

THE WORLD COMES HERE.

TMS 2024

153rd Annual Meeting & Exhibition

MARCH 3–7, 2024

HYATT REGENCY ORLANDO | ORLANDO, FLORIDA, USA

#TMSAnnualMeeting | www.tms.org/TMS2024



38TH EXHIBITION

Located in the Regency STUV Rooms
at the Hyatt Regency Orlando

EXHIBIT HOURS AND EVENTS

Monday, March 4

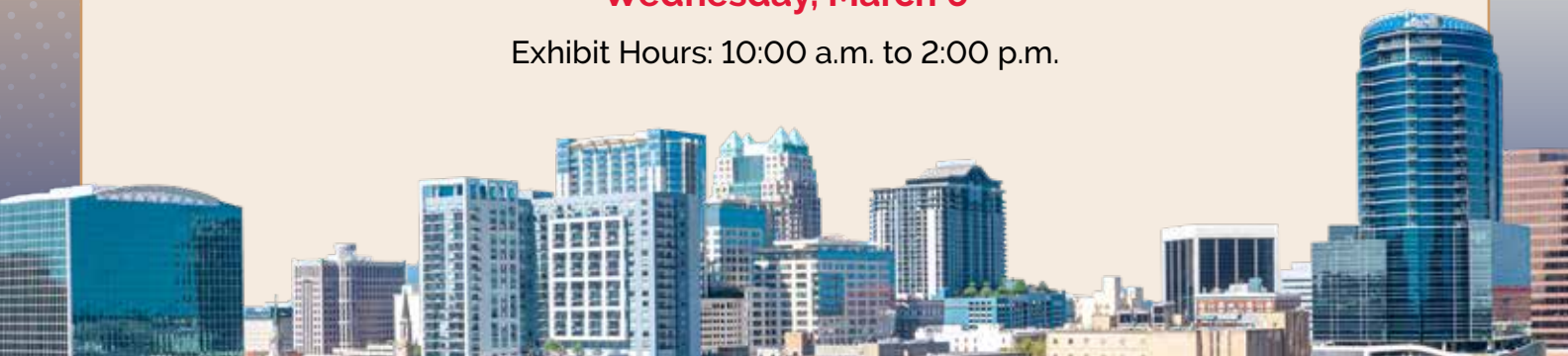
Exhibit Hours: 11:00 a.m. to 6:30 p.m.
Exhibit Opening Reception & Poster Session I: 5:30 p.m. to 6:30 p.m.

