Monday (April 27, 2026)

Technical Forum Breakfasts

TFB: Atmospheric Plasma Technology
Hana Barankova (Uppsala University) / Ladislav Bardos (Uppsala University)
Long Beach Convention Center Promenade: 102 A

TFB: Coatings and Surface Engineering for Medical Applications
Jeff Hettinger (Rowan University) / Greg Taylor (Lawrence Livermore National Laboratory)
Long Beach Convention Center Promenade: 102 B

TFB: High Power Impulse Magnetron Sputtering (HIPIMS)
Arutiun P. Ehiasarian (Sheffield Hallam University) / Ralf Bandorf (Fraunhofer-IST)
Long Beach Convention Center Promenade: 102 C

TFB: Photonically Induced Surfaces and Thin Film Processing
Christopher Muratore (University of Dayton) / Stefan Seager (Fraunhofer-FEP)
Hyatt Regency: Seaview Ballroom A

TFB: Durability Evaluation of Thin Film Coatings: Testing Methods and Practical Implications
Brent Boyce (Guardian) / Anelia Wickerlin (Gilas Trilach)
Hyatt Regency: Seaview Ballroom B

TFB: Transparent Conductive Materials (TCM)
Clark Bright (Bright Thin Film Solutions, LLC) / Patrick Morse (Arizona Thin Film Research, LLC)
Hyatt Regency: Seaview Ballroom C

LBCC Promenade 106A (Program track daily room assignment) | LBCC Promenade 104B (Program track daily room assignment) | LBCC Promenade 104C (Program track daily room assignment) | LBCC Promenade 101A (Program track daily room assignment) | LBCC Promenade 101B (Program track daily room assignment)

10 minute passing break

Compact Business Meeting (30 minutes)
All are encouraged to attend!
(LBCC Promenade 104B)

10 minute passing break

Director of Program Welcome and Conference Introduction (LBCC Promenade 104B)

Keynote (LBCC Promenade 104B)
Sustainability and Life Cycle Thinking as Innovation Drivers for Surface Engineering
(Christoph Hermann - Fraunhofer IST)

20 minute refreshment break

Large Area Colloquium
"Giving new life to old coaters: Modernization of coaters for new demands"

Large Area (1/2)
Vacuum Deposition Coating Technologies for Thin Film Batteries
[Yasmine Bumangat - ISSPro]

Large Area (1/2)
HiPIMS Deposition of Functional Coatings
[Mathieson Schlemmer - HZB-HELMHOLTZ GmbH]

Characterization, Testing, and Failure Analysis (C1)
In-Situ and In-Vivo Detection of Pin-Hole Corrosion in Functional Thin Films
[Lukas Mahler - Polytechnique Montreal]

Characterization, Testing, and Failure Analysis (C1)
Experimental Study of Laser Thin Film Surface Softening and Wrinkling of Aluminum Alloy 2195 for Bipolar Plates
[Christopher Muratore - University of Dayton]
Overflow (OP) PROGRESS STUDENT PRESENTATION

Characterization, Testing, and Failure Analysis (Invited)
Surface Coating, Treatment, and Analysis of Materials for Medical Devices
[Bernard Kelly - Lehigham]
Overflow (OP) PROGRESS STUDENT PRESENTATION

Characterization, Testing, and Failure Analysis (C1)
Influence of Laser Ablation Textured Substrate Surface Properties on the Tribological Behavior of DLC Coatings
[Ilser Altinsoy - Universidad Publica de Navarra (UPNA)]
Overflow (OP) PROGRESS STUDENT PRESENTATION

Characterization, Testing, and Failure Analysis (C1)
Reliable Mechanical Characterization of Vacuum Coatings: Best Practices in Nanoindentation and Scratch Testing
[Parth Kotak - Anton Paar USA Inc.]

Large Area (1/2)
Arc Evaporation Technology for Cathode Materials Target Fabrication
[Marco Wenzel - PMTA Aachen University]

Plasma Processing and Diagnostics (PP)
Results using a Specialized ZDR-RGA and a Related Remote-Control System Demonstrated for the PRO ERDEA System
[Mark Manus - Der Rüger Kalmar Laboratory]

Plasma Processing and Diagnostics (PP)
Tuning the Properties of PVD Films Prepared by Ion Beam Assisted Deposition Using Different Precursors
[Oleg Zabeida - Polytechnique Montreal]

Plasma Processing and Diagnostics (PP)
Time-Resolved OES Diagnostics of Gas Phase Sputtering Using a Copper Target
[Jun Chen - Dalian University of Technology]
SPONSORED STUDENT PRESENTATION

Plasma Processing and Diagnostics (Invited)
Continuous PVD Roll-to-Roll Processed Material for Fuel Cells: Insights into Material Properties, Cell Performance and Interconnects for PEMA/SOFC Applications
[Yusraf Sjöblom - Alleima]

HiPIMS (Invited)
Towards Reactive Gas Ions Sputtering of Functional Nitrides - The Role of Metal Ions in Plasma Activated Reactive Environments
[Tetsuhide Shimizu - Tokyo Metropolitan University]

HiPIMS (PP)
Graphene Oxide Thin Film Synthesis Using Pulsed DC Deposition of UHMW for Thin Film Batteries Applications
[Peter Polak - Plasmas Composite Materials Exhibit]

HiPIMS (PP)
HiPIMS: Technology with stable industrial revolution economically viable
[Chenxing Tinsel - HHV Technologies Coating & K.]

