Events

2022

Sep 12–14
Smart Materials, Adaptive Structures, and Intelligent Systems (SMASIS)
The Dearborn Inn, Dearborn, Michigan, USA

ASME’s SMASIS conference brings together the global smart materials, adaptive structures, and intelligent systems community to discuss technical advancements that are bridging the gap between science fiction and real-world engineering. The program is designed to not only showcase the latest research but also encourage meaningful dialogue in a comfortable setting among attendees from academia, industry, and government. Attend SMASIS to: share your smart materials research — advance the industry and advance your career; find your next research and development partner or employer; meet smart materials researchers from leading companies, universities, and government labs; facilitate product advancement and uncover new ways to build, test, and develop smart material technologies; expand your knowledge in specialized topic areas as you discover new avenues in robotics, materials development, biomedical engineering, and more.

Contact: Keli Bell-Cole, Manager, Conferences & Events, ASME, Two Park Avenue, New York, NY 10016–5990, USA; tel: 212/591-8013; e-mail: bellcolek@asme.org; web: www.event.asme.org/SMASIS

Sep 12–15
IMAT 2022
Co-Located with NACSC and NEM-TS
New Orleans, Louisiana, USA

IMAT is the new ASM International annual meeting and, in keeping with our focus on membership needs, will offer an industry-focused conference and exposition targeting the advancement of materials, processes and their applications. Traditional materials topics of strong interest will be discussed, including metals, ceramics, composites, coatings, alloy development, microstructure/process/properties relationships, phase equilibria, mechanical behavior, joining, corrosion and failure analysis. In addition, a spectrum of emerging topics of global interest will be covered, such as: additive manufacturing, materials for the energy, power and transportation industries, renewable and sustainable materials & processes, materials to enable automation and robotics, digitization of the materials industry and biomedical/multifunctional materials.

Contact: ASM International Member Service Center, 9639 Kinsman Road, Materials Park, OH 44073; tel: 440/338-5151; e-mail: memberservicecenter@asminternational.org; web: www.asminternational.org/web/imat-2022
**Sep 13–14**

**North American Cold Spray Conference (NACSC 2022)**  
Co-Located with IMAT & NEM-TS  
**New Orleans, Louisiana, USA**

A premier two-day event featuring new cold spray technology, cutting-edge research and exciting applications. The conference will include invited presentations from prominent speakers and subject matter experts from industry, government and academia, on the following topics:

- additive manufacturing: applications—case studies, cost analysis and optimization; equipment and quality control; fundamentals: physics, science, modeling and characterization; science and engineering of powders.

NACSC 2022 registration will include access to the NEM-TS 2022, a new symposium and expo, organized by the ASM Thermal Spray Society. Both conferences will be co-located with IMAT 2022, ASM’s Annual Materials Week Conference and Expo.

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**Sep 13–14**

**New and Emerging Markets for Thick Films and Coatings: Unconventional Uses of Thermal Spray NEM-TS 2022**  
Co-Located with IMAT and NACSC  
**New Orleans, Louisiana, USA**

Thermal spray processes have a unique ability to affordably produce thick film coatings out of a wide range of materials (metals, ceramics, and polymers). This technology also produces coatings with unique properties that can lead to enhanced performance in existing applications and discovery in new applications. With the wide range of materials, unique microstructures, and inexpensive capital investment; this technology is an excellent candidate for development in new and emerging markets.

This new symposium will help you develop an understanding of the versatility and potential benefits of thermal spray to drive cost savings and new designs. The technical program will explore novel uses of thermal spray that will likely aid in the development of new designs and lower cost manufacturing processes in such areas as: solid oxide fuel cells; semiconductors; electrical insulation; heating elements; functional coatings/sensors; hydrophobic coatings; PVD and CVD targets; other industries exploring the use of thermal spray for new applications.

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**Sep 18–21**

**Liquid Metal Processing and Casting Conference (LMPC)**  
**Bellevue Hotel, Philadelphia, Pennsylvania, USA**

This conference convenes experts from both industry and academia to specifically discuss the latest advances in primary and secondary melt processing including vacuum induction melting (VIM), vacuum arc remelting (VAR), electroslag refining (ESR), and electron beam cold hearth remelting (EBCHR). No other dedicated conference specializes in this type of melting.

