

Title: Product innovation in Human and Machine Health monitoring

Speaker: Prof. Dipti Gupta
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Abstract:

There is a need and opportunity to have lots of disruptive innovations in the area of human and machine health monitoring that would provide early diagnosis and monitoring preventing occurrence of serious issues. Whereas technological innovations in medical sector would enable patient- centric, accessible and affordable human healthcare, these would bring in higher efficiencies in the industries' operation making them more productive. Flexible electronics and Nanomaterials based sensors/devices have high potential to contribute in both these sectors. Through this talk, I would be showcasing the development of wearable and vibration sensors in our lab, that are useful for human and machine health monitoring, respectively.

Biography:

Dr. Dipti Gupta is working as a Professor at Metallurgical Engineering and Material science (MEMS) department, Indian Institute of Technology Bombay (IITB), India. She received her B-Tech from IIT Kanpur and continued her M-Tech and Ph.D. degree in Materials and Metallurgical Engineering in the same institute. Later she worked as a BK-21 Postdoctoral Fellow at Korea Advanced Institute of Science and Technology (KAIST), Korea and as an EPSRC Research Associate at Imperial College, London, U.K.. She also spent two years with Department of Electrical Engineering, Seoul National University, Korea as BK Assistant Professor. She is also recipient of prestigious SERB Power Fellowship.

Currently, she is associated with Technology Innovation Hub (TIH) on IOT/IOE where she would be contributing towards Health-IOT, Sensors and Data Analysis. She is also associated with Center of Excellence in Nano electronics (CEN), IITB-Monash Research Academy (an initiative of IITB and Monash University), Wadhvani Research Center for Bioengineering (WRCB), National Center for Photovoltaic Research and Education (NCPRE), located at IIT Bombay, India. Her research activities are funded by competitive programs of Department of Science and Technology (DST), Government of India, The Indo-US Science and Technology Forum (IUSSTF), Scientific and Engineering Research Board (SERB), Wadhvani foundation, Biotechnology Industry Research Assistance Council (BIRAC), Tata Center for Technology and Design (TCTD) etc. Her research interests are in the area of Flexible and Stretchable electronics, Wearable sensors for application in healthcare and energy applications.