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)
Arutun P. Ehiasarian (Sheffield Hallam University) / Ralf Bandorf (Fraunhofer-IST)
Long Beach Convention Center Promenade: 102 C

TFB: Photonically Induced Surface 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) / Anette Wickenlin (Glas Trösch)
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 104A (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)

7:30 AM – 9:30 AM: 10 minute passing break

9:30 AM – 9:40 AM: **Compact Business Meeting (30 minutes) (LBCC Promenade 104B)**

9:40 AM – 9:50 AM: 10 minute passing break

9:50 AM – 10:00 AM: **Director of Program Welcome and Conference Introduction (LBCC Promenade 104B)**

10:00 AM – 10:40 AM: **Keynote (LBCC Promenade 104B)**
Sustainability and Life Cycle Thinking as Innovation Drivers for Surface Engineering
(Christoph Herrmann - Fraunhofer IST)

10:40 AM – 11:00 AM: **Large Area Colloquium**
"Driving new life to old coatings: Modernization of coaters for new demands"
Jürgen Ramm (Ionbond) / Ralf Bandorf (Fraunhofer-IST)
Long Beach Convention Center Promenade: 102 A

11:00 AM – 11:20 AM: Characterization, Testing, and Failure Analysis (C/T)
In-Situ and Ex-Situ Characterization of the Stress Evolution in Functional Thin Films
[Judith Monteiro - Polytechnique Montreal]

11:20 AM – 11:40 AM: Characterization, Testing, and Failure Analysis (C/T)
Thermo-Mechanical Fatigue Performance: A Comparative Experimental Study of Low-Temp Plasma Carburizing and Duplex Treatment Coatings on AISI 316L Stainless Steel
[Lucas Cordeiro - Tecnimont, MPH-PSI]
SPONSORED STUDENT PRESENTATION

11:40 AM – 12:00 PM: Characterization, Testing, and Failure Analysis (Invited)
Surface Coating, Treatment, and Analysis of Materials for Medical Applications
[Kenneth D. Vitkavage]

12:00 PM – 12:20 PM: Characterization, Testing, and Failure Analysis (C/T)
Influence of Load, Sliding Speed and Dimple Textured Area Density on Tribological Performance of Laser Textured Ni-Based Superalloys Against Ceramic Counterpart
SPONSORED STUDENT PRESENTATION

12:20 PM – 12:40 PM: **Large Area (LT)**
Vacuum-Deposited Solid-State Thin-Film Batteries
[Yasuhiro Ramanuja - ISMPG]

12:40 PM – 12:60 PM: **Large Area (LT)**
HIPIMS Goes Large
[Hardtmann Schlemiger - VON ARDENNE GmbH]

Characterization, Testing, and Failure Analysis (C/T)
Results Using a Specialized QMS RGA and a Related Xenon-Control System Demonstrated for the PR4 DRGA System
[Chris Mercer - Oak Ridge National Laboratory]

Characterization, Testing, and Failure Analysis (C/T)
Tuning the Properties of PVD Films Prepared by Ion Beam Assisted Deposition (IBAD) Technique
[Elias Eskandar - Polytechnique Montreal]
SPONSORED STUDENT PRESENTATION

Characterization, Testing, and Failure Analysis (Invited)
Surface Coating, Treatment, and Analysis of Materials for Medical Applications
[Kenneth D. Vitkavage]

Characterization, Testing, and Failure Analysis (C/T)
Influence of Load, Sliding Speed and Dimple Textured Area Density on Tribological Performance of Laser Textured Ni-Based Superalloys Against Ceramic Counterpart
SPONSORED STUDENT PRESENTATION

Characterization, Testing, and Failure Analysis (C/T)
Ion Beam Induced Chemical Vapor Deposition of Pt-Based Material for Fast Cells: Towards Future Production of Metallic Bipolar Plates and Interconnects for PEMFC Applications
[Kamal Sabbaghi - Alliance]

Plasma Processing and Diagnostics (PP)
Time-Resolved OES Diagnostics of Gas Flow Sputtering Using Ar/He/Ne Mixtures
[Jia Chai Chan - Hong Kong Polytechnic University]
SPONSORED STUDENT PRESENTATION

Plasma Processing and Diagnostics (PP)
Tuning the Properties of PVD Films Prepared by Ion Beam Assisted Deposition (IBAD) Technique
[Elias Eskandar - Polytechnique Montreal]

