Events

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2021

March 1–3
DRI & HBI: Logistics, Production and Utilization Seminar
*The Admiral Hotel Mobile, Curio Collection by Hilton, Mobile, AL, USA*

The production and use of direct reduced iron (DRI) in North America is increasing with the reduced price of natural gas due to advances in drilling technology. As such, DRI is becoming a more important feedstock to the steelmaking process. This conference will focus on areas that include: raw materials and DRI handling and shipping; technologies to produce DRI; and the use of DRI to produce steel in electric arc furnaces, blast furnaces and basic oxygen furnaces.

**Contact:** AIST, 186 Thorn Hill Road, Warrendale, PA 15086-7528, USA; tel: 724/814-3000; fax: 724/814-3001; e-mail: memberservices@aist.org; web: www.aist.org.

March 7–11
SPIE Smart Structures/Non-destructive Evaluation 2021
*Hilton Long Beach, Long Beach, CA, USA*

SPIE smart structures/non-destructive evaluation (NDE) is a leading conference on the applied technologies of advanced materials, smart sensor networks, and non-destructive evaluation tools. This meeting explores the latest technologies in development for automotive, aerospace, civil infrastructure, and Industry 4.0. This conference brings together the technologies of advanced materials and non-destructive evaluation sensor systems, structural health monitoring, and bioinspired robotics.

Conference topics for 2021 include bioinspiration, biomimetics, and bioreplication; electroactive polymer actuators and devices; active and passive smart structures and integrated systems; behavior and mechanics of multifunctional materials; nano tech, bio tech, and infotech sensors and wearable systems; sensors and smart structures technologies for civil, mechanical, and aerospace systems; nondestructive characterization and monitoring of advanced materials, aerospace, civil infrastructure, and transportation; health monitoring of structural and biological systems and smart structures for industry, smart cities, communication, and energy.

**Contact:** SPIE (International Society for Optical Engineering), PO Box 10, 1000 20th St., Bellingham, WA 98225–6705, USA; tel: 360/676-3290; fax: 360/647-1445; e-mail: customerservice@spie.org; web: www.spie.org/conferences-and-exhibitions/smart-structures/nde?SSO=1.

March 10–13
Structures Congress 2021
*Washington State Convention Center, 705 Pike St., Seattle, Washington, USA*

Structures Congress is the annual conference of the Structural Engineering Institute (SEI) of the American Society of Civil Engineers (ASCE) and a premier event in structural engineering. This congress encompasses cutting edge knowledge as well as practical applications, with a variety of technical sessions and many exhibitors. Session topics include bridges, blast, buildings, forensics and natural disasters as well as covering career development, business, professional practices, education, and research.

**Contact:** Lawan McFerren, SEI, 1801 Alexander Bell Dr., Reston, VA 20191, USA; tel: 800/548-2723 (United States); +1 (703) 295-6300 (all other countries); fax: 866/902-5593; e-mail: lcmferren@asce.org; web: www.structurescongress.org.
March 14–18
TMS 2021 150th Annual Meeting and Exhibition
Orlando World Center Marriott, Orlando, Florida, USA

The Minerals, Metals and Materials Society (TMS) annual meeting and exhibition brings together more than 4000 engineers, scientists, business leaders, and other professionals in the minerals, metals, and materials fields for a comprehensive, cross-disciplinary exchange of technical knowledge leading to solutions in the workplace and in society.

TMS2021 will present more than 85 symposia planned by all five TMS technical divisions and covering a broad range of topics related to minerals, metals, and materials science and engineering. Topics include ion exchange, solvent extraction, membrane separations and emerging technologies.

Contact: TMS, 5700 Corporate Drive, Suite 750, Pittsburgh, PA 15237, USA; tel: 800/759-4867 (U.S. and Canada only); (724) 776-9000 (all other countries); fax: 724/776-3770; e-mail: membership@tms.org; web: www.tms.org/tms2021.

March 15–17
Digital Transformation Forum for the Steel Industry
Omni William Penn Hotel, Pittsburgh, PA, USA

Digital transformation is a critical component for steel companies’ future success. It is a broad concept with the potential to influence all aspects of the steelmaking process. Following the success of last year’s digital transformation forum focusing on an overview of and insight into different components of Industry 4.0, this year’s digital transformation forum dives into the specific topics of machine learning (ML) and artificial intelligence (AI), which technologies are at the heart of nearly every application of Industry 4.0. The 2021 digital transformation forum covers ML/AI applications and use cases from liquid steel (iron- and steelmaking), upstream (casting and hot rolling) and downstream processes to final product.

