

**Orlando, Florida, USA** 

### **Connecting the global minerals, metals, and materials community.**









## **Plan Now to Attend:**

#### **Energy Technologies and Carbon Dioxide Management Symposium 2015**

This symposium intends to address the issues, relating to mass and energy flow in chemical and process engineering industry, and their impact on environment. The symposium is also inviting papers on novel mineral beneficiation, processing, and extraction techniques leading to waste minimization in critical rare-earth materials utilized in energy systems (e.g. magnets, display and lighting devices). This symposium aims to provide opportunity for a discussion platform on critical rare-earth materials and its global importance. Topics on CO2 sequestration and reduction in greenhouse gas emission from process engineering are invited. This symposium will also emphasize the need for sustainable technologies in extractive metallurgy, materials processing and manufacturing industries with reduced energy consumption, and CO2 emission.

Topics will include (but are not limited to) the following areas:

- CO2 and other greenhouse gas reduction metallurgy in ferrous (iron and steel making and forming), non-ferrous, and reactive metals including critical rare-earth metals
- Renewable energy resources for metals and materials production
- Photo-electrochemical reduction of CO2, photo-electrolysis fundamentals
- Thermo-electric/electrolysis/photo-electrolysis/fundamentals of PV
- Fundamentals of concentrated solar power generation
- Waste heat recovery and other industrial energy-efficient technologies
- Energy education and energy regulation
- Carbon footprint and life-cycle assessment
- Carbon sequestration techniques
- Energy process fundamentals

#### Sponsored by:

- TMS Extraction & Processing Division; TMS Light Metals Division
- Energy Committee

#### Organized by:

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# For more information on how to participate, visit:

www.tms.org/TMS2015

Questions? Contact programming@tms.org