University of Windsor

WELCOME TO THE

MEMS RESEARCH LAB

The Microelectromechanical Systems (MEMS) Lab at the University of Windsor:

- Focused in the research of MEMS electrostatic sensors and actuators, capacitive micro-machined ultrasonic transducers, planar and non-planar beamforming acoustical arrays, FMCW short and long range radars, ultra-wideband radars, sonoluminescence based MEMS transducer, MEMS multi-spectral multi-functional transducers, 3-D packaging and integration and MEMS micro-power generator
- Possesses expertise in Bio-medical ultrasound and NDE, UWB radar medical diagnostics, Automotive collision avoidance, Surveillance & security, Biometric identification, Cardiac pacemakers, 3-D Microsystems
- Is dedicated to developing microsystems to provide improved health care, automotive safety, and security
- Has capabilities in:
  - E-beam evaporation
  - Reactive e-beam evaporation
  - Thermal evaporation
  - DC/RF/Reactive sputtering
  - Automated mask alignment system
  - Wafer bonding
  - Vacuum load lock ICP RIE
  - Profilometer
  - Nikon microscope
  - Wet benches
  - Ball, wedge, and ribbon bonder
  - IntelliSuite
  - ADS
  - Labview
  - Verasonics Vantage 128 system

To learn more about how you can get involved with the MEMS Lab, contact Dr. Sazzadur Chowdhury of the Department of Electrical and Computer Engineering by email at sazzadur@uwindsor.ca or call 519.253.3000 ext. 4794.