Plasma Processing and Diagnostics (PP)
Automotive Efficiency and Durability of Nanostructured HiPIMS Deposited Thermochromic VO2 Smart Coatings
[Ibrahim P. Ehiasarian - Sheffield Hallam University]

Plasma Processing and Diagnostics (PP)
Real-Time Optimization of HiPIMS Processes Using Pulse-Resolved Spectroscopy and Electrical Plasma Process Control
[Thomas Schütze - PLASUS GmbH]

Plasma Processing and Diagnostics (PP)
Graphite Doped Lithium Based Sputtering Targets for DC Deposition of DRGN for Thin Film Batteries Applications
[Peter Polak - Plasma Corporate Materials GmbH]

HiPIMS (Invited)
Towards Reactive Gas Pulsing Of Industrial Metallic - The Role of Metal Ions in Plasma-Activated Reactive Environments
[Nathalie Shimizu - Tokyo Metropolitan University]

HiPIMS (Invited)
Industrial HiPIMS - Process Challenges, Trends and Innovations
[Michel Sánchez Nodagar - Ionautics]

HiPIMS (Invited)
DC MFs/2 MFs Capacitively Coupled Plasma Etching Following Laser Modification to Form Through-Glass Via
[Tianqi Jiao Chen - Tong'Ji University]

HiPIMS (Invited)
HiPULSE™ + Positive PULSE™ for Direct Sputter Coatings on Inner Surface of Small Diameter Long Tubing
[Sven Bobzenhauser - Sterlite Industries]

Advanced Multifunctional Coatings (AMF)
Sputtered Anodic-Free LiFePO4 Bond Micro Lithium-Ion Batteries for 3D Chip Stacking Storage
[Tobias Ensslen - Fraunhofer IWS]

Advanced Multifunctional Coatings (AMF)
Hydrogenated Diamond-Like Carbon Films Grown by a Beam Plasma Source
[Valdeka Amelin - Egertec Uniaxing]

Advanced Multifunctional Coatings (AMF)
Vacuum Deposited Solid State Electrolyte Thin Film Lithium Ion Batteries: Fabrication and Performance
[Kun Lu - Northeastern University China]

Advanced Multifunctional Coatings (AMF)
Advanced Corrosion and Wear Resistance of AlMn and 7075 Alloys via Optimized Anodizing and DCC Deposition
[Luca Magagnin - Politecnico di Milano]

40 minute pausing / lunch break

1:10 PM – 1:30 PM: **Don Mattox Tutorial (LBCC Promenade 104B)**
From Poisoned Targets to Healthy Models: The Quest for Parameters
[Diederik Depla - Ghent University]

1:30 PM – 1:40 PM: 10 minute passing break

1:40 PM – 2:00 PM: **Large Area (Invited)**
Roll-to-Roll Vacuum Deposition Coatings for Display Cover Glass
[Brian Hoheisel - Corning Inc.]

Characterization, Testing, and Failure Analysis (C/T)
Insitu Optical Parameter Measurement for Thin Film Processes
[Tim Dudde - Advanced Energy]

Coatings and Processes for Biomedical Applications (BP)
Estimating the Lifetime of the Antimicrobial Property of Silver Containing Titanium Nitride Coatings for Implanted Biomedical Electromedical Devices
[Hernán Castillo - Ionmax Innovacion]

HiPIMS (HP)
Time Resolved Investigation of Ionization, Ionization Degree, and Plasma Composition within a HiPIMS Pulse
[Ralf Bandorf - Fraunhofer IST]

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

2:00 PM – 2:10 PM: **Large Area (LT)**
Beam Plasma Source Enhanced Deposition of high- and low-index Oxide Thin Films
[Ivanna Jae - Michigan State University]

Characterization, Testing, and Failure Analysis (C/T)
Controlled Synthesis of 3D TiNbCo with Tunable Dispersity and Optoelectronic Characteristics
[Dhanya Cani Dias - National University of Taiwan]

Coatings and Processes for Biomedical Applications (Invited)
Trace Tolerance to Biofouls - Closing the Loop with Thin Films
[Matthias Wagner]

2:10 PM – 2:20 PM: **Large Area (LT)**
Enabling Large-Area Advanced Packaging Through Optical In-Situ Metrology in Sputter Deposition
[Vidja Hakarland - Jenoptik AG]

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

2:20 PM – 2:30 PM: **High-Throughput Large-Area Coating Using a Carousel-Type Sputtering System**
[Yohsuke Sugawara - Shincron Co., Ltd.]

