# THE WORLD COMES HERE.

# TMS2025

154th Annual Meeting & Exhibition

March 23-27, 2025

MGM Grand Las Vegas Hotel & Casino Las Vegas, Nevada, USA #TMSAnnualMeeting | www.tms.org/TMS2025



# 39<sup>™</sup> EXHIBITION

Located in the Marquee Ballroom, across the courtyard from TMS2025 session rooms and registration areas.

### **EXHIBIT HOURS AND EVENTS**

Monday, March 24

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 25

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 26

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

# 2025 **EXHIBITING COMPANIES** DIRECTORY

Listing current as of February 10. For the most up-to-date listing, check the TMS2025 App.

Company	Booth	Company	Booth
ABB, Inc.	410	MDPI	210
Across International LLC	215	Micro Materials Ltd	416
Allied High Tech Products	509	MTI Corporation	604
AMAZEMET Sp. z o. o.	521	Nanometronix LLC	224
Angstrom Scientific Inc./Alemnis AG	322	Netzsch Instruments N.A. LLC	606
BlueHalo	216	Oxford Instruments	404
BlueQuartz Software	223	PRCO AMERICA, INC.,	304
Bruker	303	Precimeter Inc.	615
California Nanotechnologies	621	Proto	309
Cameca	311	Protochips, Inc.	312
CompuTherm LLC	516	Psylotech Inc	207
Dr. Fritsch Sondermaschinen GmbH	616	Quantum Design, Inc	622
EBSD Analytical	209	Rtec Instruments	412
Exum Instruments	610	Seco/Warwick Corp	513
Fritsch Milling & Sizing, Inc.	522	SELEE	206
Gatan/EDAX	204	Sente Software Ltd.	413
Gleeble	321	Software for Chemistry & Materials	515
Haarslev Industries Press Technology GmbH + Co.Kg	310	Synton Mdp AG	221
innovatherm Prof. Dr. Leisenberg GmbH +	422	TA Instruments	316
Co. KG		Tenova Inc.	409
InssTek	222	TESCAN	421
International Magnesium Association	506	Tethon 3D	203
KLA Corporation	603	Thermal Technology LLC	608
Laser Thermal Analysis	512	Thermo Calc Software Inc.	510
Linseis Inc	524	Thermo Fisher Scientific	609
Los Alamos National Laboratory	514	Zhengzhou Jingwei Technology Industry Co.,Ltd	315
Materials and Chemistry Laboratory, Inc.	212	CO.,LIQ	

# **FLOOR PLAN** OF 2025 EXHIBITING COMPANIES

#### MARQUEE BALLROOM ENTRANCE

604 606 608 610 612 616 FOOD & BEVERAGE STATION	504 603 506 510 609 512 613 514 615 516	404 410 509 513 412 515 416	304 310 409 312 413 316	204 303 206 309 210 311 212 315 216 FOO BEVE STAT	RAGE	
	524	BEVE	421 324 DD & RAGE	323 224	223	SEATING AREA
		STAT				IG AREA

# 2025 EXHIBITING COMPANY DESCRIPTIONS

Exhibitor list current as of February 10. See the TMS2025 App for exhibitors added after February 10.

**Booth** Company Company

410

322

223

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.

ABB, Inc.

Across International LLC 215

#### **Allied High Tech Products** 509

For over 36 years, Allied High Tech Products has provided quality products for metallographic sample preparation and analysis. Allied manufactures state-of-the-art equipment including sectioning machines, mounting systems, grinders/ polishers and a precision tabletop milling machine at its California headquarters.

AMAZEMET Sp. z o. o. 521

#### Angstrom Scientific Inc./Alemnis AG

Angstrom Scientific Inc. represents leading manufacturers supporting materials characterization. Specifically: Hitachi Tabletop SEMs, Imina Nano-probing systems, Point Electronics EBIC/EBAC, Leica Sample prep equipment, NenoVision and Alemnis In-Situ AFM, & Nano-Indenters, EMSIS TEM Cameras, Advent Diamond X-ray Beam Monitor, ConnectomX -Katana Microtome, and VacuumFab motion control.

BlueHalo 216

#### **BlueQuartz Software**

BlueQuartz Software specializes in microstructureoriented computational services. Our tools are distributed via the DREAM.3D platform. DREAM.3D is built around SIMPL, a general spatiotemporal information management and analysis library. BlueQuartz employs software engineers and MSE experts. Let us be the software development team for your materials analysis needs.

**Booth Bruker** 303

Bruker's industry-leading technologies include Electron Micro SEM/TEM Analyzers, 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

621

California Nanotechnologies offers an array of facilities including advanced consolidation techniques (Spark Plasma Sintering), cryogenic milling, and machining tools. R&D and pilot-scale production services are performed by Cal Nano for both in-house programs and customer-funded projects. Programs range from Space, Aerospace, Nuclear, and Sports & Recreation industries.

311 Cameca

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.

#### CompuTherm LLC

516

CompuTherm LLC is one of the leading developers of software and databases for thermodynamic calculation and kinetic simulation using the CALPHAD method. Our products include Pandat software suite, thermodynamic databases, mobility databases, and thermo-physical property databases for numerous alloy systems, such as Al-, Co-, Fe-, Mg-, Ni-, Ti-, TiAl-based alloys, high entropy alloys, and refractory alloys. These simulation tools provide materials solutions on multi-component phase equilibria, diffusion, precipitation, grain growth, solidification, welding and more. We also provide consulting service and develop customized simulation tools as requested by customers.