Tuesday, March 5

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 6

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



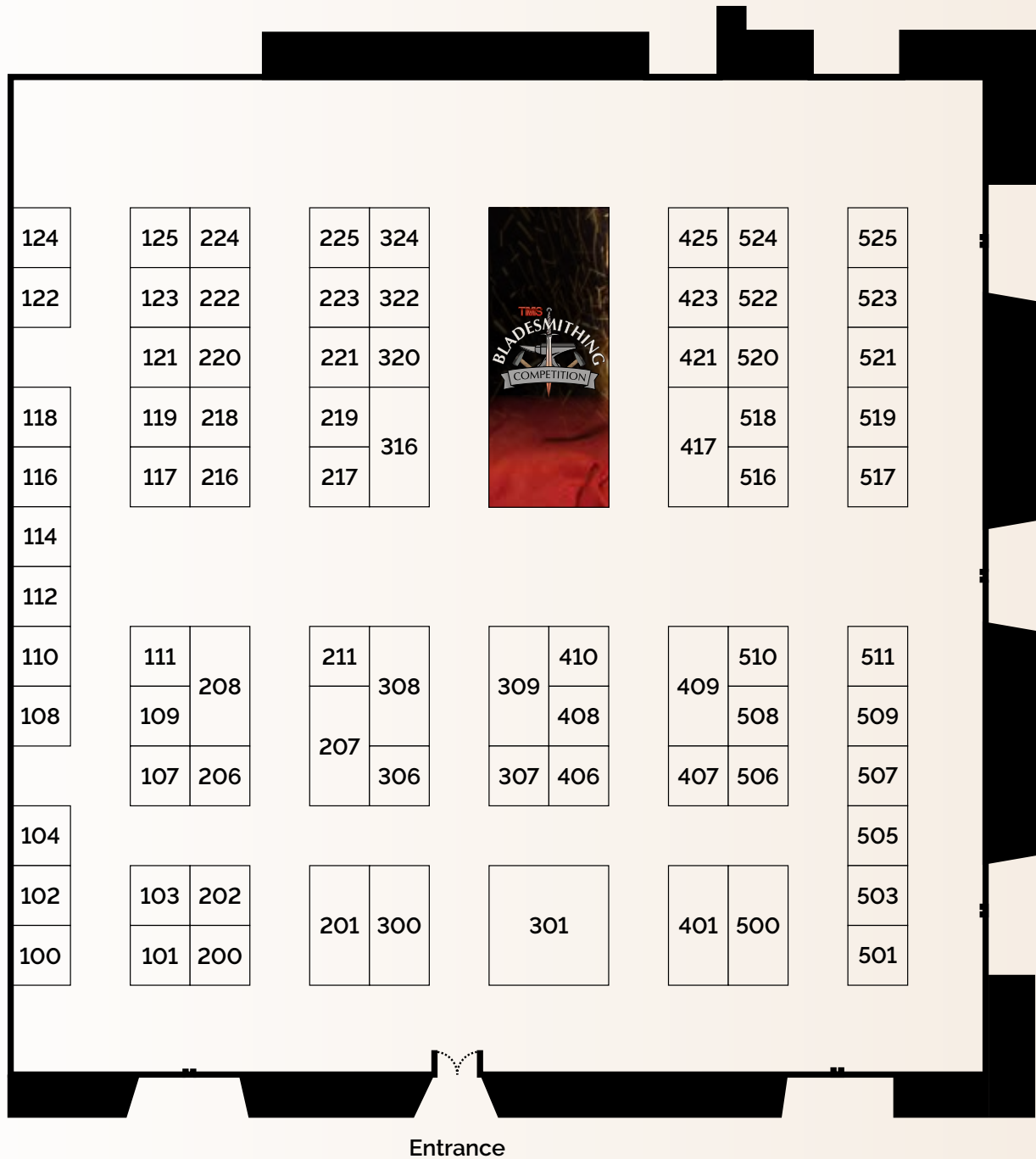
2024 EXHIBITING COMPANIES DIRECTORY

Exhibitor list current as of January 26. See the mobile app for exhibitors added after January 26.

Company	Booth #
ABB, Inc.	206
Across International LLC	112
Alemnis AG / Angstrom Scientific Inc	217
Allied High Tech Products	500
ALMEX USA, Inc.	308
AMAZEMET Sp. z o. o.	425
AnalytiChem	421
Anton Paar	207
B-jetting	503
Bruker	201
Cameca	101
Carl Zeiss Microscopy, LLC	401
CompuTherm, LLC	211
Dr. Fritsch Sondermaschinen GmbH	116
DTE	417
EBSD Analytical	408
Elsevier	322
Exum Instruments	109
FemtoTools AG	301
Fritsch Milling & Sizing, Inc.	307
Gatan/EDAX	410
GLAMA	300
Gleeble	516
Glenn T. Seaborg Institute - Idaho National Laboratory	510
Haarslev Industries Press Technology GmbH + Co.Kg	306
Heraeus Electro-Nite	409
innovatherm Prof. Dr. Leisenberg GmbH + Co. KG	511
InssTek	103

