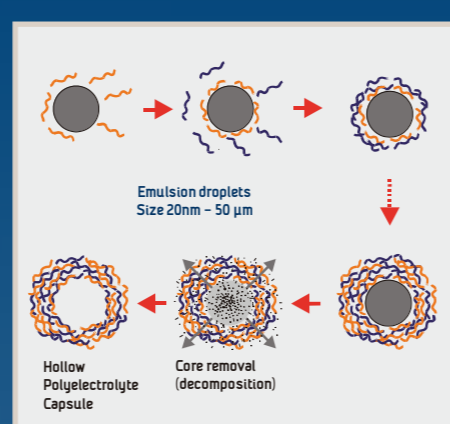
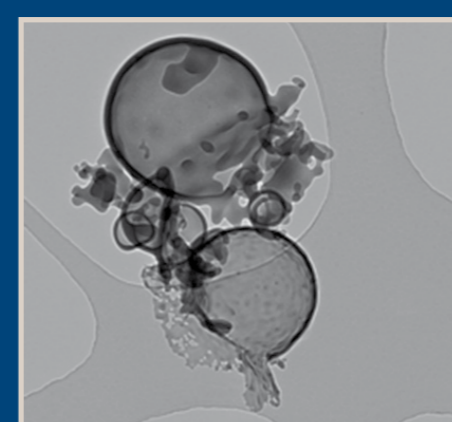
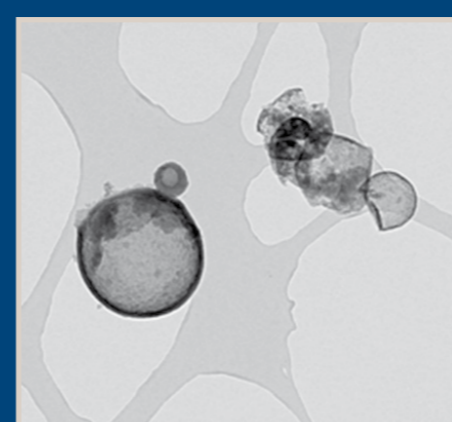
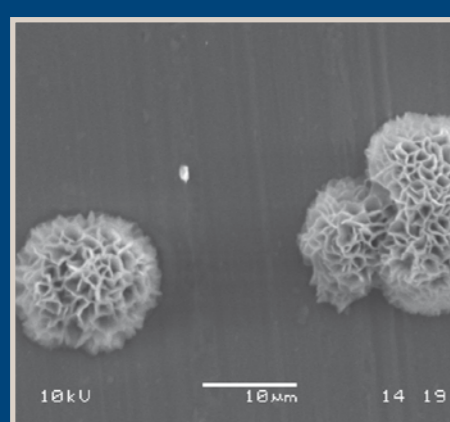
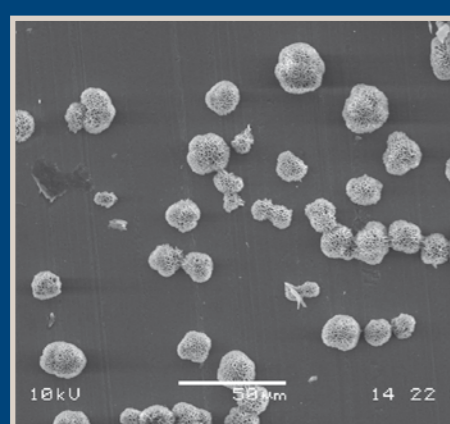
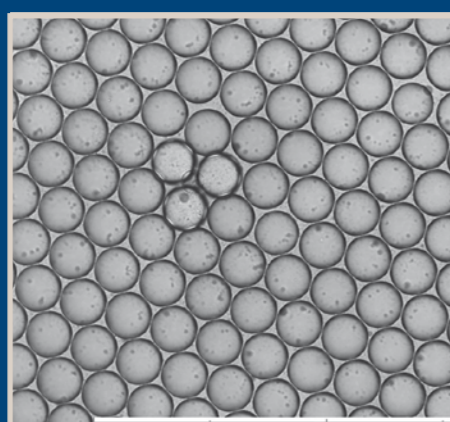
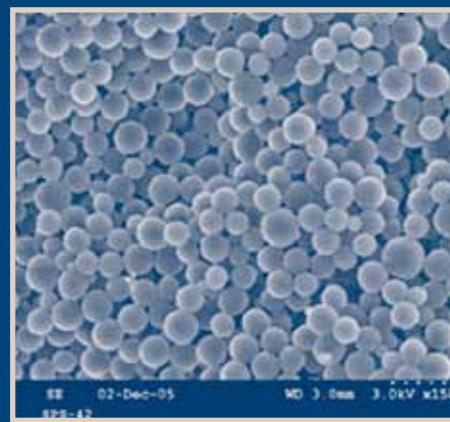
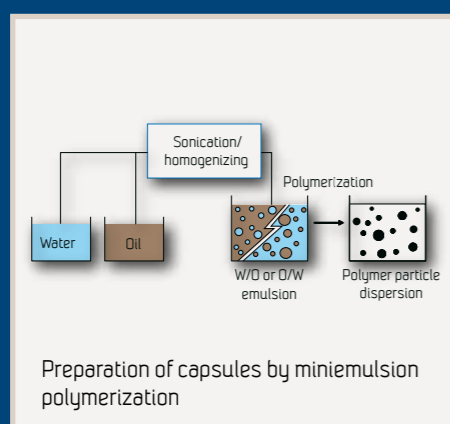


# How to use intelligent oil spill chemicals

Use of oil spill chemicals currently involves bulk application from various platforms. The properties of chemicals, improved strategies for application and new and innovative techniques, will significantly improve effectiveness, reduce waste and reduce environmental effects.

- Different encapsulation techniques
  - Emulsion based techniques, combined with various solidification processes
  - Micelles formation and subsequent encapsulation
  - Layer-by-layer (LbL) deposition using polyelectrolytes: shells
  - Spray drying and Complex coacervation
  - Soaking/adsorption in porous materials, followed by coating
  - Foaming
- Nanosized and microsized capsules from various materials
  - Synthetic organic polymer capsules
  - Biopolymer capsules
  - Organic inorganic hybrid polymer capsules
  - Organic modified silica capsules
  - Organic inorganic hybrid polymer gels
  - Mesoporous silica particles
  - LbL polyelectrolyte capsules
- Tailor-made surface properties
- Encapsulation of active chemicals (liquids or solids)
- Controlled delivery



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