THE ROYAL PHILOSOPHICAL SOCIETY OF GLASGOW

218th Lecture Series
7.30pm - 4 March 2020

Prof Ravinder Dahiya
Electronic Skin - From Humanoids to Humans

ABSTRACT

The enhancements in the performance of electronics over the last 50 years have revolutionized our lives through fast computing and communication. But the performance alone is insufficient as evident from the limitations of current electronics in several emerging applications such as wearables, robotics and healthcare. Often these applications require sensors, actuators and electronics to conform to 3D surfaces, which calls for innovative strategies to integrate or embed the electronics in unconventional substrates such as plastics, papers and soft and squishy elastomers. This lecture will present some of the methods the research community is exploring to address these new multidisciplinary requirements and how we are exploiting them to develop energy autonomous tactile or electronic skin for robotics and prosthesis. Briefly, the lecture will also present how, with tattoo-like smart skin patches, this cross-cutting technology could empower people to monitor their health and enable touch based communication.

BIOGRAPHY

Ravinder Dahiya is Professor of Electronics and Nanoengineering at University of Glasgow. His group (Bendable Electronics and Sensing Technologies (BEST)) conducts fundamental research on high-performance flexible electronics for development of electronic skin and its application in robotics and wearables. Prof. Dahiya has published more than 300 research articles, 4 books, and 15 patents submitted/granted. He has led many international projects (>£20M) funded by industry and research councils. Prof. Dahiya is Fellow of IEEE.

LINKS

https://www.gla.ac.uk/schools/engineering/staff/ravinderdahiya/

https://rsdahiya.com/

All lectures take place in Lecture Theatre JA3.25, John Anderson Building, University of Strathclyde, Rottenrow East, Glasgow G4 0NG.
Non-members welcome

The John Anderson Building is in the pedestrianised area between Rottenrow and Rottenrow East.
Free car parking is available behind the building. From High Street enter Rottenrow East at the Barony.
Refreshments will be served at 9.00pm.