

ECTC Panel: Advancements in Bio-Medical Technology & Associated Packaging

Kaustubh Nagarkar (<u>nagarkar@ge.com</u>) May 26, 2015

Imagination at work.

GE Products, Systems, Technology

PRODUCTS







SYSTEMS & COMPONENTS









PACKAGING TECHNOLOGY

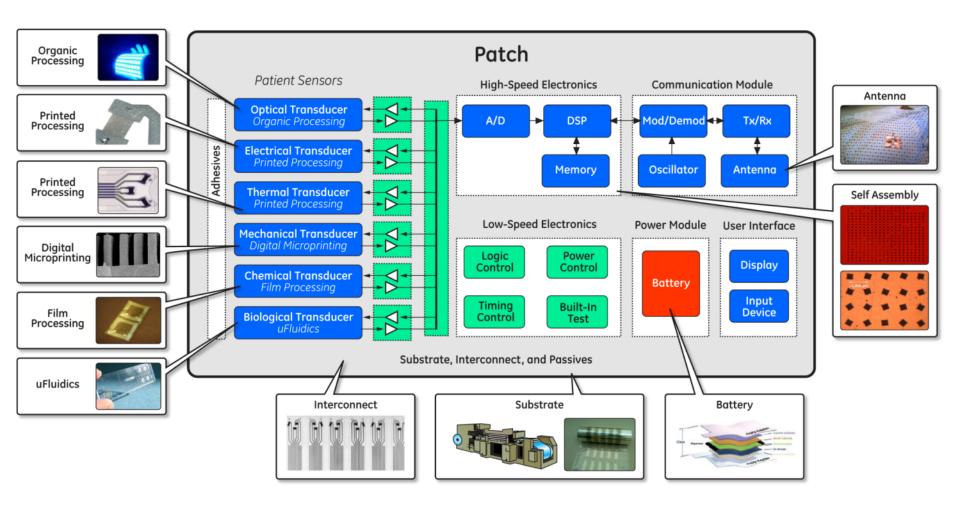






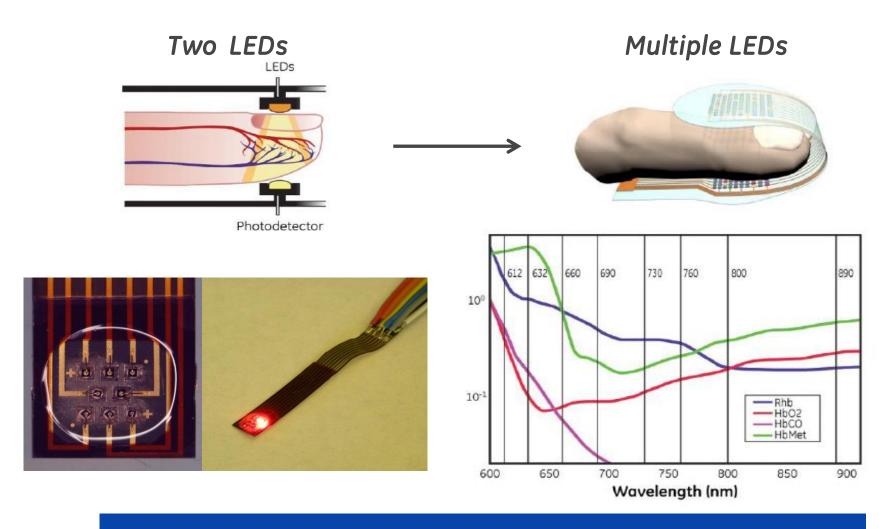


Next Generation Wearable Electronics Technologies





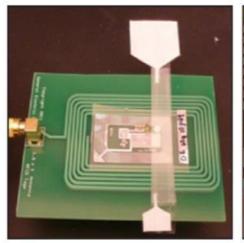
Multi-wavelength Photoplethysmograph Sensor

