

THE UNIVERSITY



OF HONG KONG

**DEPARTMENT OF MECHANICAL ENGINEERING
AND
MEDICAL ENGINEERING PROGRAMME**

**Sponsored by the Strategic Research Theme of Biomedical Engineering and
Nanotechnology (SRT BMENT)**

SEMINAR

Title: Non-invasive Disease Diagnosis Using Wearable Technologies

**Speaker: Prof. Hossam Haick
The Department of Chemical Engineering
and the Russell Berrie Nanotechnology Institute
Technion - Israel Institute of Technology
Israel**

Date: 21 June, 2017 (Wednesday)

Time: 11:00 a.m.

Venue: Theatre C, Chow Yei Ching Building, HKU

Abstract:

The lecture will present innovative technologies developed by our research group at the Technion. These technologies are non-invasive disease diagnosis tools that do not require needles or use of dangerous materials. The lecture will present, amongst other things, an electronic system that simulates the canine olfactory system and that detect diseases from exhaled breath. This system is known as "Nano-Artificial Nose". Clinical trials worldwide have shown that this system can detect 17 different diseases, including various cancers, neurological disorders and infectious diseases - all though a simple breath test. The lecture will also present the development and miniaturization of intelligent wearable technology that integrates functions similar to those in the human skin. This technology, known as the "Electronic Skin", has been found effective in monitoring a wide range of health indicators and help in disease diagnosis in both the

developing and developed world. The link of these technologies to a unique information cloud, where the analysis of data takes place and results are sent back to the user or their personal physician, will be presented and discussed as well.

ALL INTERESTED ARE WELCOME.

For further information, please contact Dr. A. Shum at 3917 7904.

Research area: Biomedical Engineering