

Nano-engineered biodegradable polymer-composite for bone soft tissue fixation

Salient features of the technology:

- This is a polymer-composite that can be used to make orthopedic devices to cater fixation of soft-tissue injuries, small bone fractures and fractures in paediatrics.
- The polymer-composite based orthopedic fixation device is biodegradable and bioresorbable.
- It also provides better biocompatibility and osteoconduction.
- This composite allows for bone tissue proliferation and supports vascularization.
- The product is very economical and hence acceptable to the masses.
- Prototypes of the nano-composite have been prepared.
- Technology was developed at Indian Institute of Technology, Bombay in collaboration with ICMR, Delhi.
- Indian patent has been filed and international filing through PCT is under process.

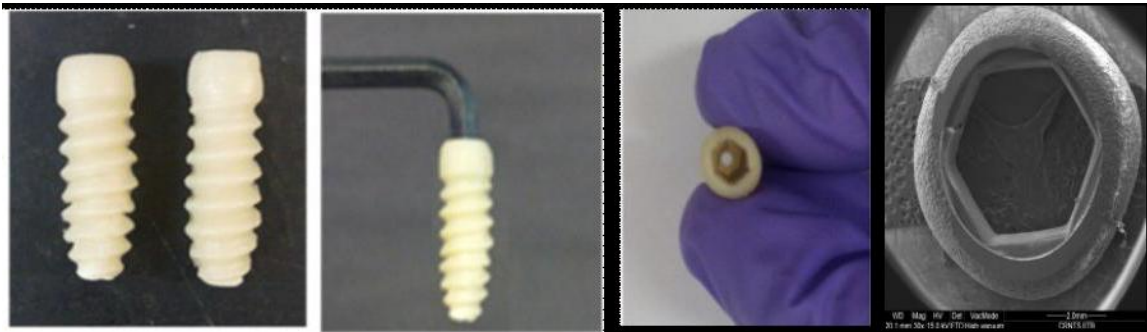


Fig. Prototype resorbable bone screws with cannulation for bone soft tissue fixation