

PhD in Biomedical Engineering seminar series

SOFT SENSORS AND ELECTRONICS FOR HUMAN MACHINE INTERFACES AND ADVANCED HEALTHCARE

Dr. W. Hong Yeo

Associate Professor and Woodruff Faculty Fellow Director of WISH Center

In this talk, Dr. Yeo will share the basic scientific study of integrated soft sensors and electronics in both wearable and implantable configurations.

He will talk about the limitations of the existing biomedical systems used in continuous health monitoring, persistent human-machine interfaces, and disease diagnosis.

A set of new solutions that can tackle these issues will be shared with the details. Specifically, he will discuss unique strategies for designing and fabricating new systems using soft and hybrid materials. In terms of recent outcomes, he will

introduce a few projects that develop soft electronic sensors and platforms targeting persistent human-machine interfaces (human augmentation via wearable exoskeletons), sleep quality and disorder quantification and detection, and wearable auscultation for continuous heart and lung sound detection.

In vitro and in vivo study examples will capture the novelty of these soft electronic systems and their major advantages over the existing systems in real-time continuous health monitoring, portable healthcare, quantitative disease diagnosis, and connected therapeutics with human-machine interfaces.

BIO1 Room Contacts: phd-bio@polimi.it

