MATERIALS PROCESSING

RARE METAL EXTRACTION & PROCESSING

This symposium will cover extraction of rare metals as well as rare extraction processing techniques used in metal production. Extraction of rare—less common metals or minor metals (not covered by other TMS symposia)—will be covered. This will include elements such as antimony, bismuth, barium, beryllium, boron, calcium, chromium, gallium, germanium, hafnium, indium, manganese, molybdenum, platinum group metals, rare earth metals, rhenium, scandium, selenium, sodium, strontium, tantalum, tellurium, and tungsten—rare metals of low-tonnage sales compared to high-tonnage metals such as iron, copper, nickel, lead, tin, zinc, or light metals such as aluminum, magnesium, or titanium and electronic metalloid silicon.

Rare processing will cover bio-metallurgy, hydro-metallurgy, and electro-metallurgy, as well as extraction of values from EAF dusts, and less common waste streams not discussed in recycling symposia. Rare high-temperature processes such as microwave heating, solar-thermal reaction synthesis, and cold crucible synthesis of the rare metals will be included. Design of extraction equipment used in these processes will be included from suppliers, as well as laboratory and pilot plant studies.

ORGANIZERS
Hojong Kim, The Pennsylvania State University, USA
Bradford Wesstrom, Freeport-McMoRan Copper & Gold, USA
Shafiq Alam, University of Saskatchewan, Canada
Takanari Ouchi, Massachusetts Institute of Technology, USA
Gisele Azimi, University of Toronto, Canada

SPONSORS
TMS Extraction & Processing Division
TMS Hydrometallurgy and Electrometallurgy Committee