Exhibitor list current as of February 10. See the TMS2025 App for exhibitors added after February 10.

# 2025 EXHIBITING COMPANY DESCRIPTIONS

**Booth** Company

#### 616 Dr. Fritsch Sondermaschinen GmbH

Founded in 1953, Dr. Fritsch is the world's first and largest manufacturer of FAST/SPS sinter presses, which are ranging from R&D devices for universities to large automated FAST/SPS sinter presses for industrial mass production. Furthermore, mixers, cold presses, granulation machines as well as metal and ceramic powders are part of Dr. Fritsch's product portfolio.

#### **EBSD Analytical**

209

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.

#### **Exum Instruments**

610

#### Fritsch Milling & Sizing, Inc.

522

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 nanotechnology.

#### Gatan/EDAX

204

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.

#### Gleeble

321

Dynamic Systems Inc. (DSI) is a global leader in materials testing solutions, specializing in thermalmechanical simulation and high-temperature materials research. Our flagship Gleeble® systems empower researchers in aerospace, automotive, energy, and advanced materials industries to develop and validate next-generation materials under real-world conditions. From general metallurgical testing to ultra-high-temperature ceramic and composite evaluation, DSI provides the tools and expertise to accelerate innovation.

Company **Booth** 

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

310

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.

#### innovatherm Prof. Dr. Leisenberg GmbH + Co. KG

422

Innovatherm is the world market leader in anode baking systems for the primary aluminum industry. Known as "ProBake", we supply complete firing systems consisting of burners, necessary safety technology as well as process control technology. At the TMS show we present first insights into our newly developed ProBake X control system for optimized anode baking process.

#### InssTek

222

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.

#### International Magnesium Association

506

#### **KLA Corporation**

603

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.

Laser Thermal Analysis	512
Linseis Inc	524
Los Alamos National Laboratory	514
Materials and Chemistry Laboratory, Inc.	212
MDPI	210

# 2025 EXHIBITING COMPANY DESCRIPTIONS

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**Booth** Company **Booth** Company

416

Micro Materials has pioneered many advances in nanomechanical test instrumentation, most are capable of depth sensing indentation and a wide load range. Tribological techniques include

Micro Materials Ltd

recently testing to 1100 degrees C. Our platforms tribological measurements that can be done over scratch and wear, high strain rate nano-impact, micro impact, & nano-fretting.

604 **MTI Corporation** 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.

**Nanometronix LLC** 224

606 Netzsch Instruments N.A. LLC

Oxford Instruments 404

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

PRCO AMERICA, INC., 304

Precimeter Inc. 615

Molten Metal level control.

**Proto** 309

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 MetalJet 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.

312 Protochips, Inc.

**Psylotech Inc** 207

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, Inc** 622

#### **Rtec Instruments**

412

Rtec Instruments develops and manufactures advanced mechanical and optical surface characterization testing instruments. We supply high-precision, reliable, and innovative product lines to provide solutions for your research and quality control needs. We lead several new technological fronts such as space, EV, coatings, and sustainability drive. Product line includes solutions for Instrumented indentation, scratch testing, adhesion testing, optical characterization, film thickness measurement and tribometers.

#### Seco/Warwick Corp

513

SECO/WARWICK is a leading supplier of aluminum processing and melting/holding/tilting furnace systems. With decades of experience and deep engineering experience, SECO/WARWICK can design, manufacture, install, and upgrade nearly any furnace systems associated with aluminum processing and melting including annealing, solution heat treating, homogenizing, and melt/ reheat.

**SELEE** 206

SELEE pioneered the use of ceramic foam technology in metal filtration 50 years ago.

#### Sente Software Ltd. 413

Developers of JMatPro®, a powerful simulation software package for calculating a wide range of materials properties and behavior for multicomponent 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.

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# 2025 EXHIBITING COMPANY DESCRIPTIONS

Company	Booth
Software for Chemistry & Materials	515

Whether you research batteries, organic electronics, photovoltaics, polymers, or other materials, we have the modeling tools to drive your R&D. The Amsterdam Modeling Suite offers atomistic modeling and fluid thermodynamics all with an integrated GUI within a simple single-file binary. Come and discuss your research questions with us!

#### **Synton Mdp AG** 221

Synton-MDP is a manufacturer of diamond stylus for mictrotechnical 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** 316

Visit TA Instruments for premier technology in thermal analysis and thermophysical testing. Innovative instrumentation for materials characterization of polymers, metals, ceramics, and more. Unmatched performance from our Discovery Series DSC, TGA, and SDT and industry leading instruments for Thermal Conductivity, Dilatometry, and Thermal Diffusivity by Flash up to 2800°C.

#### Tenova Inc. 409

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	421
Tethon 3D	203
Thermal Technology LLC	608
Thermo Calc Software Inc.	510

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	609
Zhengzhou Jingwei Technology Industry Co.,Ltd	315

LANYARDS AND **CONFERENCE GUIDE** 



WELCOME RECEPTION AND **KEYNOTE SESSIONS** 



DIVERSITY AND INCLUSION BREAKFAST AND LGBTQ+ AND ALLIES NETWORKING MIXER



**MOBILE APP** 





EPD/MPMD LUNCHEON

JOURNAL OF SUSTAINABLE **METALLURGY LUNCHEON** 

REGISTRATION PACKET INSERT

**GLENCORE TECHNOLOGY** 



