

THE WORLD COMES HERE.

TMS 2023

152nd Annual Meeting & Exhibition



37th EXHIBITION

Located in Hall G of the San Diego
Convention Center

EXHIBIT HOURS AND EVENTS:

Monday, March 20

Exhibit Hours: 11:00 a.m. to 6:30 p.m.

Exhibit Opening Reception & Poster Session I: 5:30 p.m. to 6:30 p.m.

Tuesday, March 21

Exhibit Hours: 11:00 a.m. to 6:30 p.m.

Exhibit Hall Happy Hour & Poster Session II: 5:30 p.m. to 6:30 p.m.

Wednesday, March 22

Exhibit Hours: 10:00 a.m. to 2:00 p.m.

#TMSAnnualMeeting • www.tms.org/TMS2023

2023 EXHIBITING COMPANIES DIRECTORY

Current as of February 14, 2023. View the most up-to-date list on the TMS2023 App

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Current as of February 14, 2023. View the most up-to-date list on the TMS2023 App



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2023 EXHIBITING COMPANY DESCRIPTIONS

ABB, Inc.

Booth #305

ABB offers a complete range of analytical solutions to the aluminum industry: AlSCAN™ hydrogen analyzer, LiMCA inclusion analyzer, Prefil®-Footprinter melt cleanliness analyzer, PoDFA inclusion identification and quantification analysis as well as electromagnetic stirring solutions.

Advanced Optical Technologies

Booth #506

Alemnis AG/Angstrom Scientific Inc.

Booth #308

Almex USA, Inc.

Booth #409

Almex USA is the leading supplier of aerospace & commercial aluminum billet & slab casting technology & equipment. The company specializes in complete turnkey "Furnace to Finish™" aluminum casthouse solutions. The well-rounded product line includes melting furnaces, degassing systems, DC casting machines, billet/slab casting systems, automation & homogenization systems.

Boise State University

Booth #211

Bruker

Booth #513 and #514

Bruker's industry-leading technologies include Micro-XRF, UMT mechanical testers and Hysitron nanomechanical test instruments. From investigating friction and wear to nanoscale materials characterization and elemental analysis, Bruker offers advanced solutions to help you appreciate and develop innovative materials at the macro- and nano-scale.

California Nanotechnologies

Booth #209

California Nanotechnologies hosts a complement of advanced powder processing and machining capabilities for your materials research & manufacturing needs. Our state-of-the-art facility features multiple in-house Spark Plasma Sintering systems, cryogenic mills, analytical tools, and tooling fabrication equipment allowing us to be a one stop shop for your R&D programs. Cal Nano serves customers across all industries, universities, and national labs.

Cameca

Booth #510

Carl Zeiss Microscopy, LLC

Booth #602

ZEISS microscopy is the world's only manufacturer of light, electron, ion, and X-ray microscope systems to address challenges in materials characterization and inspection. From 2D to 3D and even 4D (through time) analysis, ZEISS microscopes offer the modalities and dimensions needed to fully investigate your material microstructures.

Ceotherm Industrial Furnaces

Booth #304

Ceotherm produces affordable and quality products compared to its competitors. Aluminum Billet Casthouse, Billet Homogenization Plants, Billet Handling Systems, Tilting Rotary Furnaces, Tilting Type Reverberatory Furnaces, Aluminum Ingot Casting Systems, Hot-Top Billet Casting Systems with related Engineering, Automation, Manufacturing, Installation, and Commissioning.

CompuTherm, LLC

Booth #611

CompuTherm is a leading developer of CALPHAD-based simulation tools. In addition to thermodynamics & phase equilibrium, Pandat software can be used to simulate materials processing from solidification to homogenization and heat treatment. Thermodynamic, mobility, molar volume and other property databases are available. We also aid customers to develop specialized tools.

Research in Germany & German Materials Society (DGM)

Booth #214

The German Materials Society (DGM) is a professional organization dedicated to materials science and engineering in Germany. "Research in Germany" is an initiative of the Federal Ministry of Education and Research. It presents Germany as a country of research and innovation and creates a forum for international exchange and cooperation.

