



# TechCon 2026

## Long Beach

Long Beach Convention Center  
Long Beach, California, USA

April 25 - April 30, 2026

# Call for Papers

## Deadlines for Abstracts:

January 1, 2026

(Guaranteed placement in requested session)

## Now Accepting Abstracts for the 2026 Technical Conference

### Technical Program: April 27 - April 30, 2026

- Technical Sessions
- Interactive Networking Forums  
+ *Technology Forum Breakfasts*

### Education Program: April 25 - April 30, 2026

- Problem-Solving Tutorial Courses

### Featuring Sessions on:

- ◆ Advanced Multifunctional Coatings: Integrating Vacuum and Electrochemical Deposition for Sustainable Energy, Surface Protection, and Biomedical Innovations (Joint Session with The Electrochemical Society - ECS) **New**
- ◆ Advances in Thin Film Sensor Technologies: Materials Design and Applications
- ◆ Atomic Layer Processing
- ◆ Characterization, Testing and Failure Analysis of Thin Films, Coatings, and Engineered Surfaces **New**
- ◆ Coatings and Processes for Biomedical Applications
- ◆ Coatings for Energy Conversion and Related Processes
- ◆ Digital Transformation through Artificial Intelligence, Machine Learning, Simulation, and Data Science in the Thin Film Industry
- ◆ Electron Beam Processes
- ◆ Emerging and Translational Technologies and Applications
- ◆ Exhibitor Innovator Showcase
- ◆ High Power Impulse Magnetron Sputtering (HIPIMS)
- ◆ Large Area Advanced Packaging and Integrated Photonics **New**
- ◆ Large Area Coatings
- ◆ Optical Coatings
- ◆ Organic and Perovskite Electronics
- ◆ Photonically-Induced Transformations of Thin Films and Surfaces **New**
- ◆ Plasma Processing and Diagnostics
- ◆ Process Monitoring, Control, and Automation
- ◆ Protective, Tribological, and Decorative Coatings
- ◆ Quantum Computing
- ◆ Thin Film Contributions for the Hydrogen Economy
- ◆ WebTech Roll-to-Roll Technologies and Innovation



For more information, contact the SVC at +1-505-897-7743  
or [CLICK HERE](#) to submit an abstract

[WWW.SVC.ORG](http://WWW.SVC.ORG)



# Message from the Program Director

The 2025 TechCon in Nashville finished a few weeks ago after putting a very robust technical program on the stage at the Gaylord Opryland venue. We knew at the start of the planning cycle that the SVC would suffer from an unfortunate schedule overlap with the Optical Interference Coatings Conference (OIC) that prevented several community members from attending the TechCon. However, due to additional headwinds in the international business climate that constrained travel funding and international attendance, turnout for this TechCon was below our ambitious goals but still considerably better than some of our peers' events thanks to the herculean efforts of SVC staff and the volunteer program leadership team. We highlighted several new technical sessions, secured prominent Keynote and Invited speakers, and showcased contributions from our exhibitors in both the technical sessions as well as the Exhibitor Innovation Showcase. The interactive program elements – Technology Forum Breakfasts (TFBs) and in-session Colloquia – were again an enormous success and remain a hallmark of the SVC's program that we will carry forward. We are now in the phase of preparing the "memorialization" of the program content through a wide range of publication options – PowerPoint presentations (static or narrated/ pre-recorded) or a manuscript in the conference proceedings, or peer-reviewed submissions to a high-impact scientific journal. Note that the stellar technical content of this edition of the Bulletin is based on an outstanding contribution to past TechCon programs as an example of preserving the knowledge we share with our community, and I encourage every presenter to take advantage of the publications options the SVC offers.

With the 2025 event wrapped up, no time was wasted to start planning the 2026 SVC TechCon in Long Beach, particularly since we will have a somewhat shorter planning cycle due to the difference in timing of the two events. Long Beach is an extremely attractive venue based on past experience, and we will offer several new technical sessions, and fine-tune the line-up of TFBs and in-session colloquia. The 2026 TechCon offers an industry-leading technical exhibition, abundant networking opportunities, along with an extensive educational program and in-depth technological expertise. We plan to emphasize and highlight the opportunities and potential of our young members (students and early-career professionals) that are so important to the growth of our industry. The 2026 TechCon will be a wonderful opportunity to present your latest research results, coating processes, and equipment applications in the field. Please enjoy the technical content of this Bulletin, mark your calendar for the 2026 TechCon (April 26 – 30, 2026), and review the upcoming Call for Papers to contribute a talk or poster that highlights your current technical or business achievements.

— Chris Stoessel, SVC Program Director  
cstoessel@stoesselconsulting.net



**Our Vision:** *To provide a dynamic forum for transitioning and commercializing thin film and surface engineering innovation to industry.*

**Our Mission:** *To promote technical excellence by providing a global forum for networking, educating, and informing the stakeholders, the technical community, and the industrial eco-system on all aspects of industrial vacuum coating, surface engineering and related technologies.*

## Publication Options:

There are two publication options and one video presentation option for work presented during the 2026 Technical Program

### WITHOUT PEER REVIEW

Submission Deadline:

September 11, 2026

Publication in PowerPoint OR  
Manuscript format in Society of  
Vacuum Coaters Annual Technical  
Conference Proceedings  
(ISSN 0737-5921)

### PEER REVIEWED

Submission Window Open

April 15 - September 11, 2026

Publication in a special edition of  
Elsevier's Surface and Coatings  
Technology Journal  
(ISSN: 0257-8972)

### VIDEO PRESENTATIONS

Submission window open

April 15 - September 11, 2026

Narrated mp4 or PowerPoint  
video to be posted to the  
SVC's dedicated YouTube Channel



# SVC and SVC Foundation Travel Support for Students and Young Professionals

*Young professionals and students are our future. The SVC and the SVC Foundation recognize that capturing the imagination and the interest of young technicians, engineers, and scientists are essential activities that will perpetuate the technologies and the companies that comprise the SVC. Student education scholarships and sponsorships supporting travel and conference participation are offered annually through programs that encompass a global reach to qualified and deserving individuals.*



## **SVC Student/Young Professional Travel Sponsorship Program**

The SVC Travel Sponsorship Program provides travel support and complimentary conference registration to selected full-time students and young professionals (under the age of 35 working in industry) to make an oral technical presentation at the SVC Annual Technical Conference. A limited number of sponsorships will be awarded to the best applicants. Applicants from industry, academic, research, and technical institutions from the United States and around the world are encouraged to apply. The Travel Sponsorship Committee evaluates applications and makes selections based on the quality and relevance of the applicant's project to the interests and mission of the SVC. It will also consider the quality of the application itself (completeness, quality, etc.), potential impact of the oral presentation, its relevance to the specific session, as well as the need for funding.

