

ATOM PROBE TOMOGRAPHY @ M&M 2022

Special Events!

Event	Date	Start Time	Booth #
APT Demo	8/2/2022	11:00 AM	1872
APT Demo	8/3/2022	11:00 AM	1872
Tutorial	8/3/2022	5:45 PM	1872

Join us for continuous live APT data collection on the Invizo 6000.

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LEAP 6000 and Invizo 6000 launch. Don't miss this catered event. Sign up in the MEGABOOTH.

Tuesday, August 2nd

Analytical Sciences Symposia

Presentation						
Session	Date	Start Time	Number	Presentation Title	Presenting Author	Room
A06.1	8/2/2022	10:30 AM	139	Mysterious Evaporation Behavior of Hydrogen in Aluminium Based Material Analyzed with APT	Loïc Rousseau	C122
A06.1	8/2/2022	11:00 AM	140	Hydrogen Trapping in Fully Martensitic Steels using Atom Probe Tomography	Rekha M Y	C122
A06.1	8/2/2022	11:15 AM	141	Laser Ablation Sample Preparation for grain boundary analysis of H in Atom Probe Tomography	Martina Heller	C122
A06.1	8/2/2022	11:30 AM	142	Solving Peak Tail Overlaps in Atom Probe Tomography using Convolutional Networks	Martin Meier	C122
A06.1	8/2/2022	11:45 AM	143	Multiple-ion Events in APT Studies of MoNbTi and HfNbTaTiZr Refractory High Entropy Alloys	Patrick Callahan	C122
A01.3	8/2/2022	11:30 AM	14	Preparation of Atom Probe Specimens Containing Individual Nanoparticles	Mark McLean	D138
A01.3	8/2/2022	11:45 AM	15	Yield Assessment of Protective Coatings for Atom Probe Analysis	Yimeng Chen	D138
A06.2	8/2/2022	1:30 PM	144	Dynamic observation of electro-assisted Fe oxidation by Operando Atom Probe	Sten Lambeets	C122
A06.2	8/2/2022	2:00 PM	145	Fully Automated Data Acquisition and Reporting for Semiconductor Dopant Analysis	Katherine Rice	C122
A06.2	8/2/2022	2:15 PM	146	A Standards-based Approach to Dopant Quantification Using Atom Probe Tomography	Karen DeRoche	C122
A06.2	8/2/2022	2:30 PM	147	AP Suite Extension Infrastructure	James Payne	C122
A06.2	8/2/2022	2:45 PM	148	APT_PyControl, an Open-source Python Atom Probe Tomography Control Software Package	Mehrad Monajem	C122
A03.4	8/2/2022	2:00 PM	68	Insight Into Precipitation Synergy of Nano β -NiAl + Cu + Carbide in Austenitic Steel by APT	Colin Stewart	B112
A03.4	8/2/2022	2:30 PM	70	3D nanoscale imaging of semiconductor films for GAA (gate all around) device development	Pritesh Parikh	B112

Physical Sciences Symposia

Presentation						
Session	Date	Start Time	Number	Presentation Title	Presenting Author	Room
P01.3	8/2/2022	10:30 AM	437	Characterization of hydrogen effect on mechanical properties of metals at different length scales	Afroz Barnoush	A105
P01.3	8/2/2022	11:00 AM	438	Hydride formation and deformation mechanisms in commercially pure titanium	Stoichko Antonov	A105
P01.3	8/2/2022	11:15 AM	439	Cryogenic FIB Sample Preparation for the Analysis of Hydrogen in Zr Alloy APT Experiments	Megan Jones	A105
P01.4	8/2/2022	1:30 PM	441	Visualization of Hydrogen-Trapping Sites in Steels by Atom Probe Tomography	Jun Takahashi	A105
P01.4	8/2/2022	2:00 PM	442	Imaging of hydrogen in metals using an atom probe with ultra-low hydrogen background	Peter Felfer	A105
P01.4	8/2/2022	2:15 PM	443	Exploiting Adsorption Dynamics in APT for accurate Measurements of Hydrogen Concentrations	Martin Meier	A105
P01.4	8/2/2022	2:30 PM	444	The Observation of H Isotope in Fe-Cr-Ni Model Stainless Steels at the Nano Scale using APT	Dallin Barton	A105
P01.4	8/2/2022	2:45 PM	445	Preliminary APT Evidence for H-Trapping at a Beta-Nb Second Phase in a Neutron-Irradiated Zr Alloy	Benjamin Jenkins	A105