DTE

Booth #217

DT Equipment's product range includes a fully automatic Element Analyzer which delivers real-time information on trace elements in liquid aluminum. With proprietary improvements over standard LIBS technology, we can deliver frequent real-time process information, rivaling laboratory accuracy, without any operator involvement – towards Industry 4.0 and fully autonomous production processes. Further information at booth 217.

2023 EXHIBITING COMPANY DESCRIPTIONS

Eurofins EAG Laboratories Booth #307

EAG Laboratories, now part of Eurofins global network, is the global leader in materials characterization. We specialize in the determination of material identity, composition, purity, contaminant levels and crystal structure using advanced analytical techniques. We can manage highly complex analytical projects and help you meet your goals quickly and confidently.

EBSD Analytical Booth #407

EBSD Analytical provides microstructural analysis services through EBSD and EDS coupled with the SEM. The owner, Ron Witt, has been involved with EBSD since 1996, having worked for both TSL and EDAX/ametec before founding EBSD Analytical in 2003. With over 23 years of experience, let us show you how materials characterization with EBSD can help improve your processes.

EDAX Booth #606

EDAX is the global leader in Energy Dispersive Spectroscopy (EDS), Electron Backscatter Diffraction (EBSD), Wavelength Dispersive Spectrometry (WDS) and X-ray Fluorescence (XRF) systems. EDAX manufactures, markets, and services high-quality products and systems for leading companies in semiconductors, metals, and geological, biological, material and ceramics markets.

Elsevier Booth #406

See our ad on the front inside cover of this conference guide.

EnPot Ltd Booth #208

ETA Inc Booth #405

FemtoTools AG Booth #502

FemtoTools is a manufacturer of high-resolution nanoindenters for applications in metallurgy and thin films.

FormAlloy Booth #613

Headquartered in San Diego, California, FormAlloy is an additive manufacturing technology company that is principally engaged in the design, R&D, manufacture and integration of metal deposition systems. FormAlloy's award-winning metal am technology provides an innovative, cost-effective solution to form, enhance, and repair 3D metal parts in a diverse set of industries.

GLAMA Booth #401

GLAMA founded in 1961 is mainly building heavy-duty equipment for aluminium pot rooms, cast houses and anode rodding shops throughout the world. Extract of our range of products: anode changing vehicles; anode pallet transporters; butt cleaning manipulators; furnace charging machines; furnace tending machines; ladle charging trucks; molten metal carriers; tapping trucks.

Haarslev Industries Press Technology GmbH + Co.Kg Booth #507

The world leader for most efficient wear protection materials. We supply optimized wear and spare parts for Anode Paste mixers at economical prices with longer life times than any other supplier to this industry. Furthermore, we provide services and process support for anode paste preparation. All of our parts for the Aluminium Industry are manufactured in Germany.

Henry Royce Institute for Advanced Materials Booth #315

The Henry Royce Institute is the UK's national institute for advanced materials research & innovation, established to ensure the UK can exploit its world-leading from discovery to application. Royce ensures that academics & industry in the UK's materials community have access to world-class research capabilities, infrastructure, expertise, & skills development.

Hycast AS Booth #306

Hycast AS has expertise within aluminium casthouse technology and core competencies within project management, engineering and process know-how. Hycast AS has extensive experience and know-how gained from numerous projects world-wide. The main products are Billet and Slab Casting technology, Melt refining, Rod Feeders and Launderers integrated into a fully automated process.

Hydrova Booth #511

INTEREP Inc Booth #311

2023 EXHIBITING COMPANY DESCRIPTIONS

JH Technologies

Booth #413

JH Technologies has been successful in supporting manufacturing businesses and research organizations for 30 years. Optical & digital imaging, metallography, sample preparation, and metrology tools backed by expert applications support.