Company	Booth #
KLA Corporation	309
Linseis Inc	508
Micro Materials Ltd	320
MTI Corporation	406
Nuclear Science User Facilities	218
Pacific Northwest National Laboratory (PNNL)	100
Plastometrex Limited	208
Precimeter Inc.	506
Proto	202
Psylotech Inc	505
PyroGenesis Canada	219
Quantum Design	114
Reed Exhibitions (China) Ltd	110
Rtec Instruments	221
SELEE	108
Sente Software Ltd.	519
Sistem Teknik Industrial Furnaces Ltd.	117
Software for Chemistry & Materials	507
Synton Mdp AG	517
Tekna Plasma System Inc	423
Tenova Inc.	316
TESCAN	216
Thermo Calc Software Inc.	200
UES inc. An Eqlipse Company	407
UK Atomic Energy Authority	107
University of Central Florida, Materials Science and Engineering	104
University of North Texas: Center for Agile and Adaptive Additive Manufacturing	324

FLOOR PLAN OF 2024 EXHIBITING COMPANIES



2024 EXHIBITING COMPANY DESCRIPTIONS

Exhibitor list current as of January 26.
See the mobile app for exhibitors
added after January 26.

Company	Booth
ABB, Inc.	206

Our company offers a complete range of analytical solutions to the aluminum industry with ALSCAN™ hydrogen analyzer, LiMCA inclusion analyzer, Prefil®-Footprinter melt cleanliness analyzer, PoDFA inclusion identification and quantification analysis. ABB also offers metallographic analysis services.

Across International LLC	112
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Alemnis AG / Angstrom Scientific Inc	217
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Angstrom Scientific Inc. represents a number of leading manufacturers supporting materials characterization and analysis.

Allied High Tech Products	500
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For over 41 years, Allied High Tech Products has provided quality products for metallographic sample preparation & analysis. Items on display include state-of-the-art Grinding/Polishing Systems, Sectioning Saws and Mounting Systems, as well as a full range of consumable products. Carl Zeiss Microscopes will also be featured.

ALMEX USA, Inc.	308
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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.

AMAZEMET Sp. z o. o.	425
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AnalytiChem	421
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Anton Paar	207
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B-jetting	503
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Company	Booth
Bruker	201

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.

Cameca	101
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CAMECA is a world leading supplier of microanalytical and metrology instrumentation for research and process control. Our instruments measure elemental and isotopic composition in materials down to atomic resolution and equip government and university labs as well as high-tech industrial companies around the world.

Carl Zeiss Microscopy, LLC	401
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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.

CompuTherm, LLC	211
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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.

Dr. Fritsch Sondermaschinen GmbH	116
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DTE	417
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DTE's product range includes a fully automatic Elemental 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 process automation and Industry 4.0.

2024 EXHIBITING COMPANY DESCRIPTIONS

Company	Booth
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EBSD Analytical	408
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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/Ametek before founding EBSD Analytical in 2003. With over 23 years experience, let us show you how materials characterization with EBSD can help improve your processes.

Elsevier	322
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Elsevier is a global leader in information and analytics that helps researchers and healthcare professionals advance science and improve health outcomes for the benefit of society. Elsevier's Materials Science journals are dedicated to the creation and sharing of materials science research with high-quality and comprehensive coverage throughout the various disciplines.

Exum Instruments	109
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Exum Instruments enables materials scientists and engineers to spend less time acquiring data and more time learning from it. Exum's innovative Massbox can take any solid material and measure the full periodic table of its constituents in minutes. Its intuitive operations and compact package bring high performance outside the traditional laboratory environment.

FemtoTools AG	301
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FemtoTools is a manufacturer of high-resolution nanoindenters for applications in metallurgy and thin films.

Fritsch Milling & Sizing, Inc.	307
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FRITSCH is an internationally respected German manufacturer of commercial quality, professional application-oriented laboratory instruments & production equipment. Serving a range of industries—from agriculture to pharma to nano-technology.

Gatan/EDAX	410
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Gatan/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.

Company	Booth
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GLAMA	300
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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

Gleeble	516
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Glenn T. Seaborg Institute - Idaho National Laboratory	510
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Haarslev Industries Press Technology GmbH + Co.Kg	306
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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.

