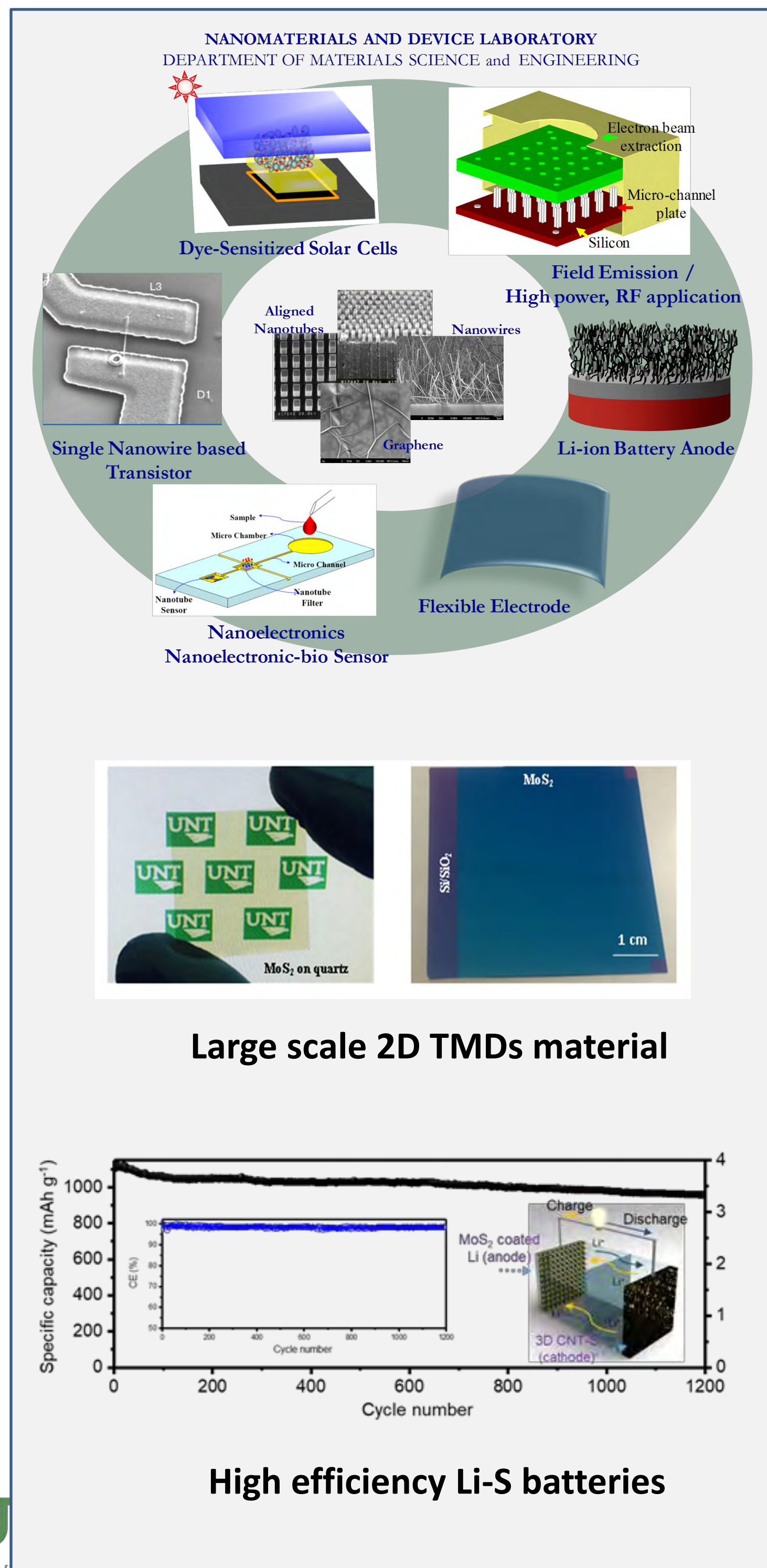


# Nanomaterials and Device Laboratory

Director: Professor Wonbong Choi, MRS Fellow

Associate Director of AMMPI, Department of Materials Science and Engineering



## Research Areas

- **Nanomaterials synthesis and characterization:** Carbon nanotubes, graphene, 2D transition metal dichalcogenides (TMDs) and alloys
- **Rechargeable Batteries:** Electrode materials, Li-S battery, metal-air batteries, flexible batteries.
- **Advanced Electronics** – Neuromorphic memory based on 2D TMDs, Piezoelectric materials and sensors

## Major Equipment

- Low Pressure Chemical Vapor Deposition (CVD) systems
- Graphene Thermal CVD System: graphene and 2D materials synthesis
- Glove Box and equipment for battery fabrication
- Battery Testers (MACCOR, Arbin); CV, EIS
- Nano-Scopic Thermal Imaging System + Atomic Force Microscopy
- Probe station to measure electrical properties of various devices
- In-situ Raman and electro-chemical cell tester
- Micro/nano fabrication & characterization

