Industry Consultancy Cell

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1. What is their area of expertise which would be helpful in collaborating with the respective industries?

Electrochemistry and nanotechnology based expertise will be provided to the collaborative industrial partners. In specific, the development of three / two dimensional nanostructures and the design and fabrication electrochemical devices including Waste Water Treatment Microbial Fuel Cells, Direct Methanol Fuel Cells, Direct Urea Fuel Cells, Lithium-ion and Lithium-sulfur Batteries, Electrochemical Sensors, Dye Sensitized Solar Cells and Anti-Corrosion will be stipulated to the collaborative industrial partners.

- 2. What is their contribution in product/process development and the technology transfer areas?
 - (i) Synthesis of electrochemically active polymers, nanostructures and nanocomposites
 - (ii) Cost efficient electrode fabrication
 - (iii) Tuning the unique properties of nanostructures with the perspectives of morphological, surface and textural concerts.
 - (iv) Engineering the micofluidic and innovative reactors and or devices
 - (v) Fabrication of electrochemical devices with the perspective of limited fuel/analyte utilization and lower catalyst loading
 - (vi) Translation of research findings into product
- 3. What type of consultancy services they can give to the industries?
 - (i) Material characterization and its analysis can be provided
 - (ii) Service can be given in the fabrication of prototype devices
 - (iii) Diagnosis of challenges existing in the analytical instruments and electrochemical devices
 - (iv) Providing solutions to tackle the limitations in the design and fabrication of electrochemical devices
 - (v) Solutions to improve the energy conversion efficiency of electrochemical devices
 - (vi) Training on the material synthesis and electrochemical devices will be provided to the industries
 - (vii) Promote the translation of obtained research insights into market.