Characterization, Testing, and Failure Analysis (C/T)
Correlated Lattice-Parameter and Electric-Field Mapping in Sub/Sub0-Thin-Film Ferroelectrics
[Xiaoxi Zhu - Uniatomic]

2:30 PM – 2:40 PM: 20 minute refreshment break

2:40 PM – 2:50 PM: **Large Area (LT)**
Scalable Manufacturing of Signal-Penetrating Low-E Glass via Plasma-Free Magnetron Sputtering
[Xiaowen Ding - Lucid Glass Operation Corp.]

Characterization, Testing, and Failure Analysis (Invited)
Thin Film Characterization Using Ellipsometry
[James Hilfiker - J.A. Woollam Co.]

Quantum Computing (Invited)
Complete Interdiscipline Coatings for Much-Needs Superconducting Qubits
[El Lawrence Hah - University of Southern California]

2:50 PM – 3:00 PM: **Large Area (LT)**
Advances in the Fourier Sensing of RPS and Other Types of Arcing
[Matthew Linford - Brigham Young University]

Characterization, Testing, and Failure Analysis (C/T)
Advanced In-Situ Fourier Sensing of RPS and Other Types of Arcing
[Matthew Linford - Brigham Young University]

Photonically Induced Transformations of Thin Films (Invited)
Laser Spike Annealing of Thin Films by Nanosecond Pulse Applications
[Blake Austin - AV Incorporated/Air Force Research Laboratory]

3:00 PM – 3:10 PM: **30 minute break**

3:10 PM – 5:00 PM: **Sunset Meeting Forums**

SMF: Advanced Deposition Coating Hardware
Frank Papa (UP 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 (UMAP)
Long Beach Convention Center Promenade: 102 B

SMF: Materials for PVD processes
David Sanchez / Christos Pernagidis (Avalusec)
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 (Elbatco)
Hyatt Regency: SeaView Ballroom B

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

5:00 PM – 6:20 PM: **1hr 40 min Dinner Break**
6:20 - 8:00 PM

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

Tuesday (April 28, 2026)

Technical Forum Breakfasts

TFB: Lab Detection - Issues and Practices
Mike Ridemour Sarjeski (USA) / Jean-Pierre Delsa (BDL Redwood)
Long Beach Convention Center Promenade: 102 A

TFB: Industrial Challenges: Uptime, Yield, & Consistency
John Nayler (Kurt J. Lesker Company) / Jimmy Height (Semicore)
Long Beach Convention Center Promenade: 102 B

TFB: Magnetron Sputtering
Wilmert De Bosscher (Soleras 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 Schingel (VAT Group)
Hyatt Regency: SeaView Ballroom A

TFB: Energy Conversion and Storage
Volker Sittinger (Fraunhofer-IST) / Stefan Seager (Fraunhofer FEP) / Ric Shimshock (MLD)
Hyatt Regency: SeaView Ballroom B

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

LBCC Promenade 104A (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)

7:30 AM – 9:30 AM: 10 minute passing break

9:30 AM – 9:40 AM: **Awards Ceremony (LBCC Promenade 104B)**
8:40-9:20 AM

9:40 AM – 9:50 AM: 10 minute passing break

9:50 AM – 10:00 AM: Advanced Multifunctional Coatings (Invited)
Powder Atomic Layer Deposition (PALD) Commercial Scale for Battery Materials
[Christopher Gump - Forge Nano]

Organic and Perovskite Electronics (Invited)
Achieving Comparable Performance in Perovskite Thin Films by Blade Coating and Thermal Evaporation
[Jay Patel - King's College London]

Process Monitoring, Control, and Automation (PAC)
From Processes to Performance: The Impact of PAC Inspection on Hollow Perovskite Thin Films and Devices
[Wei Tan - University of Oxford]

Process Monitoring, Control, and Automation (PAC)
Fiber-Logics to Industry: Fiber Optic Sensor Systems Coaters with Fiber Current Monitoring
[Marcus Klein - SURFACES GmbH]

HiPIMS (HP)
Industrial HiPIMS - Process Challenges, Trends and Innovations
[Michel Sánchez Nodagar - Ionautics]