### **Requirements for Participation:**

The applicant must have a sponsor. The sponsor can be a faculty member or supervisor at the student's institution/place of employment or another academic, technical, or research institution. The sponsor must indicate that he or she understands the nature of the conference and what SVC technical programs are about. The applicant must commit to providing a manuscript based on the content of the oral presentation at the TechCon or the PowerPoint presentation delivered at the TechCon for subsequent publication by the SVC before any financial support is provided.

During the selection process, preference will be given to those applicants who have not already received sponsorship from SVC. The successful candidates should also preferably come from different institutions.

**SVC Travel Sponsorship Program Abstract and Application Deadline: October 4, 2025**



**The SVC Foundation** provides scholarships and/or stipends for travel expenses to attend the annual SVC technical conference. Scholarships are open to

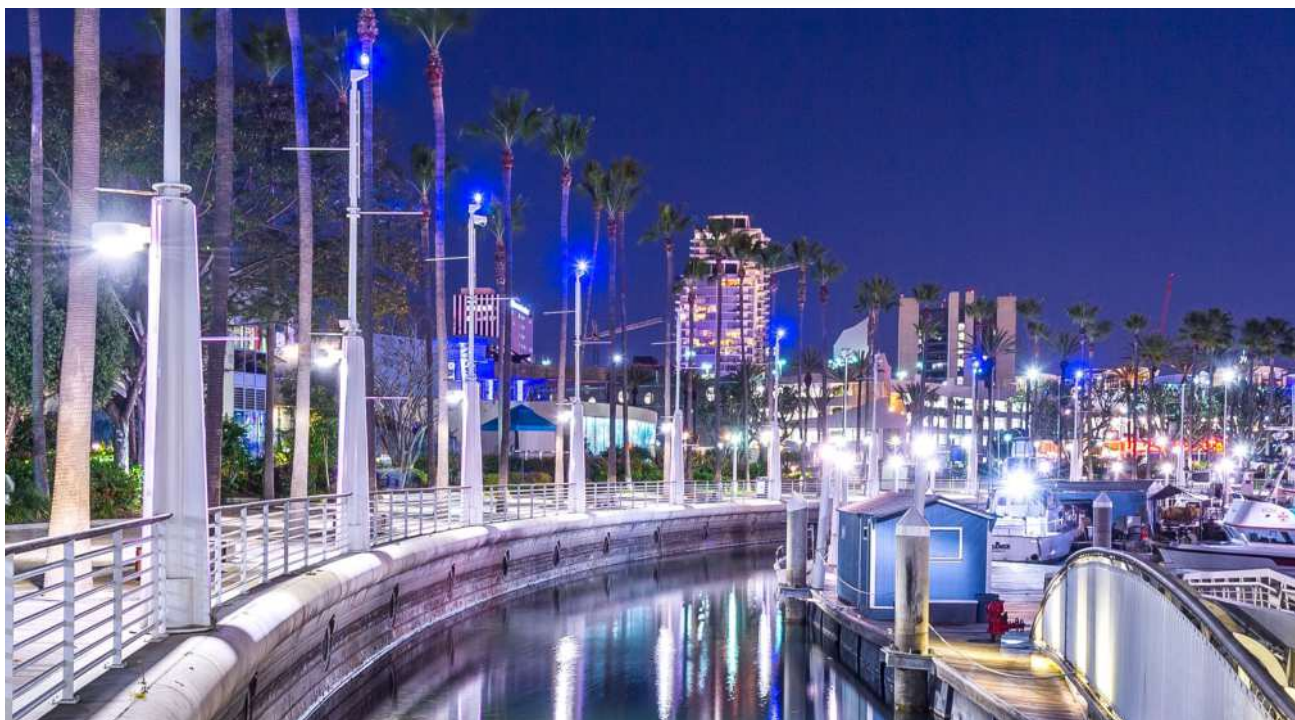
well-qualified students planning to enter fields related to vacuum coatings as well as technicians already working in the field practicing the craft. The Society of Vacuum Coaters (SVC), the SVCF's founder, and AIMCAL, an organization committed to advancing vacuum roll-coating technology, and their members, provides support for the Foundation to pursue these goals. Since its inception in 2002, the SVCF has awarded more than 220 scholarships and travel awards totaling over \$600,000 to students from more than 28 countries.

**Please visit [www.svcfoundation.org](http://www.svcfoundation.org) for more information**

**Academic Scholarship application deadline: October 18, 2025**

**Industry Scholarship application deadline: January 23, 2026**

**Student Travel Sponsorship application deadline: October 4, 2025**





# Call for Papers

**Abstract Submission Deadline**

**Guaranteed Session Placement: January 1, 2026**

**The SVC welcomes contributions in the following areas. Each area is organized by a Technical Advisory Committee (TAC) or Session Organizing Committee.**

## **Advanced Multifunctional Coatings: Integrating Vacuum and Electrochemical Deposition for Sustainable Energy, Surface Protection, and Biomedical Innovations (Joint Session with The Electrochemical Society)**

Thin-film coatings are at the heart of materials innovation, playing a transformative role in energy systems, corrosion resistance, surface protection, and biomedical applications. This session will bridge expertise from the Society of Vacuum Coaters (SVC) and the Electrochemical Society (ECS) by exploring the synergy between vacuum-based deposition techniques and electrochemical processes, focusing on their combined potential for enhancing specific applications. Whether by integrating vapor-phase deposition methods with electrochemical techniques or applying vacuum-deposited thin films directly to electrochemical devices such as batteries, fuel cells, and sensors, the session will highlight how these approaches can drive the development of high-performance, multifunctional materials for a range of applications.

Vapor-phase methods such as physical vapor deposition (PVD), chemical vapor deposition (CVD), and atomic layer deposition (ALD) enable the deposition of high-purity, conformal coatings with precise microstructural control. These techniques are becoming crucial for the fabrication of next-generation energy devices, corrosion and wear-resistant surfaces, and bioactive films. This session aims to explore the dynamic intersection of vacuum-based deposited thin films materials and electrochemical technology applications. By bridging surface engineering with electrochemical performance, the session seeks to promote cross-disciplinary dialogue and drive innovation across both fields. Discussions will focus on how advanced thin films, coatings, and nanostructures fabricated through vacuum processes can transform electrochemical devices such as batteries, fuel cells, sensors, and beyond.