A unique event, LMPC 2022 showcases the latest technological and scientific advances related to those industrial processes used to cast large ingots of highly alloyed metals.

The LMPC 2022 program will include but not be limited to the following topics: primary and secondary melt processing (VIM, VAR, ESR, plasma melting, and similar processes); physical property measurements of liquid metals and slags; modelling and control of liquid metallurgical processes; ceramic, slag, and refractory reactions with liquid metals; alloy melt refining, evaporation and gas/metal reactions; origins of defects during liquid metal processing;

**Contact:** TMS Meeting Services, 5700 Corporate Drive, Suite 750, Pittsburgh, PA 15237, USA; tel: 800/759-4867 (U.S. and Canada only), or 1-724/776-9000 (all other countries); e-mail: mtgserv@tms.org; web: www.tms.org/LMPC2022

**Sep 26–30**

**International Pipeline Conference (IPC)**  
**Hyatt Regency—Telus Convention Centre, Calgary, Alberta, Canada**

Members of the pipeline industry from around the world will gather in Calgary for the 14th International Pipeline Conference (IPC 2022). Organized by volunteers representing international energy corporations, energy and pipeline associations and regulatory agencies, the IPC has become internationally renowned as the world’s premier pipeline conference. This is a not-for-profit conference and proceeds continue to support educational initiatives and research in the pipeline industry. Technical tracks include: pipeline safety management systems; project management, design, construction, and environmental issues; pipeline and facilities integrity;

- operations, monitoring and maintenance; materials and joining; strain-based design and assessment; risk and reliability; northern, offshore and production pipelines; and a new track for 2022, emerging fuels and greenhouse gas emissions.

**Contact:** ASME, Two Park Avenue, New York, NY 10016–5990, USA; tel: 212/591-8013; e-mail: info@ipcyyc.com; web: www.event.asme.org/IPC
For the 20th installment of the Materials Science & Technology (MS&T) conference series, there will be an extensive technical program that includes approximately 80 symposia in 15 technical tracks developed by all three MS&T partner societies: the American Ceramic Society (ACerS), the Association for Iron & Steel Technology (AIST), and The Minerals, Metals & Materials Society (TMS). For your convenience, the planned symposia have been divided into the following technical tracks: additive manufacturing; artificial intelligence; biomaterials; ceramic and glass materials; education; fundamentals and characterization; iron and steel (ferrous alloys); lightweight alloys; materials-environment interactions; modeling; nanomaterials; nuclear energy; processing and manufacturing; sustainability, energy, and the environment; special topics.

**Contact:** TMS Meeting Services, 5700 Corporate Drive, Suite 750, Pittsburgh, PA 15237, USA; tel: 800/759-4867 (U.S. and Canada only) or +1 724/776-9000 (all other countries); fax: 724/776-3770; e-mail: mtgserv@tms.org; web: www.matscitech.org/MST22/

Oct 9–13
**World PM 2022 International**
**Lyon, France**

The Powder Metallurgy World Congress is only held in Europe once every six years and is therefore an essential destination for the international PM community to meet its suppliers, producers and end-users and to discover the latest innovations in the state-of-the-art PM technology. The technical program will focus on: powder production; consolidation technologies: compaction and sintering, MIM, HIP, field assisted sintering technologies, AM beam-based and sinter-based technologies; materials: ferrous, nonferrous, light, high temperature, and functional; hard metals, cermet and diamond tools; applications: biomedical, aerospace, automotive and energy; tools for improving PM: test and evaluation, secondary operations, design and modelling, life cycle analysis and digitization.

There will also be networking opportunities to discuss future business potential with suppliers and end-users as well as factory visits to experience the world-renowned French industry.

World PM2022 is organized and sponsored by the European Powder Metallurgy Association (EPMA) with the support of MPIF and JPMA, and in cooperation with key members from the PM community in France.

