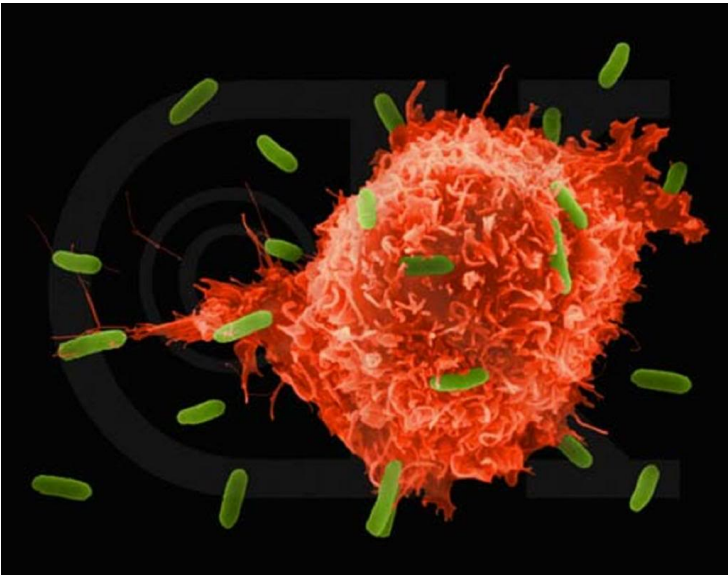


## IIT-M team designs nano-cocoons for drug delivery

30 November 2017 | News

**The scientists were able to deliver them inside lab-bred brain cancer tissues.**



Scientists at the Indian Institute of Technology (IIT) Madras have designed ultra-small cocoons that can serve as a potential drug delivery system in future using a commercially available polymer and tiny carbon fibres that are thinner than human hair as ingredients.

The scientists used bio-compatible polymer, polyethylene glycol (PEG), used not just in healthcare and cosmetics but also as coating and paint material, and multi-walled carbon nanotubes to these nano biomaterials.

The scientists were able to successfully insert curcumin, the active ingredient of turmeric that is found to have anti-cancerous properties, in these nano-cocoons, and also deliver them inside lab-bred brain cancer tissues.

The team feels that apart from exploring the optimum drug loading and drug release, there is the need to find out whether these cocoons are suitable for targeting different cells in the human body.