The Session welcomes papers in the following areas:

- Innovations in PVD, CVD, and emerging vacuum methods for fabricating high-performance electrochemical components,
- Integration of vacuum deposition (PVD/CVD) with electrochemical methods (electrodeposition, electroless plating) for multifunctional and durable coatings,
- Design and development of thin film electrodes for batteries, supercapacitors, and fuel cells to enhance energy storage and conversion efficiency,
- Surface modification using vacuum-based techniques to improve interfacial stability, conductivity, and overall electrochemical performance,
- Advances in scalable vacuum deposition processes tailored for mass production of electrochemical energy storage and conversion devices,
- Vacuum-deposited coatings for next-generation batteries, fuel cells, supercapacitors, and hydrogen storage systems, and
- Novel vacuum deposition approaches to enhance corrosion resistance and extend the service life of components in aerospace, marine, and harsh environments.

### **Session Organizers:**

#### **ECS:**

**Luca Magagnin**, *Politecnico Milano 1863*, [luca.magagnin@polimi.it](mailto:luca.magagnin@polimi.it)

**Wei Tong**, *Lawrence Berkeley National Laboratory*, [weitong@lbl.gov](mailto:weitong@lbl.gov)

#### **SVC:**

**Jones Alami**, *Mohammed VI Polytechnic University*, [jones.alami@um6p.ma](mailto:jones.alami@um6p.ma)

**Mohammed Makha**, *Mohammed VI Polytechnic University*, [mohammed.makha@um6p.ma](mailto:mohammed.makha@um6p.ma)

**Chris Stoessel**, [cstoessel@stoesselconsulting.net](mailto:cstoessel@stoesselconsulting.net)

## **Advances in Thin Film Sensor Technologies: Materials Design and Applications**

This technical session highlights cutting-edge developments in thin film sensor technologies, with a focus on the interplay between novel functioning materials, innovative design strategies, and impactful real-world applications. As sensing demands grow across diverse sectors—from healthcare and environmental monitoring to industrial automation and wearable electronics—thin film-based sensors have emerged as a powerful platform for achieving high sensitivity, selectivity, and integration in compact form factors.

Contributions to this session will explore advances in functional thin film materials, including nanostructured, hybrid, and two-dimensional systems; breakthroughs in deposition techniques and micro/nanofabrication; and the engineering of sensor architectures optimized for performance and reliability. Particular emphasis is placed on interdisciplinary approaches that combine materials science, nano-photonics, optoelectronics, electronics, and data-driven techniques to push the limits of sensing performance. Researchers and technologists from academia, industry, and government are



**Again for 2026**

**The 7<sup>th</sup> Annual SVC Foundation Casino Night on Monday Evening, April 27, 2026**

*To benefit the SVC Foundation and Student Sponsorship Program!*

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encouraged to share innovations, challenges, and future directions in this rapidly evolving field.

The session will welcome contributions on, but not limited to, the following topics:

- **Advanced Sensing Materials:** Novel nanostructured, hybrid, and 2D thin films,
- **Deposition and Fabrication:** Innovations in thin film growth and micro/nano-processing,
- **Sensor Design and Integration:** Compact, robust, and multifunctional architectures,
- **Interdisciplinary Approaches:** Merging materials, photonics, and electronics,
- **Smart Sensing Systems:** AI/ML-enhanced data processing and analytics, and
- **Application Highlights:** Use cases in health, environment, industry, and wearables.

## **TAC Co-Chairs:**

**Jason Hrebik**, Kurt J. Lesker Company, jasonh@lesker.com

**Jacob Lee**, University of Texas at Arlington, seunghyun.lee@uta.edu

**Binbin Weng**, University of Oklahoma, binbinweng@ou.edu

## **Atomic Layer Processing (ALP)**

Over the last few years, atomic layer processes (ALPs), such as atomic layer deposition (ALD), atomic layer etching (ALE), molecular layer deposition (MLD), and atomic layer epitaxy (ALEp) have increased in importance, enabling many new products and applications. With excellent uniformity, nanoscale precision, and high versatility, ALPs have applications in sensing, optical coatings, energy storage, and microelectronics. Recent advances in low temperature processing make ALP methods attractive to the processing polymers, biomaterials, and other applications with low thermal budgets.

Sequential Infiltration Synthesis (SIS), alternatively called also Vapor Phase Infiltration (VPI) complements the above-mentioned layer-by-layer technologies by its ability to form 3D nanostructures by a bulk diffusion and selective chemical reactions of precursor with functional groups in polymers or block co-polymers (BCP). Highly selective reactions of precursors with e.g., carbonyl groups (C=O) in the polymer bulk allows integration of inorganic materials into the organic matrix, resulting in a hybrid material. A self-organized BCP film after the SIS will form 3D nanostructures.

The common feature of all those methods is the use of self-limiting reactions that can provide atomic-scale resolution in both vertical and horizontal directions: this property can also be complemented by selectivity in etching or deposition. Selectivity in deposition or etching may solve some of the processing challenges in the technology of nano-devices, e.g., alignment of nanometer-sized features. A high degree of control makes the selective atomic scale processes attractive for future nano-fabrication methods.

We are soliciting oral and poster contributions in areas including both established technologies and creative new developments. Advanced technologies which successfully cross over from early-stage

feasibility studying to commercially viable industrial solutions are of particular interest.

Session topics will include:

- Innovations in methods for upscaling ALPs towards high-volume industrial applications,
- New business concepts or market perspectives that accelerate transfer of ALPs and selective atomic processes from the lab to commercial viability,
- Current commercial products using ALPs,
- Precursor synthesis,
- Fundamental aspects of ALP,
- Process development,
- Plasma enhanced processes,
- Challenges and applications of ALPs and selective atomic processes,
- Novel concepts for ALP process control, characterization, and monitoring,
- Applications of selective atomic processes, and
- Selective atomic processes in micro- and nanoelectronics.