**Contact:** European Powder Metallurgy Association AISBL Administrative and Technical Office, 1 Avenue du Général de Gaulle, 60500 Chantilly, France; tel: +33 (0)3 44 58 15 24; e-mail: info@epma.com; web: www.worldpm2022.com/

Oct 19–20
**International Additive Manufacturing Conference (I-AM 2022)**
**Lisbon, Portugal**

The first International Additive Manufacturing Conference is co-sponsored by The American Society of Mechanical Engineers (ASME) and European Federation for Welding, Joining and Cutting (EWF).

Join colleagues from around the world and participate in discussions focused on cutting-edge technology in additive manufacturing research and development. This year will include live technical presentations from government, academia and industry, as well as topic related panelists and invited speakers.

Participants will have access to on-demand recorded content of each presentation, access to tabletop exhibits, daily lunches, and the welcome networking reception. Optional facility tours will also be available to attendees on October 21. Program tracks include: polymers; ceramics; metals; and emerging technologies.

**Contact:** Amy Street, CMP, Manager, Conferences & Events, ASME, Two Park Avenue, New York, NY 10016–5990, USA; tel: 212/591-8013; e-mail: streeta@asme.org; web: www.event.asme.org/IAM

Oct 17–20
**CAMX Composites and Advanced Materials Expo**
**Anaheim, California, USA**

Co-produced by ACMA and SAMPE, CAMX has the most robust composites and advanced materials education program anywhere in the world. Learn skills, material developments, and processes from more than 100 sessions led by experts. Gain insights from thorough technical paper presentations and education sessions, and discover best practices from lively panel discussions. Tracks and categories include: additive manufacturing; advances in materials; bonding and joining; business, regulatory, and workforce development; design, analysis, and simulation; green and sustainability; manufacturing and processing technologies; market applications.

**Contact:** Martha Lowe, American Composites Manufacturers Association, 2000 N. 15th Street, Ste. 250, Arlington, VA 22201, USA; tel: 703/525-0511; fax: 703/525-0743 e-mail: mlowe@acmanet.org; web: www.thecamx.org
Oct 24–28

**NuMat2022: The Nuclear Materials Conference**

_Ghent, Belgium_

The Nuclear Materials Conference (NuMat) was created in 2012 in association with the *Journal of Nuclear Materials* to serve as an umbrella for international meetings on nuclear materials science related to fission and fusion reactors and the overall nuclear fuel cycle. Following on from NuMat 2020 Online, where over 500 delegates presented their work, NuMat 2022 will focus on broad topics of interest to the nuclear materials community centred around structural components and fuel systems. For the 2022 meeting, a session will be dedicated to special topics such as cements and ceramics, polymers, and advanced manufacturing.

There will be plenary speakers, plus an opening plenary from the 2022 recipient of the Robert Cahn award and a presentation from the best paper prize recipient from the *Journal of Nuclear Materials*. There will be three parallel sessions including workshops and poster sessions which will cover the breadth of research within nuclear materials. NuMat 2022 will offer the following tracks: structural components; fuel systems; special topics.

**Contact:** Marie Treadwell, Elsevier B.V. (Corporate Office), Radarweg 29, Amsterdam 1043 NX, Netherlands; tel: +31 20 485 3911; e-mail: m.treadwell@elsevier.com; web: [www.elsevier.com/events/conferences/the-nuclear-materials-conference](http://www.elsevier.com/events/conferences/the-nuclear-materials-conference)

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Oct 30–Nov 3

**ISTFA 2022**

_Pasadena, California, USA_

The demand for higher performance and lower power-consumption microelectronic devices has driven semiconductor technology to shrink continuously according to Moore’s Law. Furthermore, for latest technologies in nano realm, a new set of disruptive development in new structures and novel materials was introduced. Thus, defects causing semiconductor device failures have become smaller and more elusive. To chase such defects, all failure analysis techniques and methodologies also need to be improved to keep pace with semiconductor technology. Failure characterization, fault isolation, electrical failure analysis, physical analysis, microscope imaging and materials analysis are examples of the key challenged areas. A gap analysis has been done by the EDFAS FA Technology Roadmap Committee and is available to EDFAS members on ASM connect. To close the gap, you can play a role, no matter what your area of expertise is.

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