HiPIMS (PP)
Comparative Study of Growth and Properties of Thin Film Films Deposited via Reactive DcMS and HiPIMS
[Anna Dhaliwal - Pentacon Coating Technologies GmbH & Co. KG]

HiPIMS (PP)
Antimicrobial Efficiency and Durability of Nanostructured HiPIMS Deposited Nanoscale Multilayer TiN/MoN Coatings
[Andrea P. Ehiasarian - Sheffield Hallam University]

HiPIMS (PP)
Real-Time Optimization of HiPIMS Processes Using Pulse-Resolved Spectroscopy and Machine Learning Process Control
[Thomas Schalkx - PLASUS GmbH]

HiPIMS (Invited)
Towards Reactive Gas Ions Sputtering of Functional Nitrides - The Role of Metal Ions in Plasma Activated Reactive Environments
[Tetsuhide Shimizu - Tokyo Metropolitan University]

Advanced Multifunctional Coatings (AMF)
Advanced Active and Inactive Cooling Technologies to Improve Life and Safety of Industrial Equipment, Automotive and Grid Applications
[Khalil Kabus - Argonne National Laboratory]

Advanced Multifunctional Coatings (AMF)
Sputtered Oxide Thin-Film Electrolytes Enabling Solid-State Batteries for On-Chip Energy Storage
[Jose Nogueira - Fraunhofer-IST]

Advanced Multifunctional Coatings (AMF)
Hydrogenated Fractured Zinc Coral Films Grown by a Beam Plasma Source
[Tadeáš Ondica - Agentur Ionizovaný Plyn]
[pre-recorded video presentation]

Advanced Multifunctional Coatings (AMF)
Vacuum-Evaporated Composite Copper Foil for Lithium-Ion Batteries - Fabrication and Performance
[Sun Liu/Shenlong Lu - Northeastern University China]

Advanced Multifunctional Coatings (AMF)
Sputtered Thin Film Solid Electrolyte Coatings for DC Deposition of LiPON for Thin Film Batteries Applications
[Peter Polak - Plasmas Composite Materials Exhibit]

SIG Strategic Technologies and Markets Colloquium
"The challenge of transitioning to sustainable surface engineering practices"

40 minute passing / lunch break

Don Mattox Tutorial (LBCC Promenade 104B)
From Poisoned Targets to Healthy Models: The Quest for Parameters
[Diederik Depla - Ghent University]

10 minute passing break

Large Area (Invited)
Mass Production of Inorganic and Organic Coatings for Display Cover Glass
[Brian Hatcher - Corning Inc.]

Large Area (1/2)
Beam Plasma Source Enhanced Reactive Sputtering of High- and Low-Index Oxide Thin Films
[Junwoo Lee - Michigan State University]

Large Area (1/2)
Enabling Large-Area Advanced Packaging Through Optical In-Situ Metrology in Sputter Deposition
[Volker Hoffmann - Leybold - KGS]

Characterization, Testing, and Failure Analysis (C1)
Influence of Substrate Roughness on Adhesion Properties of Thin Metal Films
[Oleg Zabeida - Polytechnique Montreal]

Characterization, Testing, and Failure Analysis (C1)
Emergent Superconductivity Superimposed in WTe2 with Silver Mixed Monolayers
[Do-Gum Sohn - Korea Research Institute of Standards and Science]

Characterization, Testing, and Failure Analysis (C1)
Controlled Synthesis of 3D Ultra-Soft Tunable Magnetic and Superconductive Metamaterials
[Zhong-Kun Chu - National University of Taiwan]

Characterization, Testing, and Failure Analysis (C1)
Optical Characterization, of the Growth of Ultra Thin Metal Films
[Oleg Zabeida - Polytechnique Montreal]

Coatings and Processes for Biomedical Applications (BP)
Estimating the Lifetime of the Antimicrobial Property of Silver Containing Thin Films Using Accelerated Thermal Aging Experiments
[Hanna Bernasconi - Bernasconi Devices]

Coatings and Processes for Biomedical Applications (BP)
Electrically Reinforced Titanium Electrodes with Integrated Antibacterial Functionality for Non-Antimicrobial-Implantable Applications
[Arik Fanaka - Drexel University]

Coatings and Processes for Biomedical Applications (Invited)
From Tubercle to Biofilm - Closing the Loop with Thin Films
[Matthias Wagner]

Tens Resistant Investigations on Ion Fraction, Ionization Degree, and Plasma Characteristics of Cathodic Arc Metal Plasma
[Ralf Bandorf - Fraunhofer-IST]

HiPIMS (HP)
Through-Glass Via Metallization by Using HiPIMS Copper Layer
[Kang-Chen Wu - Feng Chia University]
SPONSORED STUDENT PRESENTATION

HiPIMS (HP)
Advanced HiPIMS Coatings Deposition Using High Performance Cutting Tools Field Forgiven Prize Winner
[Wei Zhou - Guangdong Huashang nanotechnology]

HiPIMS (HP)
Reactive Sputtering Discharge Dynamics by Pulse Sequencing in Multi-Pulse HiPIMS
[Erdong Chen - Tokyo Metropolitan University]

Coatings and Processes for Biomedical Applications (Invited)
From Tubercle to Biofilm - Closing the Loop with Thin Films
[Matthias Wagner]

Photonically Induced Transformations of Thin Films (Invited)
Photonic Post-Processing of Printed Inks on Flexible Substrates
[Mark Pulido - SUNY Binghamton University]

20 minute break

Sunset Meeting Forums

SMF: Advanced Deposition Coating Hardware
Frank Papa (GP Plasma, LLC) / Ralf Bandorf (Fraunhofer-IST)
Long Beach Convention Center Promenade: 102 A

SMF: Advanced Multifunctional Coatings: Integrating Vacuum and Electrochemical Deposition
L. Magagnin (Politecnico Milano) / J. Alami (UMJP)
Long Beach Convention Center Promenade: 102 B

SMF: Advanced Deposition Coating Hardware
Frank Papa (GP Plasma, LLC) / Ralf Bandorf (Fraunhofer-IST)
Long Beach Convention Center Promenade: 102 A

SMF: Advanced Multifunctional Coatings: Integrating Vacuum and Electrochemical Deposition
L. Magagnin (Politecnico Milano) / J. Alami (UMJP)
Long Beach Convention Center Promenade: 102 B

SMF: Materials for PVD processes
David Sanchez / Christos Pernagidis (Avalovet)
Long Beach Convention Center Promenade: 102 C

SMF: Characterization, Testing and Failure Analysis of Thin Films, Coatings and Engineered Surfaces
Matt Linford (Brigham Young University) / Oleg Zabeida (Ecole Polytechnique Montreal) / Dehua Yang (Ellabcco)
Hyatt Regency: Seaview Ballroom B

SMF: Large-Area Advanced Packaging and Integrated Photonics
Patrick Morse (Arizona Thin Film Research, LLC) / Manuela Junghähnel (Fraunhofer-AESKI)
Hyatt Regency: Seaview Ballroom C

1hr 40 min Dinner Break
6:20 - 8:00 PM

Casino Night Fundraiser (Hyatt Regency - Beacon Ballroom)
8:00 - 10:00 PM

Tuesday (April 28, 2026)

Technical Forum Breakfasts

TFB: Leak Detection - Issues and Practices
Mike Rickenbach (Lackpeak USA) / Jean-Pierre Delsca (BOC, Redwood)
Long Beach Convention Center Promenade: 102 A

TFB: Industrial Challenges: Uptime, Yield, & Consistency
John Naylor (Hart 1, Lesker Company)/ Jimmy Height (Semicorex)
Long Beach Convention Center Promenade: 102 B

TFB: Magnetron Sputtering
Wilmert De Bosscher (Solaires Advanced Coatings) / Patrick Morse (Arizona Thin Film Research, LLC)
Long Beach Convention Center Promenade: 102 C

TFB: Process Monitoring & Control
Martynas Audronis (Nova Fabrica, Ltd.) / Edmund Schingnel (VAT Group)
Hyatt Regency: Seaview Ballroom A

TFB: Energy Conversion and Storage
Volker Sittinger (Fraunhofer-IST) / Stefan Sauger (Fraunhofer-FEP) / Ric Shimshock (General Atomics)
Hyatt Regency: Seaview Ballroom B

TFB: ALD for Optics
Chris Cook (Edmund Optics) / David Sanchez
Hyatt Regency: Seaview Ballroom C

LBCC Promenade 106A (Program track daily room assignment) | LBCC Promenade 104B (Program track daily room assignment) | LBCC Promenade 104C (Program track daily room assignment) | LBCC Promenade 101A (Program track daily room assignment) | LBCC Promenade 101B (Program track daily room assignment)

10 minute passing break

Awards Ceremony (LBCC Promenade 104B)
8:40-9:20 AM

10 minute passing break

Advanced Multifunctional Coatings (Invited)
Powder Atomic Layer Deposition at the Commercial Scale for Lithium-Ion Batteries
[Christopher Ramp - Forge Nano]

Advanced Multifunctional Coatings (AMF)
Composite Salicylate Precursor Tooling at TRL 4 and CM Coatings - Insights from Manufacturing Scale Coated Rollers
[Helmut Roell - TIC Wave]

Advanced Multifunctional Coatings (AMF)
Stabilizing Lithium Metal Anodes with Vacuum-Deposited PET-Like Composite Current Collectors
[Kiesheng Jia - Northeastern University China]

Organic and Perovskite Electronics (Invited)
Achieving Compatibility Tunability in Perovskite Thin Films by Physical Vapor Deposition
[Jay Patel - King's College London]

Overflow (OP)

Process Monitoring, Control, and Automation (PC)
From Legacy to Industry 4.0: Retrofitting Vacuum Coaters with Edge Control Monitoring
[Marcus Klein - SURFACE Group]

Process Monitoring, Control, and Automation (Invited)
Transforming Process Monitoring and Control in Advanced Thin-Film Deposition
[Pedro Reyes Santiago - VAT Vakuumventile AG]

HiPIMS (HP)
HiPIMS(P++) Practical Approach to Dielectric Coatings on Inner Surface of Small Diameter Long Tubing
[Ivan Shchedrinkov - Starfire Industries]

HiPIMS (HP)
Industrial HiPIMS - Process Challenges, Trends and Innovations
[Rafael Bastian Hopker - Sumitomo]

HiPIMS (HP)
60 MHz/1 MHz Capacitively Coupled Plasma Etching Following Laser Modification to Form Through-Glass Via
[Tsung-Hao Chen - Feng Chia University]

HiPIMS (HP)
Beyond Traditional High Power Impulse Magnetron Sputtering
[Dan Boyanovsky - Trumpf Huttinger GmbH + Co. KG]

HiPIMS (Invited)
PVD Coatings for Wear Protection Applications - Applications, Testing Methods and Practical Implications
[Herbert Gabriel - PVT Plasma und Vakuum Technik GmbH]
SPONSORED STUDENT PRESENTATION

This Film Contributions for the Hydrogen Economy (DHE)
Hydrogen - Boon or Bane? Opportunities and Challenges in Coating Solutions for Hydrogen Applications
[Nadim Rajman - Schaeffler Technologies]

This Film Contributions for the Hydrogen Economy (DHE)
Replacing Tribiums by Thermally Sprayed Coatings
[Ralf Bandorf - Fraunhofer IST]

20 minute refreshment break

Overflow (OP)

Exhibitor Showcase (ESS)
Cutting Seven Free: DLW Technical Products
[Marcel Kaspar - DLW Technical Products]

Exhibitor Showcase (ESS)
Hard
[Edwards]

Exhibitor Showcase (ESS)
New Plasma Source Technology to Help Combat Global Supply Chain Disruptions and Material Price Increases
[Dermot Monaghan - Sensus Ltd]

Exhibitor Showcase (ESS)
Dual Output, Half Bio Footprint, Full Control in Stackline Reactive Sputtering Power Supply Enables Fast Process Development with PVD and Advanced Arc Control for Faster Reporting and Lower CAPEX
[Radu Krasnicki - TRUMPF Huettinger]

Exhibitor Showcase (ESS)
Integrated Mechanical Cleaning and Surface Preparation Solutions for Vacuum Coatings
[Parth Kotak - Anton Paar USA Inc.]

Exhibitor Showcase (ESS)
Custom Vacuum Coating Systems, Vacuum Cooler Refurbishment and Contract R&D at GP Plasma
[Frank Papa - GP Plasma LLC]

Organic and Perovskite Electronics (OP)
Monitoring Interfacial Decomposition Losses in Perovskite Solar Cells Using Operando Photoluminescence Quantum Yield Measurements
[Dr. Dan Bryant - University of Toledo]
SPONSORED STUDENT PRESENTATION

Organic and Perovskite Electronics (OP)
High Voltage All-Evaporated Color Tunable Perovskite Photodetectors
[Mallika Gupta - Indian Institute of Technology Jodhpur]
SPONSORED STUDENT PRESENTATION

Organic and Perovskite Electronics (OP)
Thermal Co-Evaporation of Thin Film Photovoltaics by the Cluster Source Method
[Jim Van Ommen of Oxford]

Organic and Perovskite Electronics (OP)
Toward Intelligent In-Situ Metrology: From Real-Time Data to Actionable Process Control
[Hulal Ghazi - h-Spark Associates]

Process Monitoring, Control, and Automation (PC)
Virtual OES Intelligence Platform: A Multisensor, Architect Architecture for Autonomous Film-Film Manufacturing
[Martynas Audronis - Nova Fabrica]

Process Monitoring, Control, and Automation (PC)
Post, Highly Repeatable Process Control Technology for Atomic Layer Processes
[Bryan Pinsney - Brooks Instruments]

Process Monitoring, Control, and Automation (PC)
Critical Substrate Sapphires Flaw a Key Role in the Global Wafer Supply Chain
[Frank Gunn - Tech Drought]

Process Monitoring, Control, and Automation (PC)
Toward Intelligent In-Situ Metrology: From Real-Time Data to Actionable Process Control
[Hulal Ghazi - h-Spark Associates]

This Film Contributions for the Hydrogen Economy (DHE)
PVD Coatings for the Hydrogen economy - Applications, Testing Methods and Practical Implications
[Herbert Gabriel - PVT Plasma und Vakuum Technik GmbH]
SPONSORED STUDENT PRESENTATION

This Film Contributions for the Hydrogen Economy (DHE)
Correlating Deposition Temperature with Structure and Sensing Performance in Pd Thin Film Hydrogen Sensors
[Shalika Chandrasekara - Uppsala University]
SPONSORED STUDENT PRESENTATION

This Film Contributions for the Hydrogen Economy (DHE)
Thin-Film Electrochemical Hydrogen Sensors Enhanced by Laser-Induced Graphene Electrodes
[Lagnel Pilli Pilla Ho Reyes Pablo - Universidad Publica de Navarra (UPNA)]

10:00 AM Exhibitor B2B Coffee Hour

11:00 AM Exhibit Hall Opens

2:30 - 4:30 PM Poster Session

POSTER (P1): Fabrication and Characterization of Molybdenum-Oxide Thin Films for Solar Energy Applications [Bassel Abdel-Samad - Université de Moncton]

POSTER (P2): Atmospheric Plasma Beam Printing of the Silicon Anodes and Lamination of Carbon Nanofiber Cathodes for Li-Ion (Pur) Batteries - Nanocoating Plasma Systems]

POSTER (P3): Front Contact (TCO/Ag/Ni) Engineering for High-Efficiency CdTe-based Solar Cells on Ultra-Thin Cover Glass [Andre Patel - University of Toledo] SPONSORED STUDENT PRESENTATION

POSTER (P4): Thick Metal Coatings on Glass Microsphere for Advanced Manufacturing [Rita Shalmiev - Los Alamos National Laboratory]

POSTER (P5): Influence of E-Beam Evaporation Parameters on Coating Phase Transformation [Ruo Liu - Northeastern University China]

POSTER (P6): Study on the Bond Strength of Flexible Film Substrates [Ruo Liu - Northeastern University China]

POSTER (P7): Simulation Toolbox for Thin-Film Coating: From Plasma and Gas Flux to Sputtered Particles, Nucleating and Layer Thickness [Eric Vyblihardt - Fraunhofer IST]

Welcome Reception (Exhibit Hall)
5:00 - 6:00 PM

Exhibit Hall Closes: 6:00 PM

Wednesday (April 29, 2026)

TAC Breakfast Meetings

(1) Large Area Coatings TWG (2) Large Area Advanced Packaging and Integrated Photonics TWG
Hyatt Regency: Seaview Ballroom A

(1) High Power Impulse Magnetron Sputtering (HIPIMS) TWG (2) (3) Protective, Tribological, and Decorative Coatings TWG (4) This Film Contributions for the Hydrogen Economy TWG
Long Beach Convention Center Promenade: 102 A

(1) Photonically Induced Transformations of Thin Films and Surfaces TWG
Long Beach Convention Center Promenade: 102 C

(1) WebTech Roll-to-Roll Technologies and Innovation TWG (2) Emerging and Transitional Technologies and Applications TWG
Long Beach Convention Center Promenade: 102 B

(1) Optical Coatings TWG (2) (3) Photonically Induced Transformations of Thin Films and Surfaces TWG
Long Beach Convention Center Promenade: 102 B

(1) Electron Beam Processes TWG (2) (3) Coatings for Energy Conversion and Related Processes TWG
Hyatt Regency: Seaview Ballroom B

(1) Advanced Multifunctional Coatings TWG (2) (3) Advances in Thin Film Sensor Technologies TWG
Hyatt Regency: Seaview Ballroom A

(1) Digital Transformation through AI, Machine Learning, Simulation and Data Science TWG (2) Process Monitoring Control and Automation TWG
Hyatt Regency: Seaview Ballroom C

(1) Characterization, Testing, and Failure Analysis of Thin Films TWG (2) (3) Coatings and Processes for Biomedical Applications TWG
Hyatt Regency: Shoreline A

(1) Organic and Perovskite Electronics TWG (2) (3) Quantum Computing TWG
Hyatt Regency: Shoreline B

LBCC Promenade 106A (Program track daily room assignment) | LBCC Promenade 104B (Program track daily room assignment) | LBCC Promenade 104C (Program track daily room assignment) | LBCC Promenade 101A (Program track daily room assignment) | LBCC Promenade 101B (Program track daily room assignment)

10 minute passing break

Keynote (LBCC Promenade 104B)
Fano-Resonant Crystal Engineered Coatings for Photonics
(Chunlei Guo - University of Rochester)

10 minute passing break

Exhibitor Showcase (ESS)
The Benefits of Moving Plasma PVD Source Technology
[Sara Marsden Glas - Sensus Ltd]

Exhibitor Showcase (ESS)
Industrial-Ready HiPIMS: 25 Years of Power-Supply Evolution Even Under Demanding Conditions
[Anna Mikonow Dimensys - TRUMPF Huettinger Sp. z o.o.]

Exhibitor Showcase (ESS)
Next-Generation Rotary Sensor Technology for Demanding Vacuum Coating Applications
[Sheldon Wayman - INFICON]

Process Monitoring, Control, and Automation (PC)
Real-Time Contaminant Particle Monitoring During Thin Film Deposition Processes Using Laser Scattering Studies
[Sylvain LeCochin - SDH]

Process Monitoring, Control, and Automation (PC)
Industrial Vacuum Coating Process Monitoring and Chemistry Analysis of Sputtered Thin Films and Evaporated Coatings
[Vitaly Hatchenkov - LinTec AG]

Process Monitoring, Control, and Automation (PC)
Industrial Scale Up of Reactive Magnetron Sputtering of Metallic Oxychalcogenides - Coatings Using Optical Emission Spectroscopy Closed-Loop Control
[Elhanan Hamzianoff Rodriguez - Teknikker]

Emerging and Transitional Technologies (ET)
Digital Twins for Plasma Etching Using Physics-Informed Machine Learning
[Ryan Gosselin - Ansys]

Emerging and Transitional Technologies (ET)
Industrial Production of Ultra-Low Loss Optical Chalcogenide Thin Films from LM to Sub-Wafer
[Lucas Sun - Ai Force Research Laboratory]

Emerging and Transitional Technologies (ET)
Ultra-Low Loss Chalcogenide Thin Films for Photonic Integrated Circuits
[Zhaohong Fan - Ai Force Research Laboratory]

Emerging and Transitional Technologies (ET)
Industrial Production of Ultra-Low Loss Optical Chalcogenide Thin Films from LM to Sub-Wafer
[Zhaohong Fan - Ai Force Research Laboratory]

Large Area Advanced Packaging and Integrated Photonics (LAP)
Fabrication of Ultra-Low Loss Chalcogenide Thin Films for Mid-Infrared Photonics
[Zhaohong Fan - Ai Force Research Laboratory]

Large Area Advanced Packaging and Integrated Photonics (LAP)
A Scalable HiPIMS Process for Ultra-Low Loss Chalcogenide Thin Films
[Yifan Shen - TRUMPF Huettinger GmbH + Co. KG]

Large Area Advanced Packaging and Integrated Photonics (LAP)
Open Source Roller Coater Platform for Roll-to-Roll Electron Beam Process Modeling Using FEM
[Ante Mitica - Switzerland - Swiss Plasma Systems Consulting]

20 minute refreshment break

Exhibitor Showcase (ESS)
Surgeon and Weldphenom Sputtering Targets for Semiconductor and Flat Panel Display Manufacturing
[Enrico Fuzzio - Thomas RC]

Exhibitor Showcase (ESS)
A Modular Pulsion Approach for Advanced Carbon Coatings: Extending Performance and Flexibility with the Pulsion DCMEMO Platform
[Bruno Dzeworski - Chieftan Bakers Coating USA]

Exhibitor Showcase (ESS)
X-ray Diffraction and X-ray Reflectivity for Thin Film Phase Identification Requirements for Optical Coatings - Vacuum Determination
[Lawrence Anderson - Thermo]

Overflow (OP)

Process Monitoring, Control, and Automation (Invited)
Beyond Ion Gauges: Helium Mass Spectrometer Vacuum Sensing for Modern Coating Systems
[Cooper Christiansen - Sensor A/S]

Process Monitoring, Control, and Automation (PC)
In-Vacuum Color Monitoring to Improve Process Repeatability in Optical Thin Film Production
[Jan-Peter Schuch - PLASUS GmbH]

Overflow (OP)

Overflow (OP)

Overflow (OP)

Overflow (OP)

Overflow (OP)

Active Nanostructured Optical Coatings for Energy, Exposure and Sensing
[Ludvik Martinu - Polytechnique Montreal]

Optical (OP)
Tunable Broadband Optical Properties of Reactive Magnetron Sputtered Niobium Oxide Films Controlled by Substrate Temperature
[Lining Sun - Air Force Research Laboratory]

Optical (OP)
Ultra-Low Coating Thermal Noise Reflectors: The Case of Hydrogenated Amorphous Silicon for Gravitational Wave Detectors
[Alexandre Lussier - Université de Montréal]
SPONSORED STUDENT PRESENTATION

Optical (OP)
Physisolbased, Plasmachemical Corrosion Masks for Large-Area Magnetooptical/Optical Coatings
[Chien-Jen Tang - Feng Chia University]

Optical (Invited)
Recent Innovations in Optical Coating Design Software
[Michael Trubetskov - OTF Studio GmbH]

Optical (OP)
Harnessing Nd:Mg:LiNbO3 Plasmonic Dynamics in All-Dielectric Metasurfaces for Sensor and Laser-Modulation Optical Wave
[Rajesh Sonawane - Aviation Coating Technologies GmbH & Co. KG]

Optical (OP)
Development of Reflective Optical Coatings Using a Semi-Automated Spectroscopic Phase Measurement System
[Christopher Cook - Edmund Optics]

Large Area Advanced Packaging and Integrated Photonics (LAP)
Expanding HiPIMS Applications for Semiconductor Manufacturing Enabling Highly Uniform Metallization and Dielectric Deposition Over Large Substrates
[Anna Mikonow Dimensys - TRUMPF Huettinger Sp. z o.o.]

Large Area Advanced Packaging and Integrated Photonics (LAP)
Spatial Thin Film Unique Feature For Sensor Phasing Integrated Circuits
[Chaoyu "Pete" Supanee - Omnivac Co. Ltd.]

Large Area Advanced Packaging and Integrated Photonics (Invited)
Optical Engine and Thin Film Nanophotonics
[Mohamed Elbakouch - University of Arizona]
[pre-recorded video presentation]

9:00 AM Exhibitor Meeting

10:00 AM Exhibit Hall Opens

2:00 PM Beer Blast

3:00 PM Announce: 5 K Run Winner & Best Poster

Exhibit Hall Closes at 4:00 PM

Free Time
4:00 - 5:30 PM

TAC Program Meeting (Hyatt Regency Shoreline A/B)
5:30 - 7:30 PM

Thursday (April 30, 2026)

Technical Forum Breakfasts

TFB: Surface Engineering for the Hydrogen Economy
Ralf Bandorf (Fraunhofer-IST) / Herbert Gabriel (PVT Plasma und Vakuum Technik GmbH)
Long Beach Convention Center Promenade: 102 A

TFB: Protective, Reflective, and Decorative Coatings
Martin Engelb (Inobesol) / Arno Shallone (Avalovet)
Long Beach Convention Center Promenade: 102 B

TFB: Digital Transformation of Industrial Deposition Processes
Holger Gerdes (Fraunhofer-IST) / Thomas Schalkx (Plasus GmbH)
Long Beach Convention Center Promenade: 102 C

TFB: Optical Thin Film Design
Jay Ancelotti (Idea Corp.) / Rajiv Pethe (Vital Chem USA)
Hyatt Regency: Seaview Ballroom A

TFB: Aligning Deposition Process Requirements with Vacuum System Layout and Design
Wolfgang Decker (Kurt J. Lesker Company) / Jimmy Height (Semicorex)
Hyatt Regency: Seaview B

TFB: Electron Beam Processes
Stefan Sauger (Fraunhofer-FEP) / Matthias Neumann (Von Ardenne)
Hyatt Regency: Seaview C

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10 minute passing break

Keynote (LBCC Promenade 104B)
Plasma Technologies for Precision and Large-Scale Surface Engineering
(Elisabeth von Hauff - Fraunhofer-FEP)

10 minute passing break

Electron Beam Processes (EB)
High Rate Plasma Activated EB PVD for Graphite-Filled Composite Bipolar Plates
[Stefan Sauger - Fraunhofer-FEP]

Electron Beam Processes (EB)
Vacuum Electron Beam Technology for Sustainable Coatings Investments in Equipment and Process Technology for Wire and Wire Use Silver - VON ARDENNE Group]

Electron Beam Processes (EB)
Open Source Roller Coater Platform for Roll-to-Roll Electron Beam Process Modeling Using FEM.
[Ante Mitica - Switzerland - Swiss Plasma Systems Consulting]

Atomic Layer Processing (Invited)
Directional Atomic Layer Etching of Lithium Niobate Using Reactive Plasma Chemistry
[Austin Minnich - Caltech]

Atomic Layer Processing (AL)
Cleaning Carbon Contaminated Surfaces Using Atomic Layer Processing (ALP)
[Hans Van Bommel - Delft University of Technology]

Atomic Layer Processing (AL)
Low Resistivity Metallic Films by Thermal Atomic Layer Deposition Enabling Next Generation Interconnects
[Sara Sartin - Forge Nano]

Optical (OP)
Linear Ion Beam Assisted Deposition Sputtering
[Frank Sherman - ASPHERA, Inc.]

Optical (OP)
Revolutionizing Optical Coatings Technology: Higher Deposition Rates and Plasma Stability with Ion Beam Sputtering
[Yitzi Shen - TRUMPF Huettinger GmbH + Co. KG]

Optical (Invited)
State of the Art of Ion Beam Sputtering Technology: Improvements for the Manufacturing of Optical Thin Film and Other Applications
[Laurent Pinard - Laboratoire des Materiaux Avances - CNRS]

Overflow (OP)

Protective, Tribological, and Decorative Coatings (TT)
Arc and Sputter Coatings for Plastic Injection Molding
[Jochen Hahn - Jenoptikplus eiNer Vacuum GmbH]

Protective, Tribological, and Decorative Coatings (TT)
Sputtering Technology for Decorative Coatings
[Sion Hoyen Lee - Korea Institute of Materials Science (KIMS)]

Protective, Tribological, and Decorative Coatings (TT)
Tribological Coatings for Plastic Injection Molding
[Jochen Hahn - Jenoptikplus eiNer Vacuum GmbH]

20 minute refreshment break

Digital Orientation (DO)
Predicting Film Homogeneity in Large Area Sputtering: DFU-Accelerated Multi Spectra Transport and Energy Distribution Analysis
[Patrick Morse - Arizona Thin Film Research LLC]

Digital Orientation (DO)
Particle-Based Simulation of Reactive Magnetron Sputtering in an Industrial Glass Coating Chamber Using the Open Source FLOW MULTIDIM Solver PELIN
[Paul Shoenhair - Ballistic - numerical plasma dynamics GmbH]

Digital Orientation (Invited)
Navigating Digital Transformation in an Established Industrial Environment: Data, Simulation, and the Strategy Road Ahead
[Alexander Elsner - Hauck Pulsion GmbH]

Optical (OP)
"A Manufacturer's Guide to Coatings for High Power Lasers"

Protective, Tribological, and Decorative Coatings (TT)
Decorative PVD Coatings - From Film Field to the Future
[Martin Engelb - Inobesol Beschichtung K.G.]

Protective, Tribological, and Decorative Coatings (TT)
Tribological Coatings for Wave Tools
[Christoph Schiffers - CemeCon AG]

Protective, Tribological, and Decorative Coatings (TT)
A Novel Method to Low Stress Cathodic Arc Evaporated Coatings
[Dermot Monaghan - Sensus Ltd]

Protective, Tribological, and Decorative Coatings (TT)
Influence of Replicon Doping on the Microstructure and Wear of TiAlN Coatings at High Temperatures
[Thomas Schalkx - Plasus Ion Beam Technology & Consultancy GmbH]

Protective, Tribological, and Decorative Coatings (TT)
TiN-based PVD Multilayer Coatings Deposited by Arc and Sputter Deposition for Tribological Applications
[Kaitlyn Chase - Kurt J. Lesker Company]

40 minute Lunch break

Photonically Induced Transformations of Thin Films (Photon)
Optimization of CO2N Vertical-Cavities Etching For Improving Light-Matter Interaction in Mid-Wave Infrared Photodetectors
[Sumit Gonsoon - University of Oklahoma]

Overflow (OP)

Overflow (OP)

Overflow (OP)

Optical (OP)
High-Consistency Vacuum Coating Equipment and Process Platform for Large Area Optical Components
[Erhang Li - Guangdong Huizhong Vacuum Technology Co., Ltd.]

Photonically Induced Transformations of Thin Films (Invited)
Process-Based Programming of Spatially Varying Nanostructure Properties Using Ultrafast Laser Processing and Selective Etching
[Brandon Rodney - University of Pittsburgh]

Sensors (SE)
Versatile Hydrogen Sensor Platform Fabricated Using Self-Ion Beam Induced Chemical Vapor Deposition
[Chris Muratore - University of Dayton]
SPONSORED STUDENT PRESENTATION

Sensors (SE)
Challenges and Opportunities of Copper Nitride Nanostructures Synthesis and Sensing Applications
[Ashish Pandey - University of Toledo]
SPONSORED STUDENT PRESENTATION

Photonically Induced Transformations of Thin Films (Photon)
Controlling Photodetection in Rare-Earth Doughnuts Thin Films via Laser Induced Photochemical Reactions
[Martino Calderone - Institute of Solid State Physics, University of Latvia]

Epitaxial Growth from a Thermal Evaporant: Highly Active Arsenic Free Catalyst for Water Splitting
[Kalid Hussain - University of Toledo]
SPONSORED STUDENT PRESENTATION

Optical (OP)
Optical Measurements of Large-Aperture Diamond Coatings on Silicon Wafers Using Spectral Reflectance Information and Deflectometry Corrections
[Volker Sittinger - Fraunhofer-IST]

Protective, Tribological, and Decorative Coatings (TT)
"Decorative PVD Coatings – Trends and Challenges"

20 minute refreshment break

Photonically Induced Transformations of Thin Films (Invited)
Additive Nanomanufacturing and Photonic Processing of Functional Devices
[Mahmoud Mahjouri Samani - Auburn University]

Sensors (SE)
Broadband BiMM Absorption in Thin Film Metasurfaces Photodetectors Using Deep Neural Networks
[Md Kaushik Alam - University of Oklahoma]
SPONSORED STUDENT PRESENTATION

Sensors (SE)
Design and Characterization of Low-Noise, Wide-Band, Type-II Superlattice Based MIR Mesa Infrared Photodetectors
[Hoai Pahlevan - The University of Texas at Arlington]
SPONSORED STUDENT PRESENTATION

Coatings for Energy Conversion and Related Processes (EN)
NiCrAl Based Reflective Co