## **TAC Co-Chairs:**

**Sara Harris**, Forge Nano, Inc., sharris@forgenano.com

**Ivan Maximov**, Lund University, ivan.maximov@ftf.lth.se

**Craig Outten**, coutten@verizon.net

**Matt Weimer**, Forge Nano, Inc., mweimer@forgenano.com

## **Characterization, Testing, and Failure Analysis of Thin Films, Coatings, and Engineered Surfaces**

In support of innovations and continuous R&D, product and process improvements across SVC society stake holders and industries, a new session for the SVC TechCon has been added to this year's program. This new session focuses on thin film, coating, and engineered surface characterization, evaluation and failure analysis. The goal of the session is to provide a forum for attendees to present and exchange technical information related to characterization and evaluation of thin films, coatings and engineered surfaces made





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through vacuum coating processes. The importance and significance of this session are obvious. First, the various properties of thin films and coatings depend on several factors during preparation. Proper characterization is critical for understanding and further optimization. Second, characterization and testing are essential for intended applications, for meeting product-design specifications, and for ensuring desired interactions with service environments. Third, the lifetime estimates, and failure analysis of thin films and coatings are crucial for avoiding unexpected situations and for identifying root causes of failures.

There are a variety of techniques for analysis, characterization and testing of materials. This session will focus on techniques and applications suitable for thin films, coating and engineered surfaces, with an emphasis on the recent development of the new in-situ and ex-situ capabilities, multi-technique approaches, automation, and AI assistance.

Presentation submissions in the following areas and topics are encouraged:

- Biological compatibility, toxicity, antimicrobial properties,
- Chemical composition, stability and interactions with environments,
- Lifetime estimation and life cycle assessment,
- Mechanical properties, super-hardness and stress evolution,
- Electric and magnetic properties,
- Microstructure, crystallinity, phase composition and porosity
- Nano/microscale phenomena, organized structures and nanocomposites,
- Optical properties, colors and emissivity,
- Surface and interfacial properties,
- Thermal properties, heat transfer and thermal stability, and
- Tribological properties, wear and adhesion.

This session, through a series of invited talks and contributed presentations, aims to address common questions and challenges faced by researchers, practitioners, and professionals who are in the SVC associated fields. It will provide new insights into the analysis, characterization and testing methods currently available, recently

developed and under development for thin films, coatings and engineered surfaces.

## TAC Co-Chairs:

**Matthew Linford**, *Brigham Young University*, mrlinford@chem.byu.edu

**Dehau Yang**, *Ebatco*, dyang@ebatco.com

**Oleg Zabeida**, *Polytechnique Montréal*, oleg.zabeida@polymtl.ca

## Coatings and Processes for Biomedical Applications

Coatings and surface treatments are essential to the advancement of both established and emerging biomedical technologies. Recent progress in the understanding of biological systems has accelerated the development of innovative coatings and surface engineering approaches. These technologies aim to improve osseointegration, enable neural interfaces, extend the operational lifespan of implanted devices, enhance biocompatibility, and reduce costs. These advances are not limited to implantable devices; they also support a wide range of applications such as energy harvesting for wearable health-monitoring systems, where flexibility and biocompatibility are essential.

To support continued innovation and address technical challenges in this rapidly evolving field, the Coatings and Processes for Biomedical Applications Technical Advisory Committee (TAC) welcomes paper submissions focused on coatings and surface modifications for biomedical applications. Submissions may cover material development, surface engineering techniques, characterization methods, performance evaluation, regulatory pathways, or emerging applications in the biomedical space.

Topics of interest include, but are not limited to:

- Orthopedic coatings and osseointegration,
- Cardiac rhythm management,
- Neurostimulation technologies,
- Cardiovascular interventions,
- Bio-corrosion resistance,
- Flexible and stretchable electronics,
- Biosensors, bioelectronics, and biochips,
- Antimicrobial surface treatments,
- Novel surface modification techniques (e.g., laser processing),
- High-throughput materials development,
- High-throughput and advanced characterization techniques,
- Regulatory approval strategies,
- Navigating evolving funding landscapes, and
- Market analysis and projections.

Submissions addressing other biomedically relevant topics related to coatings and surface engineering are also encouraged.

## TAC Co-Chairs:

**Jeff Hettinger**, *Rowan University*, hettinger@rowan.edu

**Natalie Page**, *Lila Sciences*, npage@lila.ai

**Gregory Taylor**, *Lawrence Livermore National Laboratory*, taylor275@llnl.gov

**Chinmay Trivedi**, *IHI Hauzer Techno Coating B.V.*, ctrivedi@hauzer.nl



# Call for Papers

Abstract Submission Deadline

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## Coatings for Energy Conversion and Related Processes

This session provides a comprehensive forum for experts and researchers to discuss the latest developments and technologies in the field of energy conversion coatings. These talks cover a wide area of applications, however with a core focus on energy conversion, storage, and management. This session brings industry, research, and academics together in order to facilitate the transfer of technology and share new and upcoming ideas and technologies for the improvement of sustainable living.

The Technical Advisory Committee (TAC) welcomes papers in the following areas:

### **Solar and Ambient Light Energy Conversion:**

- Thin-film and thin wafer as well as perovskite silicon tandem photovoltaics for space and terrestrial applications,
- Organic flexible photovoltaics (OPV),
- Semi-transparent photovoltaics,
- Coatings for improved performance.

### **Energy Harvesting:**

- RF harvesting, piezoelectrics, kinetic harvesting through body movement.

### **Energy Storage:**

- Thin flexible batteries,
- Flow batteries,
- Powder surface treatment (PVD, CVD, ALD) for Li-ion batteries, Na-batteries, or solid-state batteries (or other types),
- Super capacitors,
- Coatings for improved stability, Graphene and carbon nanotubes,
- Protective coatings for the prevention of e.g., hydrogen embrittlement.

### **Efficient Functional Coatings:**

- Radiative cooling,
- Hydrophobic and hydrophilic,
- Self-cleaning catalytic coatings,
- Development of coatings for reduction of precious metal,
- Anticorrosive coatings.

### **Other Traditional Subjects:**

- Smart windows,
- Selective radiators,
- Fuel cells and electrolyzers (low temperature, high temperature, advanced types),
- Large-scale energy conversion and storage.

### **TAC Co-Chairs:**

**Volker Sittering**, Fraunhofer IST, volker.sittering@ist.fraunhofer.de

**Roel Bosch**, IHI Hauzer Techno Coating B.V., RBosch@hauzer.nl

**Ric Shimshock**, MLD Technologies, LLC, ricshimshock4mld@aol.com

**Stefan Saager**, Fraunhofer FEP, stefan.saager@fep.fraunhofer.de

## Digital Transformation through Artificial Intelligence, Machine Learning, Simulation, and Data Science in the Thin Film Industry

This session explores the transformative role of digital technologies in the domain of industrial thin film deposition, particularly within vacuum-based coating technologies. The focus is on leveraging physics-informed simulation, artificial intelligence, and data-driven methods to enhance process understanding, optimization, and control.

