# **TMS2009**

**138th Annual Meeting & Exhibition** 

February 15-19, 2009 Moscone West Convention Center San Francisco, California, USA

## **Alumina Refinery Fundamentals and Practice**

Short Course • Sunday, February 15 • 8:30 a.m. to 5 p.m.

#### **Who Should Attend**

Anyone who would like to understand more about the alumina refining process, including:

- · Individuals beginning their careers in alumina refining
- People engaged in other aspects of aluminum manufacture
- Engineers or technologists in the alumina industry interested in process technology, alumina production and operation, maintenance and design of refineries

#### **Learn About**

- Bayer alumina process including the basic process for producing alumina from bauxite ore, definitions of key process terminology, importance of bauxite quality in refinery design, and basic refinery facilities.
- Fundamentals of alumina calcination, process design criteria, and operational and maintenance requirements for large calciners in the alumina industry including both circulating fluid bed and gas suspension technologies.
- Tools and measures to increase performance and availability of industrial calciner units.
- Major influence of microstructure and properties of smelter grade alumina on the operation of smelters.
- Current trends in alumina properties, for example, in relation to changes in calciner technologies and in terms of phase distribution and alumina microstructure.
- History of Process Safety Management (PSM) and how it is applied to the Bayer process for the production of alumina.
   Examples will be provided.

#### **Instructors**

Don Donaldson, Alumina Industry Consultant
Jim Metson, Light Metals Research Centre, the University of Auckland
Hans W. Schmidt, Consultant
Carlos Suarez, Associate Senior Process Consultant, Light Metals, Hatch Associates
Susanne Wind, Process Engineer, FLSmidth Minerals A/S

### For Pricing Information and to Register

Web: www.tms.org/annualmeeting.html (Click on Networking Events icon.)

#### **For More Information**

E-mail: raabe@tms.org

Telephone: (724) 776-9000, ext. 212 • (800) 759-4TMS