Heraeus Electro-Nite	409
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innovatherm Prof. Dr. Leisenberg GmbH + Co. KG	511
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InssTek	103
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InssTek develops and manufactures metal 3D printers with InssTek's original DMT (Direct Metal Tooling) technology. InssTek also provides printing, remodeling, and repair services for 3D printing applications.

KLA Corporation	309
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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.

2024 EXHIBITING COMPANY DESCRIPTIONS

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Company	Booth
Linseis Inc	508

Micro Materials Ltd	320
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Micro Materials has pioneered many advances in nanomechanical test instrumentation, most recently testing to 1100 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	406
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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.

Nuclear Science User Facilities	218
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The Nuclear Science User Facilities (NSUF) offers unparalleled research opportunities for nuclear energy researchers via partner institutions. Users are granted access via a competitive peer-reviewed process to world-class nuclear research facilities, technical expertise, and assistance.

Pacific Northwest National Laboratory (PNNL)	218
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Plastometrex Limited	208
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Founded in 2018 by a team of Cambridge scientists, Plastometrex is a cutting-edge materials testing company specialising in advanced measurement solutions for mechanical properties. The company's innovative Profilometry-based Indentation Plastometry (PIP) method offers fast and accurate insights into material properties, with a particular focus on metals.

Precimeter Inc.	506
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Molten Metal level control.

Company	Booth
Proto	202

Proto makes x-ray diffractometers for powder diffraction, single-crystal XRD, residual stress, and Laue orientation. We also offer x-ray systems with extremely bright MetaJet x-ray sources for high-end experimental x-ray techniques such as CT, phase-contrast imaging, and HEDM. Our experienced team can bring the power of a synchrotron into your home laboratory.

Psylotech Inc	505
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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.

PyroGenesis Canada	219
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PyroGenesis Canada Inc. pioneers advanced plasma processes, offering sustainable alternatives to conventional dirty practices in iron ore pelletization, aluminum, waste management, and additive manufacturing. With patented technologies, our Montreal-based team drives innovation for cleaner, economically attractive solutions.

Quantum Design	114
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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 (µAM) of metals systems and maskless lithography systems.

Reed Exhibitions (China) Ltd	114
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Rtec Instruments	221
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SELEE	108
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2024 EXHIBITING COMPANY DESCRIPTIONS

Company	Booth
Sente Software Ltd.	519

Developers of JMatPro®, a powerful simulation software package for calculating a wide range of materials properties and behavior for multi-component alloys used in industrial practice. Data exports are available to casting, forming, forging and heat treatment packages. Sente Software has a proven track record for innovation and excellence with customers worldwide.

Sistem Teknik Industrial Furnaces Ltd.	117
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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.

Software for Chemistry & Materials	507
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Synton Mdp AG	517
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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.

Tekna Plasma System Inc	423
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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.	316
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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.

Company	Booth
TESCAN	216

Thermo Calc Software Inc.	200
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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.

UES inc. An Eqlipse Company	407
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Redefining the limits of technology, from macro to micro. We're pushing the boundaries of what's possible, from concept to reality. Our high-performance and innovative scientific research and technology services and products solve challenges for customers seeking innovation and cutting-edge solutions.

UK Atomic Energy Authority	107
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United Kingdom Atomic Energy Authority (UKAEA) is the UK's national organisation responsible for the research and delivery of sustainable fusion energy. It is an executive non-departmental public body, sponsored by the Department for Energy Security and Net Zero.

University of Central Florida, Materials Science and Engineering	104
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University of North Texas: Center for Agile and Adaptive Additive Manufacturing	324
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2024 CONFERENCE SPONSORS

Current as of January 31, 2024

Lanyards and Conference Guide



**AMERICAN
ELEMENTS**
THE ADVANCED MATERIALS MANUFACTURER®

Welcome Reception and Keynote Sessions



**SPRINGER
NATURE**

Diversity and Inclusion Breakfast



ELSEVIER

LGBTQ* and Allies Networking Mixer

Social Media Engagement



**GLENCORE
TECHNOLOGY**

EPD/MPMD Luncheon



I-Form
Advanced Manufacturing
Research Centre