The session will include, but is not limited to, the following topics:

- **Physics and Chemistry Simulations:** Use of high-fidelity, multi-physics models to predict key process parameters like erosion and deposition profiles, film composition, ion bombardment, gas and plasma distributions, and substrate heating.
- **Digital Twin Models:** Real-time capable simulations that integrate equipment layout and operating parameters to forecast coating performance and variability.
- **Machine Learning and Hybrid Approaches:** Applications of AI for predictive maintenance, parameter tuning, and anomaly detection. Emphasis on combining limited experimental data with physical modeling for higher generalizability (greybox models).
- **Data Infrastructure and Process Mining:** Tools and methods for systematic data acquisition, storage, accessibility, and intelligent analysis across the coating process chain.

This session is intended for all stakeholders involved in the digital transformation: OEMs and system integrators in the vacuum coating sector, coating service providers and production engineers, developers of coater components and diagnostic tools, as well as providers of simulation software and digital services, and data mining platform providers.

### **TAC Co-Chairs:**

**Holger Gerdes**, Fraunhofer IST, holger.gerdes@ist.fraunhofer.de

**Paul Nizenkov**, boltzplatz - numerical plasma dynamics GmbH, nizenkov@boltzplatz.eu

**Adam Obrusnik**, PlasmaSolve s.r.o., obrusnik@plasmasolve.com





# Call for Papers

Abstract Submission Deadline

Guaranteed Session Placement: January 1, 2026

## Electron Beam Processes

The Electron Beam Processes Technical Advisory Committee (TAC) is a spin-off from the International Conference on High-Powered Electron Beam Technology, originally founded by Dr. Robert Bakish in 1983. Today, high-power electron beam technology is well established for coating, melting, and welding. The EB TAC focus is the development of new coatings and coating processes using electron beam technology as well as new ebeam components, such as power supplies and beam control systems to enhance material properties. Of particular interest are improvements to equipment that enable new applications such as additive manufacturing of turbine engine components and medical implants.

The TAC supports the technical and technological exchange of knowledge to promote electron beam technology especially for industrial applications and is looking for papers on the topics listed below:

- Advances in high-rate PVD by electron beam evaporation (EB-PVD), such as for thermal barrier coatings,
- Electron beam processes for the production of novel materials,
- Additive manufacturing with electron beam,
- Thermal processes (welding, hardening, refining, drilling),
- Non-thermal processes (curing, sterilization, crosslinking, gas conversion),
- New applications for PVD by electron beam evaporation for photovoltaics, concentrated solar, energy production (fuel cells), energy storage (batteries), and high efficiency lighting,
- Modelling of electron beam sources, processes, and systems,
- New components in electron beam technology (guns, power supplies, vacuum systems, plasma assist),



- Emerging technologies (electron generation, beam guidance, etc.), and
- Related and new applications of electron beam processes.

### TAC Chair:

**Stefan Saager**, *Fraunhofer FEP*, [Stefan.Saager@fep.fraunhofer.de](mailto:Stefan.Saager@fep.fraunhofer.de)

### Assistant TAC Chairs:

**Luis Isern Arrom**, *Cranfield University*, [l.iser narrom@cranfield.ac.uk](mailto:l.iser narrom@cranfield.ac.uk)

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**Asim Mirza**, *boltzplatz-numerical plasma dynamics GmbH*, [mirza@boltzplatz.eu](mailto:mirza@boltzplatz.eu)

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**Chris Punshon**, *Cambridge Vacuum Engineering*, [cpunshon@camvaceng.com](mailto:cpunshon@camvaceng.com)

**Jason Van Sluytman**, *Honeywell*, [Jason.VanSluytman@Honeywell.com](mailto:Jason.VanSluytman@Honeywell.com)

## Emerging and Translational Technologies and Applications

This session welcomes presentations related to deposition and surface engineering technologies and applications that do not readily align with the classic session topics of the SVC TechCon program.

Modern market needs and application requirements continuously trigger innovation in the production and development of thin films and coatings. There are two trajectories that historically advance the field: (a) adjacent markets and applications expand by taking advantage of innovation in traditional technologies, and on the other side (b) established markets and applications that benefit from technical innovation in fields that previously were restricted to exterior "heritage" domains.

This session seeks to highlight new applications and markets that are enabled by advances in thin film and coating deposition, interface engineering, and surface processing. Contributed presentations may emphasize applications and markets, describe the role of enabling or cross-over technologies, as well as business topics such as market opportunity overviews, or new business and engineering concepts.

Market- and business-focused talks should generally relate to technology innovation within the SVC domain, and technology-focused talks should relate to a new market or application arena that SVC stakeholders should pay attention to.

### TAC Chair:

**Chris Stoessel**, [cstoessel@stoesselconsulting.net](mailto:cstoessel@stoesselconsulting.net)

### Assistant TAC Chairs:

**Lad Bardos**, *Uppsala University*, [ladislav.bardos@angstrom.uu.se](mailto:ladislav.bardos@angstrom.uu.se)

**Clark Bright**, *Bright Thin Film Solutions (3M retired)*, [brightcrewllc@gmail.com](mailto:brightcrewllc@gmail.com)

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**Jörg Neidhardt**, *Fraunhofer FEP*, [joerg.neidhardt@fep.fraunhofer.de](mailto:joerg.neidhardt@fep.fraunhofer.de)

**Frank Papa**, *GP Plasma*, [frank@gpplasma.com](mailto:frank@gpplasma.com)



# Call for Papers

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## High Power Impulse Magnetron Sputtering – HIPIMS

High power impulse magnetron sputtering (HIPIMS) has moved from lab scale to industry. Today, a significant number of industrial-scale HIPIMS processes exist as well as some commercial processes and products. Both fundamental understanding and application-oriented development are essential for exploiting the full potential of this technology.

The latest results from fundamental research, new and advanced approaches for simulation and modeling, and the combination of applied research from lab scale to industrial size cathodes and machines are the focus of this TAC. The session aims to provide a forum linking scientists, technologists, and industrialists to discuss all aspects of the HIPIMS technology.

Papers are solicited from, but not limited to, the following areas:

- Fundamental research on plasma, discharge, and coatings,
- Simulation and modeling of HIPIMS,
- New plasma sources and process modifications,
- Recent development in pulse generation and process and plasma diagnostics,
- Application oriented results: tribological, optical, medical, etc.,
- New coatings and products.