KLA Corporation

Booth #608

We provide advanced process control solutions for manufacturing wafers and reticles, integrated circuits and packaging. In close collaboration with leading customers across the globe, our expert teams of physicists, engineers, data scientists and problem-solvers design solutions that move the world forward.

Leica Microsystems

Booth #206

Light Metal Age

Booth #410

Light Metal Age magazine has a long legacy in the aluminum industry with 80 years of experience covering primary and secondary production, extrusion, and rolling. We provide vital technical, industrial, and market information to aluminum producers and processors around the world. Aluminum in automotive, aerospace, and building and construction, are also major topics.

Maschinenfabrik Gustav Eirich GmbH & Co KG

Booth #508

EIRICH is a leading German supplier of industrial material processing solutions. For the carbon sector we offer paste preparation equipment for the production of prebake anodes, Soederberg, graphite electrodes, cathodes, metallurgy and carbon & graphite specialties.

Micro Materials Ltd

Booth #314

Micro Materials has pioneered many advances in nanomechanical test instrumentation, most recently testing to 1000 degrees C. Our platforms are capable of depth sensing indentation and tribological measurements that can be done over a wide load range. Tribological techniques include scratch and wear, high strain rate nano-impact, micro impact, & nano-fretting.

MTI Corporation

Booth #609

MTI provides laboratory R&D equipment including alloy melting, casting, annealing, sectioning, polishing, mixing machines, high temperature muffle and tube furnaces, pressing machines, film coaters, high vacuum systems, high pressure furnaces, RTP furnaces, hydrogen furnaces, as well as compact XRD/XRF for Metallographic analysis and equipment for High Throughput.

Nanovea

Booth #213

Nanovea aims to simplify advanced measurement technologies to stimulate material engineering. Ease of use, advanced automation and the dedication to superior accuracy are the driving forces behind its full range of precision instruments. Thousands of clients rely on our accurate & honest solutions, superior instruments and experienced laboratory and consulting services.

NASA Physical Sciences Informatics (PSI)

Booth #408

Netzsch Instruments NA LLC

Booth #512

NETZSCH Instruments offers highly sensitive and reliable thermal analysis and rheology instrumentation for R&D, quality control, process safety, and failure analysis. Our instruments and methods allow for material characterization and the study of properties including Cp, enthalpy, weight change, Young's modulus, conductivity, diffusivity, and evolved gas analysis.

Nuclear Science User Facilities

Booth #203

The Nuclear Science User Facilities (NSUF) offers unparalleled research opportunities for nuclear energy researchers via 21 partner institutions. Users are granted access via a competitive peer-reviewed process to world-class nuclear research facilities, technical expertise, and assistance with experiment design, assembly, safety analysis and examination.

Plastometrex Limited

Booth #201

Precimeter Inc.

Booth #503

Molten Metal level control. Precimeter is a globally active company headquartered in Sweden. We are also located in Germany, USA and China. The core business and focus of Precimeter is molten metal level and flow control.

2023 EXHIBITING COMPANY DESCRIPTIONS

Psylotech Inc Booth #604

For over 15 years, Psylotech has designed and built precision multi-scale micromechanical testing systems for the global stage. We provide the research community with tools to help better test new materials in static and fatigue that ultimately provide backbone for modeling data that supports product development. Psylotech is based in Evanston, Illinois, USA.

Quantum Design Booth #605

Quantum Design, a leading manufacturer of automated material characterization systems, offers the FusionScope™, an innovative correlative microscope that combines the power of AFM with the benefits of SEM imaging to provide completely new insights into the nano-world. QD also distributes additive micro-manufacturing (µm) of metals systems and maskless lithography systems.

REL, Inc. Booth #202

REL is an OEM for High Strain Rate Testing equipment and Visible Spectrum LED lights that are designed for dynamic material testing and other events happening on nanosecond timescales! All REL equipment is configured as a turn-key packaged solution for YOUR specific dynamic testing application.

