



PROF. NARESH BHATNAGAR

Prof Naresh Bhatnagar ,

Associate Dean (R&D) - IITD July 2014-Aug 2016. Invited Member-NITI AYO, "Make in India"- Personal Body Armour 2015-16. Expert Member-National Committee For Non-Lethal Technologies, MHA, 2016. National Coordinator- Security and Defense - IMPRINT India Initiative, MHRD, 2015- till date Expert Member: Bio Engineering Task Force- DBT, Materials and Mining PAC- SERB DST, FTT-CSIR, UPSC, DRDO. Education: PhD, IIT Bombay; 1992 B.E (Production), REC Tiruchirapalli, 1984. Area of Interest: Dental and Cardiac Implants, Medical devices, FRP Composites, High Strain Rate Impact, Bullet Proof Materials, Polymer processing, Injection Molding, Material modeling, Manufacturing, Machining. Awards:

7th National Award, GOI, Polymers in Public Health, Min of Chem & Fertilizers

**“The Journey of i-Fix: Made in India for the World”
Idea to Reality
(A Journey Less Travelled by Researchers)**

The design was developed by a synergistic effort of a team of doctors and engineers from the two partnering institutes under the aegis of CSIR-NMITLI program. The manufacturing of a complete dental implant system at IITD followed with continuous inputs by the doctors from Maulana Azad Institute of Dental Sciences (MAIDS) Delhi since 2007. The design was based on the premise of minimum stress generation (use of Finite Element Modeling (FEM) techniques) during the insertion of a threaded Titanium Ti6Al4V implant into a human bone for better Osseo integration. The surface treatment technology for the implant was developed in house, which was a key for the



(2017) - Hip Protection Device, TIDE, DST sponsored. 5th National Award, GOI, Polymers in Public Health, Min of Chem & Fertilizers (2015) - Polymeric Orthotic Knee Joint for Polio Patients- DRDO PhD Supervision: 25 completed (16 in progress)

M.Tech: 80 completed (4 in progress) MDS -Masters in Dental Surgery: 11 (completed as Co-supervisor) MCH - Master of Chirurgical: 2 (1-completed in Onco Surgery, 1 in ENT ongoing, AIIMS Delhi)

success of this implant clinically. The surgical kit containing all types of surgical drills and other surgical components was also indigenously developed leading to design and fabrication of precise components Patent: This resulted into several novel features of design and innovations, which led to the filing of an Indian Patent (2243/DEL/ 2007 ref 189/07), a PCT (PCTWO/2009/054005) and eventually a US Patent application (US2011/0117522A1) in May 2011, which was granted in 2017 (US patent No. 9833300).