**New Developments in the Hydrometallurgical Recovery of Base, Precious and Rare Metals**

David Dreisinger

Professor and Chair, Industrial Research Chair in Hydrometallurgy

University of British Columbia

Department of Materials Engineering

309-6350 Stores Road

Vancouver, British Columbia, Canada, V6T1Z4

Abstract

The industrial demand for metals continues to increase with economic growth and the development of new advanced materials applications in the energy, electronics and infrastructure sectors. The depletion of high grade ores requires innovation to exploit lower grade or complex materials. Hydrometallurgy is well suited to this challenge with many developments in the economic recovery of base, precious and rare metals. An overview of hydrometallurgical processing with recent advances in recovery of lead, copper, nickel, gold and rare earth elements is presented.