Posters

Cambridge Publishing						
Session	Date	Start Time	Number	Presentation Title	Presenting Author	
A01.2P	8/2/2022	3:00 PM	008	Laser Ablation: A New Approach to APT Specimen Preparation	Samantha Hestad	
A06.1P	8/2/2022	3:00 PM	083	A Reconstruction Wizard for Electrostatic Reconstruction	Brian Geiser	
A06.1P	8/2/2022	3:00 PM	084	Benefits of a Full Field of View in Atom Probe Tomography	Brian Reinhard	
A06.1P	8/2/2022	3:00 PM	085	DUV Atom-Probe Tomography Using Automation to Understand Parameter Space: A Progress Report	Ty Prosa	
A06.1P	8/2/2022	3:00 PM	086	Nanoscale clusters and heterogeneities in engineering and amorphous alloys	Stephan Gerstl	
A06.1P	8/2/2022	3:00 PM	087	Origin of High-Density Zone Lines in Field Desorption Patterns of Tungsten	Jiayuwen Qi	
A06.1P	8/2/2022	3:00 PM	088	Simultaneous Voltage and Laser Pulsing in Atom Probe Tomography	David Larson	
A06.1P	8/2/2022	3:00 PM	089	Structural Change of MgNiY Long Period Stacking Order Investigated with Atom Probe	Yimeng Chen	
P01.1P	8/2/2022	3:00 PM	183	Direct Observation of Hydrogen Distribution in Pearlite	Yi-Sheng Chen	
P01.1P	8/2/2022	3:00 PM	184	Improving the Quantification of Deuterium in Zr Alloy Atom Probe Tomography Data	Megan Jones	
P01.1P	8/2/2022	3:00 PM	185	Ion-Beam Induced Structural Transformations in Austenitic Stainless Steel	Josh Sugar	

On Demand

Presentation						
Session	Date	Start Time	Number	Presentation Title	Presenting Author	
On Demand	8/2/2022	On Demand	749	Site-Specific Lift-Out on Complicated Nanoscale Structures	Yimeng Chen	



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Wednesday, August 3rd

Analytical Sciences Symposia

Session	Date	Start Time	Presentation Number	Presentation Title	Presenting Author	Room
A06.3	8/3/2022	8:30 AM	149	3D- Magnetolectric Multiferroic Topologies via STEM and Spectroscopy Complemented by APT	Michele Conroy	C122
A06.3	8/3/2022	9:15 AM	151	Atom Probe Tomography of Catalyst Nanoparticles	Nora Vorlaufer	C122
A06.3	8/3/2022	9:30 AM	152	Carbon capping for specimen preparation of atom probe samples with features of interest near the surface.	Edwin Supple	C122
A06.3	8/3/2022	9:45 AM	153	The Effect of ω - and α -Phase Precipitation on the β -Phase Lattice During 400°C aging in Ti-11Cr(at.%)	JoAnn Ballor	C122
A06.3	8/3/2022	9:00 AM	150	Nanoscale Spatial and Chemical Exploration of Porcine Trabeculae Bone using Atom Probe Tomography	Yanru Ren	C122

Cross-Cutting Sciences Symposia

Session	Date	Start Time	Presentation Number	Presentation Title	Presenting Author	Room
C05.1	8/3/2022	9:00 AM	422	Argon milling of specimens for multi-length scale EBSD, TEM, and APT - controlled environments	Cecile Bonifacio	D138
C05.1	8/3/2022	9:30 AM	427	New Product Announcement – LEAP 6000XR, New Applications, New Performance	Robert Ulfing	D138
C05.1	8/3/2022	10:30 AM	426	New Product Announcement – Invizo 6000, New Applications, New Performance	David Reinhard	D138

Physical Sciences Symposia

Session	Date	Start Time	Presentation Number	Presentation Title	Presenting Author	Room
P07.5	8/3/2022	8:30 AM	569	3D Nanoscale Analysis of Implanted Deuterium in Tungsten using Atom Probe Tomography	Martin Meier	B118-119
P07.4	8/3/2022	2:15 PM	568	High Throughput Studies on Irradiated High Entropy Alloys	Mukesh Bachhav	B118-119