

TMS2015

144th Annual Meeting & Exhibition

March 15-19, 2015 • Walt Disney World
Orlando, Florida, USA

Connecting the global minerals, metals, and materials community.



Plan Now to Attend:

2015 Functional Nanomaterials: Energy and Sensing

This symposium will address unique functional properties of nanomaterials with an emphasis on energy, sensing, and data storage applications. Nanomaterials are a class of materials with morphology, properties, and structure or performance dominated by phenomena attributed to the “nano” length scale (<100 nm). These emerging materials enable new opportunities for future technological innovation, because they exhibit novel electrical, optical, and magnetic properties that are absent in their bulk counterparts.

The 2015 symposium will be focused on the use of functional nanomaterials for energy conversion/storage and optical/electric/magnetic signal sensing. One session of the symposium is jointly hosted with the Energy Conversion and Storage Committee. Topics of interest include, but are not limited to:

- Design and synthesis of nanostructured materials for energy, sensing, and data storage
- Novel physical and chemical behaviors of nanomaterials underlying energy conversion and storage
- Nanoscale characterization of energy transport in the form of electrons and phonons
- Enhancement of sensing sensitivity by surface plasmon resonance of nanomaterials
- Applications to biological and chemical sensing of electronic, magnetic, optical, and thermal phenomena
- Nanomaterials for high-temperature energy and sensing
- Dynamic probing of microstructure evolution in functional nanomaterials

Sponsored by:

- TMS Functional Materials Division (formerly EMPMD)
- Energy Conversion and Storage Committee

Organized by:

Jung-Kun Lee, University of Pittsburgh (USA)
Behrang Hamadani, National Institute of Standards and Technology (USA)
Sung Hun Wee, HGST, a Western Digital Company (USA)
Nitin Chopra, University of Alabama, Tuscaloosa (USA)
Terry Xu, The University of North Carolina at Charlotte (USA)
Jang-Sik Lee, Pohang University of Science and Technology (POSTECH) (Korea South)

**For more information on how
to participate, visit:**

www.tms.org/TMS2015

Questions? Contact programming@tms.org