HiPIMS (HP)
DC MFs/2 MFs Capacitively Coupled Plasma Etching Following Laser Modification to Form Through-Glass Via
[Tianqi Jiao Chen - Tong'Ji University]

HiPIMS (HP)
HiPULSE™ + Positive PULSE™ for Direct Sputter Coatings on Inner Surface of Small Diameter Long Tubing
[Sven Bobzenhauser - Sterlite Industries]

Thin Film Contributions for the Hydrogen Economy (THE)
Hydrogen Sensor Development and Deployment: Challenges in Coating Selection and Integration
[Nadim Kapsisian - Schaeffler Technologies]

Thin Film Contributions for the Hydrogen Economy (THE)
Replacing Ti Plates by Ti-Coated Steel Substrates for PEM Electrolyzer
[Ralf Bandorf - Fraunhofer IST]

10:00 AM – 10:40 AM: Advanced Multifunctional Coatings (AMF)
Stabilizing Lithium Metal Anodes with Vacuum-Deposited PEO via Composite Current Collectors
[Kuahong Li - Northeastern University China]

Organic and Perovskite Electronics (OE)
From Precursor to Performance: The Impact of CVD Inspection on Hollow Perovskite Thin Films and Devices
[Wei Tan - University of Oxford]

Process Monitoring, Control, and Automation (PAC)
Intelligent Sensing Technology for Characterization, Testing, and Failure Analysis of Spatterred Thin Films and Engineered Coatings
[Shelja Mathew - IoPaTec AG]

Thin Film Contributions for the Hydrogen Economy (THE)
Replacing Ti Plates by Ti-Coated Steel Substrates for PEM Electrolyzer
[Ralf Bandorf - Fraunhofer IST]

10:40 AM – 10:50 AM: **20 minute refreshment break**

10:50 AM – 11:00 AM: **20 minute refreshment break**

11:00 AM – 11:10 AM: **Exhibitor Innovator Showcase (ISI)**
Hybrid Cleaning of Contaminated Surfaces with Dry Ice Deposition Powered by Ultrasonic Vibration Tools
[Sylvain LeCuiller - BINI]

Organic and Perovskite Electronics (OE)
Multi-Functional Perovskite Thin Films Using Solution Seeded Growth Via Gas Quenching
[Ghada Koblmüller - Walter Schottky Institute, Technical University of Munich]

Process Monitoring, Control, and Automation (Invited)
Beyond Ion Gauges: Wide-Range, Maintenance-Free Vacuum Measurement for Production Environments
[Cooper Christiansen - Sensel A/S]

HiPIMS (Invited)
Beyond Traditional High Power Impulse Magnetron Sputtering
[Dieter Hegelkiewicz - Toyota Frankfurter GmbH + Co. KG]

Thin Film Contributions for the Hydrogen Economy (THE)
Combating Deposition Compromises with Structure and Composition Control: Tailoring Ti-Based Coatings for Hydrogen Electrolyzer Stacks
[Hossein Ghadiri - Hydrogen Technology Laboratory]
SPONSORED STUDENT PRESENTATION

11:10 AM – 11:20 AM: **Exhibitor Innovator Showcase (ISI)**
Tungsten and Molybdenum Sputtering Targets for Semiconductor and Other Critical Thin Film Applications
[Yoshiyuki Ishii - Tosoh Specialty Materials]

Process Monitoring, Control, and Automation (Invited)
Beyond Ion Gauges: Wide-Range, Maintenance-Free Vacuum Measurement for Production Environments
[Cooper Christiansen - Sensel A/S]

Organic and Perovskite Electronics (OE)
Multi-Functional Perovskite Thin Films Using Solution Seeded Growth Via Gas Quenching
[Ghada Koblmüller - Walter Schottky Institute, Technical University of Munich]

HiPIMS (Invited)
RF-Assisted HiPIMS on a Single Target: Discharge Stability and Ionization Behavior for Acrylic Polymer Materials
[Anna Wickstrom Ottosson - TRUMPF Huettinger Sp. z o.o.]

Thin Film Contributions for the Hydrogen Economy (THE)
Combating Deposition Compromises with Structure and Composition Control: Tailoring Ti-Based Coatings for Hydrogen Electrolyzer Stacks
[Hossein Ghadiri - Hydrogen Technology Laboratory]
SPONSORED STUDENT PRESENTATION

11:20 AM – 11:30 AM: **Exhibitor Innovator Showcase (ISI)**
A Modular Platform Approach for Advanced Carbon Coatings: Extending Performance and Flexibility with the Oerlikon DLAMOS System
[Bruno Dalanesh - Oerlikon Balzers Coating USA]

Process Monitoring, Control, and Automation (PC)
In-Vacuum Color Measuring, to Improve Process Reproducibility in Decorative Coating Applications
[Jan-Peter Urbach - Schott AG]

Process Monitoring, Control, and Automation (PC)
Metal* OES Intelligence Platform: A Multivariate, Anchor-Free Approach to Process Monitoring and Control
[Stephanie Buchholz - Mass Fabrics GdS]

Organic and Perovskite Electronics (OE)
Cell-Through Selective Vacuum Deposition Processing Using Contact Lithography and Lift-Off
[Andrew Grizzle - Stony Brook University]

Organic and Perovskite Electronics (OE)
High Voltage All-Inorganic CsPbI3 Perovskite Solar Cells
[Nadia Gröhmann - Stuttgart Center for Photovoltaics (SCPV), University of Stuttgart]
SPONSORED STUDENT PRESENTATION

Organic and Perovskite Electronics (OE)
Thermal Co-Evaporation of Thin Film Photovoltaics by the Choice of Tool
[Jin Yao University of Oxford]

Process Monitoring, Control, and Automation (PC)
Fast, Highly Repeatable Gas Chemistry Control for Atomic Scale Processes
[Thomas Brooke - Hiden Analytical]

Thin Film Contributions for the Hydrogen Economy (THE)
Hydrogen Sensors: Play a Key Role in the Global Water Gas Equipment Supply Chain
[Paolo Durbi - Tele Group]

11:30 AM – 11:40 AM: **Exhibitor Innovator Showcase (ISI)**
Digital Twin Technology for Optimized Production: A Review of Reflectance and Photoluminescence Based Process Insights
[Vidja Hakarland - JenPhotEk]

Organic and Perovskite Electronics (OE)
Digital Twin Technology for Optimized Production: A Review of Reflectance and Photoluminescence Based Process Insights
[Vidja Hakarland - JenPhotEk]

Process Monitoring, Control, and Automation (PC)
Metal* OES Intelligence Platform: A Multivariate, Anchor-Free Approach to Process Monitoring and Control
[Stephanie Buchholz - Mass Fabrics GdS]

Overflow (OP)

11:40 AM – 11:50 AM: **Exhibitor Innovator Showcase (ISI)**
Real-Output, Self-Aware Equipment: Full Control in Sensitive Reactive Sputtering and Beyond Throughput Troubleshooting
[Dominik Mayer - Fraunhofer IST]

Exhibitor Innovator Showcase (ISI)
Integrated Mechanical and Structural Characterization Solutions for Vacuum Coatings
[Parth Kotak - Anton Paar USA Inc.]

Exhibitor Innovator Showcase (ISI)
Custom Vacuum Coating Systems, Vacuum Cluster Refurbishment and Control R&D at UP Plasma
[Frank Papa - UP Plasma LLC]

Overflow (OP)

11:50 AM – 12:00 PM: **10:00 AM Exhibitor B2B Coffee Hour**
11:00 AM Exhibit Hall Opens

12:00 PM – 1:00 PM: **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 Li6 (Yuri Elokhin - Nanocoating Plasma Systems)

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

POSTER (P4): Thick Metal Coatings on Glass Microarrayfoils for Advanced Manufacturing (Dire Shaibnan - Los Alamos National Laboratory)

1:00 PM – 1:10 PM: **Welcome Reception (Exhibit Hall)**
5:00 - 6:00 PM

1:10 PM – 1:20 PM: **Exhibit Hall Closes: 6:00 PM**

Wednesday (April 29, 2026)

TAC Breakfast Meetings

(1) Large Area Advanced Packaging and Integrated Photonics TAC
Long Beach Convention Center Promenade: 102 A

(2) High Power Impulse Magnetron Sputtering (HiPIMS) TAC
Long Beach Convention Center Promenade: 102 B

(3) Protective, Tribological, and Decorative Coatings TAC
Long Beach Convention Center Promenade: 102 C