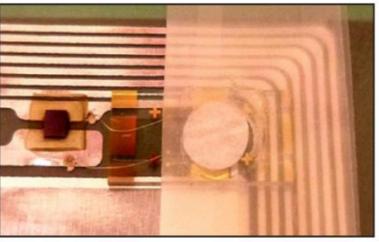


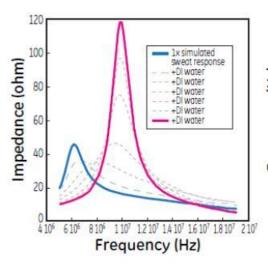
Measurement of all hemoglobin fractions in blood

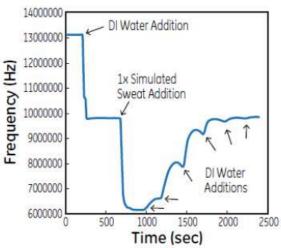


Wearable Impedance RF Sweat Sensors





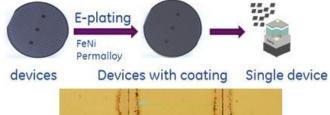


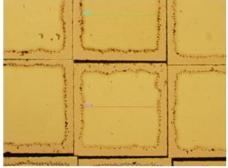




Magnetically Directed Assembly

Bulk Electroplating of *Soft*Magnets onto Chips at Wafer Fab

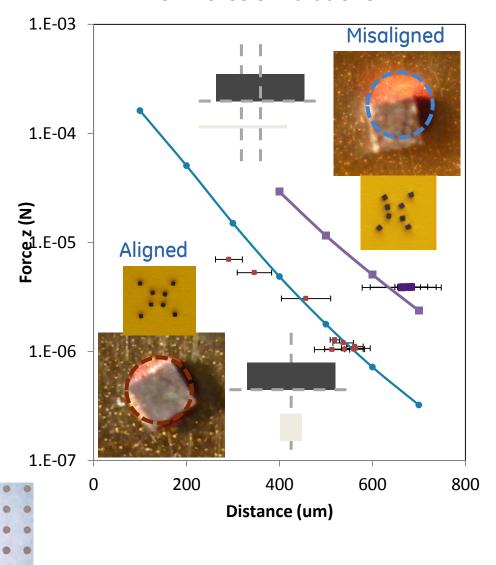




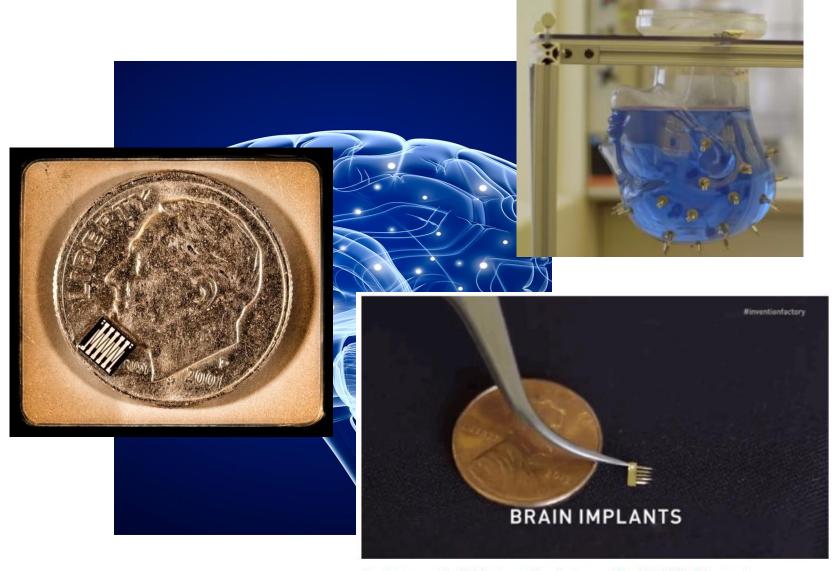
Direct Printing of *Hard* Magnets on Reusable Templates



3D Force Simulations



Current and Future Interests: Brain





A prototype of a GE brain probe. Image credit: GE Global Research