### TAC Co-Chairs:

Ralf Bandorf, *Fraunhofer IST*, ralf.bandorf@ist.fraunhofer.de

Arutun P. Ehasarian, *Sheffield Hallam University*, a.ehasarian@shu.ac.uk

Frank Papa, *GP Plasma*, frank@gpplasma.com

### Assistant TAC Chairs:

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Ian Haehnlein, *GP Plasma*, ihaehnlein@gpplasma.com

Ivan Shchelkanov, *Starfire Industries*, ishelkanov@starfireindustries.com

Brian Jurczyk, *Starfire Industries*, bjurczyk@starfireindustries.com

Ivan Fernandez, *Nano4Energy*, ivan.fernandez@nano4energy.eu

## Large Area Advanced Packaging and Integrated Photonics

The growing demand for high-performance computing, artificial intelligence, augmented/virtual reality, and advanced communication systems is driving unprecedented innovation in both large-area advanced packaging and integrated photonics. As the limits in transistor size and speed approach, the logical next steps to increase performance involve advancements in parallel computation and optimized communication between integrated components. To increase throughput, yields, thermal performance, and reduce cost, substantial focus and development effort have been put into large-area advanced packaging. As a foundational technology for these advancements, thin film deposition, a core area of expertise within the SVC community, plays a critical role in enabling the next generation of devices.

This session will explore the cutting-edge intersection of large-area manufacturing techniques for advanced packaging and integrated photonics. We encourage submissions that address challenges,

present novel solutions, and showcase recent advancements in manufacturing equipment, processes, materials, and architectures.

Topics of Interest Include, but are not limited to:

### Large Area Advanced Packaging:

- New process, equipment, performance, and yield requirements for advanced packaging,
- Large area packaging challenges and solutions,
- Wafer-level and panel-level packaging for integrated photonics,
- Advanced interconnects (e.g., through-silicon vias (TSVs) and through-glass vias (TGVs)), and
- Substrate technologies and interposer solutions for large-area integration.

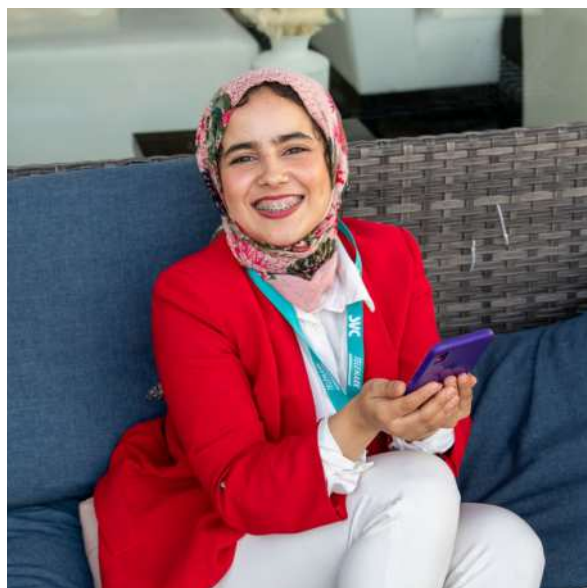
### Thin Film Deposition for Photonic Integration:

- Challenges and opportunities in scaling up integrated photonics manufacturing,
- Silicon photonics and other material platforms for integrated optics,
- Advanced dielectric and optical coatings for waveguides, filters, and resonators,
- Deposition of active photonic materials,
- The role of atomic layer deposition (ALD) and precise film control, and
- Large area physical vapor deposition (PVD) techniques for metallization and optical layers.

### Manufacturing and Process Control:

- High-throughput manufacturing methods,
- Process control and in-situ monitoring for thin film deposition, and
- Yield enhancement and cost reduction strategies for large area integration.

We encourage submissions from academic and industrial researchers, engineers, and scientists working on all aspects of large area



# Call for Papers

Abstract Submission Deadline

Guaranteed Session Placement: January 1, 2026

advanced packaging and integrated photonics, especially those with a focus on the underlying thin film and deposition processes. Join us to discuss the latest breakthroughs and future directions in this rapidly evolving field.

## TAC Chair:

Patrick Morse, Arizona Thin Film Research LLC, pmorse@azthinfilm.com

## Large Area Coatings

Scaling up to high volume manufacturing (HVM) has enabled tremendous cost reduction in the production of architectural and automotive glass, flat panel displays, solar cells, and roll-to-roll. Scalability comes with unique challenges. To operate a plant at HVM scales, the selected deposition method and related processes must be stable and reproducible over long operation time. Chemical and physical layer properties at the nanoscale must be precisely controlled across the meter scale. The obtained layers serve later as optical interference stacks, diffusion barriers, hard or lubricating coating for scratch resistance, transparent conductors, decorative coatings, solid electrodes or electrolytes.

The Large Area Coating Session gives you an opportunity to meet with and to learn from leading industry and academic experts in the field, present and discuss cutting edge developments in the broad field of coating applications, highlight the newest materials, methods, processes, review required equipment and software, and also discuss market trends. Session topics will cover:

- Understanding and controlling process at nanoscale with homogeneity up to meter-scale: Physics and chemistry of thin films and their interfaces, analytical equipment in-/ex-situ, in-/off-line,
- Human-assisting technologies: predicting and correcting materials and processes by physical simulations and machine learning,
- 2D and 3D coatings, processes, equipment, market trends and regulations for architectural, automotive, aerospace, and display applications,
- Manufacturing methods including surface preparation, etching, sputtering (magnetron, ion beam assisted), high-power impulse

sputtering (HiPIMS), evaporation, chemical vapor deposition (CVD), plasma enhanced CVD (PECVD), atomic layer deposition (ALD), plasma enhanced ALD (PEALD/PAALD), pulsed layer deposition (PLD), and

- Best practices: process engineering and transfer, quality control, upgrade of equipment, predictive maintenance, metrology, sustainability, testing and introducing new technologies, scale-up.

## TAC Chair:

Aneliia Wäckerlin, Glas Trösch, a.waeckerlin@glastroesch.ch

## Assistant TAC Chairs:

Brent Boyce, Guardian Industries Corp., bboyce@guardian.com

Marcus Frank, Bühler Group, marcus.frank@buhlergroup.com

Brian Holsclaw, Corning Inc., holsclawb@corning.com;

Ken Nauman, SCI/Bühler, knauman@sputteringcomponents.com

Kyle Schuberg, Gentex, kyle.schuberg@gentex.com

## Optical Coatings

Exciting developments in optical coatings are stimulated by the latest trends in optics, optoelectronics, photonics, optical data processing, mobile devices, displays, biomedical, sensors, energy and photovoltaics, architectural, aerospace, astronomical, and other technologies. The optical coatings session will bring together these different aspects for technical interchange in the field of optical interference coatings.