RUMUL North America LLC Booth #501

Saml Booth #509

Schrödinger Booth #505

Sistem Teknik Industrial Furnaces Ltd. Booth #414

Designing and producing industrial furnaces since 1979, Sistem Teknik uses state-of-the-art technology that is fully integrated to industry 4.0 thermal processing applications. Being one of Europe's largest turn-key solution providers for heat treatment, Sistem Teknik responds to a wide range of demands related to aluminum, brass, and composite metals.

STAS Booth #402

STAS is a world leader in the supply of various equipment and solutions to improve the productivity and quality of aluminium. We have specialized in the development, fabrication and commercialisation of process equipment since 1989. 160 employees and a dozen strategic partners and agents are located in key markets. We provide innovative, robust machines globally.

Synton MDP AG Booth #610

Synton-MDP is a manufacturer of diamond stylus for microtechnical instruments. Most of the tips are used in metrological equipment (surface finish, profile, form, nano-indentation, hardness, scratch and other characteristics). We specialise in small spherical tips, with a high level of dimensional accuracy in ultra-compact configurations, and points with razor sharp edges.

TA Instruments Booth #607

Tekna Booth #205

Tekna has been designing and manufacturing RF-ICP plasma technology for over 30 years. This technology can be used for powder metallurgy and additive manufacturing, nano particle synthesis for energy storage and micro electronics, or even material testing in high enthalpy environments such as space re-entry simulations or hypersonic flight applications.

Tenova Inc. Booth #310

Tenova Inc. is a worldwide leader in the design and supply of loose carbonaceous material calciners based on rotary hearth technology. These furnaces are used for the processing of petroleum coke, coal, formed coke briquettes and various other carbon based products. We also provide aluminum processing furnaces for a variety of applications as well as technical services.

TESCAN Booth #412

Tesla, Inc. Booth #309

2023 EXHIBITING COMPANY DESCRIPTIONS

Thermo Calc Software Inc.

Booth #301

Leading developer of software for computational thermodynamics and diffusion controlled simulations. Thermo-Calc: thermodynamic and phase equilibria calculations for multicomponent systems. DICTRA: predicting diffusion in multicomponent alloys. TC-PRISMA: simulations of precipitation kinetics. Databases for steels, Ti, Al-, Mg-, HEAs, Ni-superalloys and other materials.

Thermo Fisher Scientific

Booth #416

Total Materia AG

Booth #316

UES Inc.

Booth #204

Robo-Met.3D is a fully automated serial sectioning system for three-dimensional microstructural investigations. The system enables metallographic etching and imaging of the microstructure of materials. Post-processing reassembles these 2D images, gathered over an optical scale, into 3D models.

University of North Texas: Center for Agile and Adaptive Additive Manufacturing

Booth #415

Virtual Lab. Inc.

Booth #313

Materials Square (MatSQ) is a cloud-based materials/chemistry simulation SaaS platform. The state-of-the-art simulation methodologies including DFT, MD, CALPHAD are provided with user-friendly graphical user interface. MatSQ has very reasonable pricing model (PAY-AS-YOU-GO), where you only pay for what you use the cloud.

Wagstaff, Inc.

Booth #302

Custom Aluminum DC Casting Systems from Wagstaff. Wagstaff, Inc. is a 73-year-old industrial manufacturing and engineering company that provides customized, advanced aluminum direct-chill (DC) solidification technology to rolling ingot and extrusion billet producers worldwide. Wagstaff's headquarters are located in Spokane, Washington, USA.

2023 CONFERENCE SPONSORS

Current as of February 14, 2023
View the most up-to-date list on the TMS2023 Mobile App

LANYARDS AND CONFERENCE GUIDE:



MOBILE APP AND WEB PLATFORM:



Seeing beyond

DIVERSITY AND INCLUSION BREAKFAST:



ADDITIVE MANUFACTURING KEYNOTE:



WELCOME RECEPTION, STRUCTURAL MATERIALS DIVISION:



FRIEND OF TMS:

