Wednesday, November 13, 2024 - Waygate Technologies Customer Solution Center, Sharonville, OH

Time	Subject	Presenter
8:00 a.m.	Registration, Breakfast	
8:30 a.m.	Speaker Meeting - Day one speakers, session chairs only	
9:00 a.m.	Opening	Neil Bloomfield, Global Battery and Automotive Segment Leader, IXS, Waygate Technologies, USA
9:05 a.m.	Welcome	Michael Ulbricht, Global Commercial Director, Waygate Technologies, Germany
9:30 a.m.	Keynote Speaker Day 1 - The Capabilities of the High Energy CT for a Battery Inspection.	Dr. Tomas Zikmund, Research Sub-Group Leader, Brno University of Technology, Central European Institute of Technology, Czech Republic
Battery Inspection Technology Update		
10:00 a.m.	Radiography Systems Technology Update	Shana Telesz, Senior Product Manager, Radiography Systems, Watgate Technologies, USA
10:30 a.m.	**Morning Break**	
Session Chair: Julia Tovar - North America Radiography Sales Director		
11:00 a.m.	CT X-ray Basics for Battery Inspection	Grace Pharo, NAM CT Battery Lead, Waygate Technologies, USA
11:30 a.m.	Analyzing NMC Cathodes Using a 4.0 Materials Scientist Approach	Dr. Hugues Francois-Saint-Cyr, Sr. Industrial Application Enabler, Materials Science Division, Battery , Thermo Fisher Scientific, USA
Battery/Cell Safety and Failure Mitigation		
12:00 p.m.	X-ray CT for Characterization of Battery Degradation and Failure Mechanisms	Dr. Donal Finegan, Senior Scientist at National Renewable Energy Laboratory, Colorado, USA
12:30 p.m.	Trust But Verify: Beyond Battery Cycling	Mike Pendleton, Technical Director of Battery, Element Materials Technology, Michigan, USA
1:00 p.m.	**Lunch**	
Self Guided Hands-On Training/Tutorials		
1:45 p.m.	Introduction to the afternoon activity	Neil Bloomfield, Global Battery and Automotive Segment Leader, Radiography Systems, Waygate Technologies

Time	Power|Scan HE	v|tome|x M300	v|tome|x L450	v|tome|x S240	v|tome|x C450-5	v|tome|x C450-2	Thermo Scientific SEM	Ultrasonic Bench Area
2:00 - 2:50 p.m. **Session 1**	Chevy Bolt Module Scan		x|approver	Fast|Scan vs. Step Scan		Grayscale vs. Image Quality	Thermo Scientific SEM	UT Battery
3:00 - 3:50 p.m. **Session 2**		Multi|Scan Function	x|approver		Automation Demo	Grayscale vs. Image Quality	Thermo Scientific SEM	UT General
4:00 - 4:50 p.m. **Session 3**	Chevy Bolt Module Scan	Multi|Scan Function		Fast|Scan vs. Step Scan	Automation Demo		Thermo Scientific SEM	UT Battery

Code	Description	Presenter
Fast|Scan vs. Step Scan	Waygate Technologies Fast|Scan Technology vs. a Traditional Step Scan Demonstration	Jacob Wiley
Thermo Scientific SEM	Thermo Scientific Axia ChemiSEM Nano-scale Imaging and Analysis Made Easy with Air-Free Sample Transfer	John Yorston
Chevy Bolt Module Scan	Chevy Bolt Module Scan w/ Power|Scan HE	Josh Schradin
x|approver	Waygate Technologies Automatic Defect Recognition Software Demonstration	Grace Pharo
Multi|Scan Function	Waygate Technologies Multi|Scan Technology Demonstration to Scan Longer Battery Cells	Mike Randall
Automation Demo	Automation Demonstration with a Lithium-Ion Battery Pack	Joe Rinck
Grayscale vs Image Quality	Demonstration of How Different Grayscale Ratios Affect Image Quality	Jungil Byun
UT Battery	Using UT to inspect Li-Ion Batteries Demonstration	Cole Murphy / Yuichi Kajiura
UT General	Ultrasonic Technology Process and Demonstration	Scott Raines

5:00 p.m.	Group picture	Joe Mahigel
Evening Event		
6:30 p.m.	Cincinnati Zoo, Overlook at the Elephant Trek	
7:00 p.m.	Buffet dinner, drinks and cocktails	
9:30 p.m.	Event concludes	

Thursday, November 14, 2024 - Waygate Technologies Customer Solution Center, Sharonville, OH

Time	Subject	Presenter
Optimizing Cell/Battery Performance		
Session Chair: Paul Perera, Strategy & Technology Operations Director, Waygate Technologies| MBA | Beng UK		
8:00 a.m.	Breakfast	
8:30 a.m.	Speaker Meeting - Day two speakers, session chairs only	
9:00 a.m.	Day 2 Opening	Neil Bloomfield, Global Battery and Automotive Segment Leader, IXS, Waygate Technologies, USA
9:05 a.m.	Day 2 Welcome	Michael Ulbricht, Global Commercial Director, Waygate Technologies, Germany
9:20 a.m.	Keynote Speaker Day 2 - Solid State Battery Endeavor: Challenges and Pathways for Practicality	Prof. Ilias Belharouak, Corporate Fellow and Head of Electrification Section at Oak Ridge National Laboratory, TN USA
10:00 a.m.	Insights into Morphological Changes in Li-ion Batteries via Ex-situ and In-situ Aging Simulations and Micro-Computed X-ray Tomography	Zuzana Stravová, Ph.D Candidate, Central European Institute of Technology, CEITEC, Czech Republic
10:30 a.m.	**Morning Break**	
Optimization of Battery Production		
Session Chair: Alisa De Bruyn Kops, CSC Site Leader, Radiography Systems		
11:00 a.m.	Ultrasound Health Diagnostic of Large-Format Prismatic Lithium-Ion Batteries	Cole Murphy, NDT Design Engineer, Ultrasound, Waygate Technologies, NY USA and Yuichi Kajiura Ph.D Student, University of Oklahoma, OK USA
11:30 a.m.	X-ray Computed Tomography as Quality Control Tool in the Volume Manufacturing of Battery Cells	Dr. Saad Abbais, Head of Electrochemistry, UK Battery Industrialisation Centre, Coventry, United Kingdom
12:00 p.m.	From Coil to Stack - Utilizing a High Speed Continuous Process	Sebastian Vogel, Head of Global Sales & Business Development, Korber, Germany
12:30 p.m.	**Lunch**	
Battery Recycling		
Session Chair: Neil Bloomfield, Global Battery and Automotive Segment Leader, IXS, Waygate Technologies, USA		
1:30 p.m.	Enabling Circularity of EV Batteries and Their Critical Materials	Jonathan Harter, Senior Technical Professional, Electrical Engineering, Oak Ridge National Laboratory, TN USA
2:30 p.m.	End-of-Life EV Batteries: Industry Insights, Challenges, and Emerging Trends	Tyler Helps, Co-Founder and Chief Commercial Officer of Currents, OK USA

Self Guided Hands-On Training/Tutorials

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3:10 - 4:00 p.m. **Session 1**	Chevy Bolt Module Scan		x|approver		Automation Demo		Thermo Scientific SEM	UT Battery
4:10 - 5:00 p.m. **Session 2**		Multi|Scan Function		Fast|Scan vs. Step Scan		Grayscale vs. Image Quality	Thermo Scientific SEM	UT General

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UT General	Ultrasonic Technology Process and Demonstration	Scott Raines
5:00 p.m.	Battery Inspection Forum Close - Thank you for coming!	