

Dr. Suresh Bhalla (Civil Engineering Department) and Prof. Sneha Anand (Centre for Bio-Medical Engineering) have jointly developed a sensor suitable for foot pressure measurement and its distribution within the foot sole. The sensor has resulted from the adaptation of the concrete vibration sensor earlier developed by Dr. Suresh Bhalla, which was originally envisaged for use in reinforced concrete structures such as bridges. Laboratory studies jointly conducted by the joint research team of Dr. Suresh Bhalla and Prof. Sneha Anand in the Smart Structures and Dynamics Lab revealed that the same sensor could be used for foot sole pressure measurement with minor adaptations. The sensor displays high sensitivity, fast dynamic response, excellent signal to noise ratio and is at the same time very cost-effective as compared to its contemporary sensors. The sensor can be of significant potential in mapping of foot sole pressure and its distribution in wide range of clinical studies.