(4) Thin Film Contributions for the Hydrogen Economy TAC
Hyatt Regency: SeaView Ballroom A

(5) Plasma Processing and Diagnostics TAC
Hyatt Regency: SeaView Ballroom B

(6) Atomic Layer Processing TAC
Hyatt Regency: SeaView Ballroom C

(7) WebTech Roll-to-Roll Technologies and Innovation TAC
Long Beach Convention Center Promenade: 101 A

(8) Emerging and Translational Technologies TAC
Long Beach Convention Center Promenade: 101 B

(9) Optical Coatings TAC
Long Beach Convention Center Promenade: 101 C

(10) Photonically Induced Transformations of Thin Films and Surfaces TAC
Long Beach Convention Center Promenade: 101 D

(11) Electron Beam Processes TAC
Hyatt Regency: SeaView Ballroom D

(12) Energy and Parameters for Energy Conversion and Related Processes TAC
Hyatt Regency: SeaView Ballroom E

(13) Advanced Multifunctional Coatings TAC
Hyatt Regency: SeaView Ballroom F

(14) Digital Transformation through AI, Machine Learning, Simulation and Data Science TAC
Hyatt Regency: SeaView Ballroom G

(15) Process Monitoring Control and Automation TAC
Hyatt Regency: SeaView Ballroom H

(16) Characterization, Testing, and Failure Analysis of Thin Films TAC
Hyatt Regency: Beacon A

(17) Organic and Perovskite Electronics TAC
Hyatt Regency: Beacon B

(18) Quantum Computing TAC
Hyatt Regency: Beacon C

LBCC Promenade 104A (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)

7:30 AM – 9:30 AM: 10 minute passing break

9:30 AM – 9:40 AM: **Keynote (LBCC Promenade 104B)**
Fano-Resonant Optical Coatings and Applications
(Chunlei Guo - University of Rochester)

9:40 AM – 9:50 AM: 10 minute passing break

9:50 AM – 10:00 AM: Exhibitor Innovator Showcase (ISI)
The Ideal Vacuum Pump: Dry Pump Technology
[Jaro Marsola Ulm - Sencus SAS]

Process Monitoring, Control, and Automation (PC)
Industrial Ready Hybrid Metrology Solution Enhancing Yield Ramp Up Performance
[Ahmed Sabbah - Nova Fabrica SAS]

Optical (OP)
Active Nanostructured Spectrally Selective Coatings for Solar Energy Applications
[Judith Monteiro - Polytechnique Montreal]

Large Area Advanced Packaging and Integrated Photonics (Invited)
PVD Glass Innovations in Advanced Packaging: Enabling Dark Generation Heterogeneous Integration
[Manuela Junghähnel - Fraunhofer ISSA-ASSID]

10:00 AM – 10:10 AM: Exhibitor Innovator Showcase (ISI)
Industrial Ready Hybrid Metrology Solution Enhancing Yield Ramp Up Performance
[Ahmed Sabbah - Nova Fabrica SAS]

Emerging and Translational Technologies (ET)
Intellectual Property: A Slow Enough or Sensitive Lens
[Chris Stewart - Stewart Consulting]

Optical (OP)
Tunable Broadband Optical Properties of Reactive Magnetron Sputtered Nickel-Doped Zinc Oxide and Nickelate Electrode Thin Films from UV to far Infrared
[Liang Sun - Air Force Research Laboratory]

Large Area Advanced Packaging and Integrated Photonics (LP)
Ultra-Low Coating Thickness Variation Enabled by Precision Metrology Enabling Significantly Metallization and Via Formation for ThroughGlass Via (TGV) Technology
[Anna Wickström Ottosson - TRUMPF Huettinger Sp. z o.o.]

10:10 AM – 10:20 AM: Exhibitor Innovator Showcase (ISI)
Non-Destructive Surface Topography Measurements Overcoming Vacuum Limitations
[Shadman Khyasuddin - INFICON]

Process Monitoring, Control, and Automation (PC)
Industrial Ready Hybrid Metrology Solution Enhancing Yield Ramp Up Performance
[Ahmed Sabbah - Nova Fabrica SAS]

Emerging and Translational Technologies (ET)
Engineering Solutions for High Speed Roll-to-Roll Impacts Coating in Scalable Manufacturing of Functional and Energy-Related Films
[Zhiheng Li - Guangdong Huizhou Vacuum Technology Co., Ltd.]

