

The Physical and Chemical Characterization of Corroded Surfaces

David Shoesmith
Department of Chemistry and Surface Science Western
Western University
London, ON

www.sun.chem.uwo.ca

www.surface-science-western.com

DATE: Friday, April 26, 2013

TIME: 3:00 PM

PLACE: ER3005B

ABSTRACT: The development of solutions to industrial corrosion processes requires a multidisciplinary science and engineering approach. While the generation of mechanistic understanding is amenable to laboratory study, the use of this understanding to construct credible models for the progress of corrosion in specific industrial situations is difficult. This seminar will present some of our recent studies on a number of key corrosion issues of interest to Canadian industries. These will include the corrosion of magnesium alloys of interest to the automobile industry; the development of thin-walled corrosion resistant containers for high level nuclear waste; the corrosion of nuclear fuel leading to the release of radionuclides inside a failed waste container; and the corrosion of gas transmission pipelines under failed taped coatings. The presentation will concentrate on a general description of experimental approaches rather than a detailed discussion of specific corrosion mechanisms.

ALL ARE WELCOME!!!