To build a well-rounded optical coatings session, abstracts are solicited to cover topics including coating design, development of practical manufacturing techniques, characterization methods, and a wide range of applications.

Specific areas may include:

- Novel optical coating materials, including metamaterials and metasurfaces,
- New fabrication processes for optical coatings,
- Novel optical interference design software and design techniques,
- Production issues common to the industry – including lessons learned or serendipitous discoveries that came from problems or disasters,
- Metrology of optical films (new instrumentation and software developments, inline or in-situ approaches, etc.),
- Real-time process monitoring and control with optical coating processes,
- Industrial scale-up,
- Preconditioning and cleaning issues; refurbishment approaches for optical coatings,
- Coatings on sapphire, polymers or other special substrate materials, coatings for complex 3-D optical devices,
- Applications in non-traditional wavelengths, from EUV to IR (e.g., IR thermal imaging),
- Optical coatings for mobile electronics (e.g., fingerprint sensors, cameras, displays, touchscreens, etc.),
- Optical coatings for wearable technology, including AR/VR,
- Coatings for LIDAR/driverless vehicles,
- Optical coatings for biomedical applications,





# Call for Papers

**Abstract Submission Deadline**

**Guaranteed Session Placement: January 1, 2026**

- Optical coatings for energy control and solar power,
- Optical coatings for laser applications, including femto-second lasers,
- Optical coatings for display and integrated photonic device applications,
- Optical coatings for astronomy and aerospace, and
- Optical coatings for quantum optics.

## **TAC Co-Chairs:**

**Jay Anzellotti**, IDEX Health & Science, [janzellotti@idexcorp.com](mailto:janzellotti@idexcorp.com)

**Vivek Gupta**, Meta/Facebook, [guptavivek23@meta.com](mailto:guptavivek23@meta.com)

**Nadja Felde**, Fraunhofer IOF, [nadja.felde@iof.fraunhofer.de](mailto:nadja.felde@iof.fraunhofer.de)

**Rajiv Pethe**, Vital Chemicals USA, [Rajiv.Pethe@VitalChemUSA.com](mailto:Rajiv.Pethe@VitalChemUSA.com)

## **Organic and Perovskite Electronics**

Organic and organometal-halide perovskite materials have emerged in recent years as important alternatives to traditional inorganic materials for optoelectronic devices. These novel materials provide huge potential benefits such as reduced-cost processing, compatibility with nonconforming and flexible substrates, and tunable color properties, allowing for a range of interesting applications. Organic light-emitting diodes (OLEDs) have become widespread commercially in displays, with improvements in brightness and contrast ratios, as well as interesting form factors such as thin and flexible devices. Perovskite-based photovoltaic devices are attracting considerable interest as a potentially disruptive energy technology, with power conversion efficiencies similar to or in excess of those seen in current panels but with simpler processing requirements.

Like any interesting and fast-growing field of technology, the achievements and benefits in the field of organic/organometallic electronics and optoelectronics don't come without their own challenges. The inherent properties of these materials make them challenging to deposit using a vapor-phase technology:

- The materials are typically prone to decomposition at relatively lower temperatures which has led to development and use of evaporation sources with a complex set of features and temperature control mechanisms.
- Additionally, some of the active films in the device architecture require precise rate control algorithms to achieve the required host-dopant compositions, which in turn also require critical hardware considerations.
- Materials are mostly sensitive to moisture and oxygen, so the protection from these elements during and post-fabrication is critical.

These factors require a deep understanding of material properties, study and treatment of substrates and interfacial properties of layers, considerations of the bottlenecks towards device fabrication, encapsulation techniques and thin-film deposition system solutions, and combined they result in an exciting process in this field of study.

This session welcomes papers addressing materials and processing challenges related to these technologies involving vacuum and vapor-based techniques such as evaporation, sputtering and ALD.

We encourage submissions on practical approach towards fabrication of organic devices and emphasizing key parameters to consider during the design and building steps. Discussion on challenges and opportunities in scaling up processes for industrial production will be integral to the session.

The session will include discussions on research on the following device types:

- Organic and perovskite light-emitting diodes (OLEDs and PLEDs),
- Organic and perovskite photovoltaics (OPV and perovskite PV),
- Hybrid inorganic/perovskite tandem photovoltaics,
- Organic thin film transistors (OTFTs and OFETs),
- Organic memory devices and spintronics,
- Organic sensors,
- Flexible and wearable electronics,
- Building-integrated photovoltaics (BIPV).

## **TAC Co-Chairs:**

**Mike Miller**, Angstrom Engineering, [mmiller@angstromengineering.com](mailto:mmiller@angstromengineering.com)

**John Naylor**, Kurt J. Lesker Company, [johnn@lesker.com](mailto:johnn@lesker.com)

**Paul Sullivan**, Kurt J. Lesker Company, [paulsu@lesker.com](mailto:paulsu@lesker.com)

**Akhil Vohra**, Angstrom Engineering, [avohra@angstromengineering.com](mailto:avohra@angstromengineering.com)

## **Photonically-Induced Transformations of Thin Films and Surfaces**

Lasers, flash lamps, and other highly energetic illumination sources enable rapid thermal processing of surfaces and thin films for scaled, low-cost materials and technologies in areas of high economic, societal and environmental impact. Realization of surface-se-



# Call for Papers

**Abstract Submission Deadline**

**Guaranteed Session Placement: January 1, 2026**

lective rapid thermal annealing coupled with high-throughput are especially attractive features of photonic materials engineering.

This session provides a forum to discuss pioneering technological applications bound by the common thread of photonically-based methods for surface and thin film annealing, materials synthesis and surface patterning.

We welcome submissions addressing the following key areas:

- Surface selective annealing of bulk materials and thin films with light typically in the <100 ms range,
- Wafer based and large area in-line applications,
- Laser and flash-lamp-based conversion and synthesis of high quality, crystalline materials (transparent and conductive layers, energy harvesting, sensor material, low-power computing, multi-functional 'More than Moore' electronic device technology, large area photocatalysts and smart materials for window applications),
- Rapid patterning of microelectronic devices without photolithography (sensors, medical implants, and hardware for experiments and IoT devices),
- Control of nano-micro scale surface morphology (cell adhesion, directed fluid flow),
- Photonically-induced chemical activation of surfaces for antipathogenic, anti-smudge, (de)wetting properties, and
- Novel photonic illumination processes and devices.

