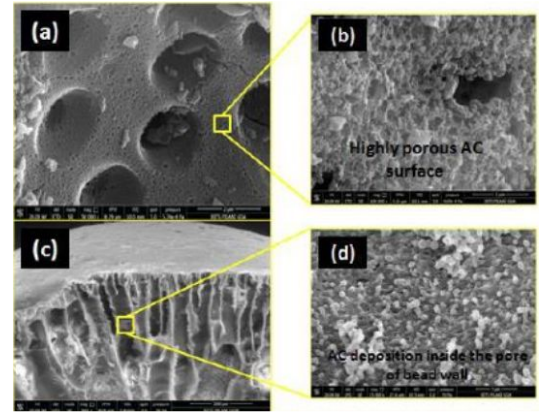


**GRANTED****(IN453729)**

## Process for preparing porous polymer beads



## NEED

Greywater treatment faces challenges in providing cost-effective, efficient filtration. The invention introduces a process for creating porous polymer beads with activated carbon to enhance greywater treatment, offering a scalable solution.

## TECHNOLOGY OVERVIEW

This patented process produces porous polymer beads incorporating activated carbon, designed for greywater treatment. The beads, made from cellulose acetate, are highly porous and efficient, offering an environmentally friendly solution for wastewater filtration.

## TECHNOLOGY KEY FEATURES

High porosity (75-85%); cellulose acetate base; activated carbon dispersion; efficient greywater filtration; bead size (2.35-7.02  $\mu\text{m}$ ); eco-friendly manufacturing.

[Read more here](#)

## MARKET ANALYSIS

The global water treatment market is expected to grow at a CAGR of 6.2% from 2023 to 2033, driven by increasing demand for sustainable water treatment solutions. (Source: MarketsandMarkets, 2023)

## Target Industries

1) Water treatment and purification industries; 2) Wastewater management sectors; 3) Environmental engineering firms focused on sustainable water solutions.

## AT A GLANCE

- SDG 6 (Clean Water and Sanitation), SDG 12 (Responsible Consumption and Production), SDG 9 (Industry, Innovation, and Infrastructure)

Technology is available for licensing/ co-development.

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