Optical (OP)
PhytoSentinel: Plasmonic-Formed Corrosion Masks for Luminescence Based Environmental Monitoring
[Chun Lin Yang - Yang City University]

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

Large Area Advanced Packaging and Integrated Photonics (LP)
A Scalable HiPIMS RF Bias Strategy for Reliable Cu Seed Layers in Advanced Packaging Applications
[Chia-Jen Chen - TRUMPF Huettinger GmbH + Co. KG]

Large Area Advanced Packaging and Integrated Photonics (LP)
Spectral Thin-Film Silicon Modules for Scalable Photonic Integration Circuits
[Tshuya Sugawara - Shincron Co. Ltd.]

Large Area Advanced Packaging and Integrated Photonics (Invited)
Optical Engineering and Thin-Film Nanophotonics
[Mohamed Elbakkouch - University of Arizona]

10:20 AM – 10:30 AM: **20 minute refreshment break**

10:30 AM – 10:40 AM: **20 minute refreshment break**

10:40 AM – 10:50 AM: **9:00 AM Exhibitor Meeting**
10:00 AM Exhibit Hall Opens

10:50 AM – 11:00 AM: **2:00 PM Beer Blast**

11:00 AM – 11:10 AM: **3:00 PM Announce: 5 K Run Winner & Best Poster**

11:10 AM – 11:20 AM: **Exhibit Hall Closes at 4:00 PM**

11:20 AM – 11:30 AM: **Free Time**
4:00 - 5:30 PM

11:30 AM – 11:40 AM: **TAC Program Meeting (Hyatt Regency Shoreline A/B)**
5:30 - 7:30 PM

11:40 AM – 11:50 AM: Overflow (OP)

11:50 AM – 12:00 PM: Overflow (OP)

12:00 PM – 12:10 PM: Overflow (OP)

12:10 PM – 12:20 PM: Overflow (OP)

12:20 PM – 12:30 PM: Overflow (OP)

12:30 PM – 12:40 PM: Overflow (OP)

12:40 PM – 12:50 PM: Overflow (OP)

12:50 PM – 1:00 PM: Overflow (OP)

1:00 PM – 1:10 PM: Overflow (OP)

1:10 PM – 1:20 PM: Overflow (OP)

1:20 PM – 1:30 PM: Overflow (OP)

1:30 PM – 1:40 PM: Overflow (OP)

1:40 PM – 1:50 PM: Overflow (OP)

1:50 PM – 2:00 PM: Overflow (OP)

2:00 PM – 2:10 PM: Overflow (OP)

2:10 PM – 2:20 PM: Overflow (OP)

2:20 PM – 2:30 PM: Overflow (OP)

2:30 PM – 2:40 PM: Overflow (OP)

2:40 PM – 2:50 PM: Overflow (OP)

2:50 PM – 3:00 PM: Overflow (OP)

3:00 PM – 3:10 PM: Overflow (OP)

3:10 PM – 3:20 PM: Overflow (OP)

3:20 PM – 3:30 PM: Overflow (OP)

3:30 PM – 3:40 PM: Overflow (OP)

3:40 PM – 3:50 PM: Overflow (OP)

3:50 PM – 4:00 PM: Overflow (OP)

4:00 PM – 4:10 PM: Overflow (OP)

4:10 PM – 4:20 PM: Overflow (OP)

4:20 PM – 4:30 PM: Overflow (OP)

4:30 PM – 4:40 PM: Overflow (OP)

4:40 PM – 4:50 PM: Overflow (OP)

4:50 PM – 5:00 PM: Overflow (OP)

5:00 PM – 5:10 PM: Overflow (OP)

5:10 PM – 5:20 PM: Overflow (OP)

5:20 PM – 5:30 PM: Overflow (OP)

5:30 PM – 5:40 PM: Overflow (OP)

5:40 PM – 5:50 PM: Overflow (OP)

5:50 PM – 6:00 PM: Overflow (OP)

Thursday (April 30, 2026)

Technical Forum Breakfasts

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

TFB: Protective, Reflective, and Decorative Coatings
Martin Engelo (Ionbond) / Anas Ghalane (Akulaxe)
Long Beach Convention Center Promenade: 102 B

