



**University
of Victoria**

Centre for
Advanced
Materials &
Related
Technology

CAMTEC SEMINAR

TITLE: *Synthesis and Electrochemical Study of Titanium Dioxide and Tungsten Oxide Based Nanostructured Materials and Coatings*

SPEAKER: **Dr. Sapanbir Singh Thind**
Department of Chemistry, Lakehead University

DATE: Wednesday, May 3rd, 2017

TIME: 11:00 am – noon

LOCATION: Engineering Office Wing, Room 230

Abstract:

TiO₂ and WO₃ based nanomaterials and nanocomposites are highly attractive for numerous applications encompassing photocatalysis, electrochromic devices, dye sensitized solar cells, hydrogen production, polymer chemistry and sensing applications due to their low cost, non-toxicity, high efficiency, chemical inertness and ability to be synthesized in various morphologies. In my work, several electronic and surface modifications of these oxides have been performed either by doping (co-doping), UV pretreatment, coatings or by formation of nanocomposites. These modified nanostructured materials possess lower band gap, decrease in the rate of electron/hole recombination and significant enhancement in photo-electrochemical activities, promising for various polymer chemistry and environmental applications.

Please contact Peggy White for further information: (250) 721-7736, camtec@uvic.ca