## 16. Title: Materials for anion removal from aqueous waste and desalination

Inventor: Prof Josemon Jacob, Department of Materials Science and Engineering

Keywords: Salt fixation and release, Desalination

**Domain:** Environment (Water Purification)

**Summary:** The developed materials/technology can remove commonly found salts from aqueous solution. This has relevance to water desalination where a lot of different kind of salts are present. Also, it has relevance to chemical industries which have to deal with removal of salts before disposing off aqueous waste. The materials can be regenerated and reused as well. Polymeric material is capable of removing salts from aqueous solution.

## Advantages:

- » Material can be synthesized in three steps and is a scalable process
- » Can be regenerated and reused

Applications: Chemical and pharmaceutical industries, Desalination

Scale of Development: Material developed at lab-scale and its properties tested

**Technology Readiness Level:** 4

IP Status: Indian Patent Application 202011055585