In addition, through presentations and panel discussion sessions, the forum will explore the essential roles humans are playing in a successful digital transformation journey as well as strategies and methods to efficiently manage cultural change.

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April 5–9
ASME Symposium on Elevated Temperature Application of Materials
All ASME conferences, meetings and events through December 2021 will be virtual only

This symposium will provide a unique opportunity for those involved in the fossil, nuclear, and petrochemical industries, standards development organizations and government, and those interested members of the public to come together for a professional exchange of information. The focus will be on how best to develop new and/or revise and upgrade current design, fabrication, and construction practices of pressure equipment such as boilers, pressure vessels, and piping components that will operate at elevated temperatures where materials will be subject to creep, creep-fatigue, embrittlement, and environmental effects.

Contact: Colleen O’Brien, ASME, Two Park Avenue, New York, NY 10016-5990, USA; tel: 800/843-2763 (U.S./Canada); (001) 800/843-2763 (Mexico); (973) 882-1170 (all other countries); e-mail: OBrienC@asme.org; web: www.asme.org/conferences-events/events/symposium-on-elevated-temperature-application-of-materials.

April 18–22
CORROSION 2021
Salt Palace Convention Center, 100 S W Temple, Salt Lake City, UT, USA

CORROSION is the world’s largest conference and exposition on corrosion, welcoming more than 5000 attendees hailing from over 70 counties. This comprehensive technical conference is filled with over 1000 hours of technical education, administrative and technical meetings, exhibits, networking and volunteer opportunities, and other activities all focused on the study, prevention, and control of corrosion. There are many opportunities to exchange knowledge and connect with the entire corrosion-fighting continuum: scientists, researchers, engineers, technicians, coatings inspectors and contractors, educators and students, as well as business executives and asset owners. The plenary lecture will be on corrosion, fracture, and failure issues for post-tensioned concrete bridge structures.

Contact: Lesley Martinez, NACE, 15835 Park Ten Place, Houston, Texas 77084, USA; tel: 281/228-6413; fax: 281/228-6300; e-mail: Lesley.Martinez@nace.org; web: www.nacecorrosion.org.

April 18–22
6th World Congress on Integrated Computational Materials Engineering (ICME 2021)
Hyatt Regency Lake Tahoe, Lake Tahoe, Nevada, USA

The 6th World Congress on integrated computational materials engineering (ICME 2021) convenes leading researchers and practitioners to share the latest knowledge and advances in the discipline. This congress is a recognized hub of interaction among software developers and process engineers along the entire production chain, as well as for materials scientists and engineers developing new materials.

Presentations and discussions will be on topics including additive manufacturing, materials design, and alloy modification, artificial intelligence and machine learning, ICME for non-metals, structural composites, and ceramics, ICME-based design tools, material databases and platforms, microstructure evolution, and analysis, multi-scale modeling, and uncertainty quantification, verification and validation.

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April 25–30

**International Congress on Ceramics (ICC8)**

*BEXCO, #55 APEC-ro, Haeundae-gu, Busan, Republic of Korea*

The International Congress on Ceramics is a unique international ceramic conference, held every 2 years in three different continents consecutively. The conference is intended to share ideas and visions of the future for ceramic and glass materials and to provide a platform for researchers in academia and practitioners in industry to present the latest research and technology progress in the field.

Plenary speakers will be lecturing on nanoscale dynamic observations of fracture and deformation in ceramics, electric ceramic technology for multi-layer ceramic capacitors, multi-materials additive manufacturing and 5D printing, and evolution of environmental barrier coatings for ceramic matrix composites. Discussions will also be held on many topics involving simulation and characterization, innovative processing and manufacturing, structural ceramics, electronic ceramics, functional ceramics, energy ceramics, bioceramics and optical ceramics, and arts and traditional ceramics.

**Contact:** The Korean Ceramic Society, Room 403, Meolijae Building, 76, Bangbae–ro, Seocho–gu, Seoul, Republic of Korea; tel: +82-2-565-3571; e-mail: secretary@icc8.org; web: [www.icc8.org](http://www.icc8.org).

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