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TMS2024
153rd Annual Meeting & Exhibition

MARCH 3–7, 2024
HYATT REGENCY ORLANDO
ORLANDO, FLORIDA, USA
#TMSAnnualMeeting



SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2024 SYMPOSIUM:

ELECTRONIC, MAGNETIC, AND ENERGY MATERIALS

Energy Technologies and CO2 Management

This symposium invites submissions with focused discussion on industrial energy sustainability and CO2 management, including processes that improve energy efficiency, and reduce or eliminate industrial GHG emissions. Submissions that address technology areas such as clean energy technologies, innovative beneficiation, smelting technologies, process intensification, as well as CO2 capture and conversion for industrial applications are encouraged.

Topics include, but are not limited to:

- Decarbonizing materials processing
- Use of low carbon fuels, feedstock, and renewable energy resources for materials processing.
- Emerging processes and techniques for industrial CO2 capture, conversion/ upgrade
- O2 and other GHG reduction metallurgy in ferrous, non-ferrous, and reactive metals processing, including rare-earth metals. Energy Efficiency & Industrial Electrification
- Electrification of industrial process heat and electrified production of energy carriers (e.g., hydrogen, ammonia)
- Energy efficiency improvements for materials processing and smart manufacturing for optimized process control
- System integration and thermal integration of process heat, waste heat recovery, and other technologies for industrial energy efficiency Sustainability analysis
- Techno-economic life cycle, resource efficiency and circular economy modeling of energy-intensive processes and associated material supply chains
- The role of energy education and regulation in energy and materials sustainability

ORGANIZERS

Chukwunwike Iloeje, Argonne National Laboratory, USA
Shafiq Alam, University of Saskatchewan, Canada
Donna Guillen, Idaho National Laboratory, USA
Fiseha Tesfaye, Metso Outotec Metals Oy/Åbo Akademi University, Finland
Lei Zhang, University of Alaska Fairbanks, USA
Lina Hockaday, Curtin University, WASM, Australia
Neale Neelameggham, IND LLC, USA
Hong (Marco) Peng, University of Queensland, Australia
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