

ISRAEL

# Ester H. Segal

## Nanotechnology

Ester Segal is a professor at the Technion Institute of Technology in Haifa.

Her research combines material science with chemistry and biotechnology to solve problems in the fields of food technology and medicine. More specifically she has contributed to the development of optical biosensing and porous silicon-based therapeutics, as well as nanocomposite materials used in active packaging technologies to extend the shelf life of food. This is achieved by incorporating polymers, essential oils and nanomaterials into the packaging materials. These materials have antimicrobial properties, allowing the packaging to preserve food for longer and, in turn, reduce food waste.

Ester serves as the CTO at *BactuSense Technologies* Ltd, and the coordinator of the EU-funded Nanopak project for the development of food packaging products that extend the shelf life of food.