

## **Edouard Asselin: IRON CHEMISTRY IN HYDROMETALLURGY**

Iron plays an important role in hydrometallurgical circuits. For example, in sulphuric acid solutions the ferric/ferrous couple often determines the solution potential during leaching. The precipitation of iron also often determines the nature of the process residue. Thus the thermochemistry of iron can be directly linked to process kinetics, process recoveries and process environmental impact.

This lecture will cover the basic thermochemistry of iron, with an emphasis on the Fe(III)-Fe(II)-H<sub>2</sub>SO<sub>4</sub>-H<sub>2</sub>O system. The impact of the Fe(III)-Fe(II) couple on solution potential and its link to process kinetics will be presented. The impact of process conditions on the nature of iron precipitates will also be presented.