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

TFB: Optical Thin Film Design
Jay Ancellotti (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 (Semicore)
Hyatt Regency: SeaView Ballroom B

TFB: Electron Beam Processes
Stefan Saager (Fraunhofer FEP) / Matthias Neumann (Von Ardenne)
Hyatt Regency: SeaView Ballroom C

LBCC Promenade 104A (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)

7:30 AM – 9:30 AM: 10 minute passing break

9:30 AM – 9:40 AM: **Keynote (LBCC Promenade 104B)**
Plasma Technologies for Precision and Large-Scale Surface Engineering
(Elisabeth von Hauff - Fraunhofer IEF)

9:40 AM – 9:50 AM: 10 minute passing break

9:50 AM – 10:00 AM: Electron Beam Processes (EB)
High Rate Plasma Activated Electron Beam Evaporation Process Monitoring Using PICoo
[Stefan Saager - Fraunhofer FEP]

Electron Beam Processes (Invited)
Vacuum Carrier Coatings for Micro-Mechanical Fitters: Developments in Equipment and Process Technology for DLC and Alloy
[Markus Pinsky - VON ARDENNE GmbH]

Atomic Layer Processing (ALP)
Directional Atomic Layer Deposition Reactors Using Reactive Plasma Chemistry
[Austin Minnich - Colorado]

Atomic Layer Processing (ALP)
Elevating Coating System Performance: Demonstrating PICVD's Chemical Stability Over PPE in Hub, PVD, and CVD
[Mirjam Dobbin - Advanecat]

Digital Alternative (DT)
Machine-Learning-Enabled High-Throughput Optimization and Physical Property Prediction for All-Vacuum-Evaporated Organic Semiconductor Films and Devices
[Mahesha G. - University of Oxford]

Digital Alternative (DT)
Can AI Predict Two-PVD Process Parameters? Power-Material Data to Predictive Process Windows
[Felix Lotz - Cassch Innovation]

Digital Alternative (DT)
Reducing Downtime and Waste in Vacuum Coating Through AI Prediction
[Jim Brickley - Sencus SAS]

Optical (OP)
Linear Ion Beam for High Rate Reactive Sputtering
[David Stevenson - AMPHEL Inc.]

Optical (OP)
Revolutionizing Optical Coating: Achieving Higher Deposition Rates and Plasma Stability with Bipolar-IBSP Technology
[Tino Zeus - TRUMPF Huettinger GmbH + Co. KG]

Optical (Invited)
State of the Art of Amorphous IBS Coatings Improvements for the Gravitational Wave Detectors and Other Applications
[Laurent Pinard - Laboratoire des Materiaux Avancés - CNRS]

Overflow (OP)

Overflow (OP)

Overflow (OP)

10:10 AM – 10:20 AM: Atomic Layer Processing (ALP)
Open-Source Reactor Simulations for Direct Current Beam Process Monitoring Using PICoo
[Kaito Mino - Schlatter - Institute for Quantum Electronics ETH]

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

Digital Alternative (DT)
Predicting Film Homogeneity in Large-Area Rotary Sputtering: GPU-Accelerated Multi-Scale Simulation Of Target Erosion Enabling Predictive Maintenance
[Patrick Morse - Arizona Thin Film Research LLC]

Digital Alternative (DT)
Particle-Based Simulation of Reactive Magnetron Sputtering to an Industrial Roll-to-Roll Coater: Toward a Digital Twin Source PVD-MOCVD/ALD Solver-Flow
[Paul Nicenboim - Indistinguishable - numerical plasma dynamics GmbH]

Digital Alternative (DT)
Navigating Digital Transformation in Vacuum-Coated Industrial Environment: Data, Detection, and the Strategic Road Ahead
[Alexander Ebner - Franck Fallon GmbH]

Optical Colloquium
"A Manufacturer's Guide to Coatings for High Power Lasers"

Protective, Tribological, and Decorative Coatings (Invited)
PVD Coatings for Tribological Applications - Known Paths and New Opportunities
[Christian Kalscheuer - Surface Engineering Institute (SEI), RWTH Aachen University]

Protective, Tribological, and Decorative Coatings (Invited)
High-Temperature Tribological Properties of Tungsten-Disulfide Thin Films Deposited by Magnetron Sputtering
[Juan Manuel Sánchez Cardenas - Centro de Ingeniería y Desarrollo Industrial (CID