## **TAC Co-Chairs:**

**Christopher Muratore**, *University of Dayton*, Dayton, cmuratore1@udayton.edu

**Jörg Neidhardt**, *Fraunhofer FEP*, joerg.neidhardt@fep.fraunhofer.de

## **Plasma Processing and Diagnostics**

This session welcomes contributions focused on the development, understanding, and application of plasma-based techniques for thin film coatings and surface modification. The scope includes both established and emerging approaches for plasma-enhanced deposition and treatment, emphasizing the underlying physical

and chemical processes, diagnostics, and modeling strategies that enable performance optimization and scalability in industrial environments.

Topics of interest include:

- Physical vapor deposition (PVD) including magnetron sputter-deposition in conventional and non-conventional arrangements,
- Plasma-enhanced chemical vapor deposition (PECVD) both on process and application side,
- Plasma-based etching in the semiconductor industry and other applications,
- Development of novel plasma sources for materials processing (e.g., mid-pressure, atmospheric pressure, nanosecond-pulsing, micro plasmas, etc.),
- Hybrid systems and hybrid processes integrating different plasma technologies,
- Atmospheric-pressure plasma processing, including dielectric-barrier discharges and plasma jets,
- Plasma diagnostics for understanding plasma dynamics and plasma-material interaction,
- Modelling and simulation of plasma and plasma-surface interactions, and
- Novel plasma processing methods such as treatment of nanoparticles, nanomaterials, and liquids, as well as plasma catalysis.

This session is particularly relevant for industry practitioners, researchers, and scientists:

- Working on the design, scale-up, and implementation of advanced plasma sources and coating technologies,
- Developing novel plasma-based processes or deposition techniques, and
- Engaged in the experimental diagnostics of laboratory or industrial plasma systems.

By fostering a technical exchange among these communities, the session aims to advance both the fundamental science and practical applications of plasma processing in thin film technologies.

## **TAC Co-Chairs:**

**Hana Baránková**, *Uppsala University*, hana.barankova@angstrom.uu.se

**Kristína Tomanková**, *PlasmaSolve s.r.o.*, tomankova@plasmasolve.com

**Oleg Zabeida**, *Polytechnique Montréal*, oleg.zabeida@polymtl.ca

## **Assistant TAC Chairs:**

**Lenka Zajíčková**, *Central European Institute of Technology & Masaryk University*, lenkaz@physics.muni.cz

**Craig Outten**, coutten@verizon.net

## **Process Monitoring, Control, and Automation**

As the fourth industrial revolution transforms manufacturing, the demand for intelligent, automated vacuum processing systems is rapidly growing. This session explores the forefront of automation technologies reshaping thin film deposition, plasma processing, and surface engineering.

Achieving high repeatability, reproducibility, and yield levels requires robust solutions for real-time process monitoring and control.





# Call for Papers

**Abstract Submission Deadline**

**Guaranteed Session Placement: January 1, 2026**

While the benefits - such as increased throughput, reduced material and energy waste, and lower operational costs - are well recognized, the path to reliable automation remains complex. Challenges include sensor and actuator integration in harsh environments, data fusion across different systems, the development of adaptive, autonomous control algorithms and cybersecurity.

This session focuses on practical solutions while highlighting the latest advances in:

- Embedded real-time sensors and actuators,
- Cyber-physical monitoring and control systems,
- Digital twins for process control,
- Automation and digitalization,
- AI and machine learning for predictive and adaptive automation,
- Robotic systems for material handling and process execution, and
- Autonomous materials discovery and optimization platforms.

We invite contributions from researchers, engineers, and solution providers that address these challenges through innovative technologies, case studies, or system-level implementations. Presentations that demonstrate practical applications, integration strategies, or lessons learned from deployment are especially encouraged.

Join us to explore how automation and digitalization enable the next generation of intelligent vacuum processing systems.

#### **TAC Chair:**

**Martynas Audronis**, *Nova Fabrica Ltd.*, martynas@novafabrica.biz

#### **TAC Co-Chairs:**

**Gun Hwan Lee**, *Korea Institute of Materials Science*, ghlee@kims.re.kr

**Edmund Schuengel**, *VAT Vakuumventile AG*, E.Schuengel@vat.ch

## **Protective, Tribological, and Decorative Coatings**

The Protective, Tribological and Decorative Coatings Technical Advisory Committee (TAC) encourages speakers to submit presentations dealing with design, research, development, applications, and production of coatings deposited with vacuum processes, the characterization of their properties related to wear, friction, and corrosion, and to assess their protection of the receiving components, such as cutting and forming tools, engine components, as well as decorative parts.

The use of such coatings is typically driven by performance requirements, reduction of life-cycle cost, environmental consideration, and durable cosmetic and aesthetic designs. These end-user motivations lead to dedicated coating and technology developments, vacuum coating equipment concepts, new testing procedures and methods, and production quality standards. Therefore, successful coating solutions in the marketplace require strong co-operation between market specialists, universities, suppliers, manufacturers, and end-users.

The TAC encourages speakers to present on the subjects of new emerging technologies. Developing and scaling up from laboratory to high volume production at high production yields is also of high interest of the participants in this session.

Today's global landscape is changing rapidly and will drive many new application developments that will include new coatings on new applications. Environmental pressure on CO<sub>2</sub> emissions and electroplating as well as fast moving communication technologies are well known examples of such change. Electrification of transportation and moving away from the combustion engine are daily news.

Topics of interest for this session include, but are not limited to:

#### **Applications:**

- Hydrogen economy related components,
- Coatings for high-performance engines, including hydrogen and e-fuels combustion,
- PVD and CVD coatings for cutting, forming and molding tools,
- Coatings for the reduction of friction and exhaust gas emissions,
- Low- and high-temperature coatings for aerospace applications,
- Decorative components and large area prefabricated sheets,
- Corrosion protective coatings (e.g. Zn:Al) on large-area surfaces, and
- Electroplating Replacements by vacuum deposited coatings.

#### **Development:**

- Super-lubricity coatings,
- Corrosion protection,
- New colors,
- Hydrogen embrittlement barriers,
- Testing and evaluation of coating performance,
- Scale-up of vacuum coating processes for industrial demands,
- Failure analysis of coatings,
- Assessment, control and management of residual mechanical stress,
- Duplex coatings and thin-on-thick systems,
- Modelling approaches to performance analysis and prediction.

#### **Production Related:**

- Reliability and life of coated parts and systems,



# Call for Papers

Abstract Submission Deadline

Guaranteed Session Placement: January 1, 2026

- Upscaling from laboratory to production,
- Scrap rates from percentages to ppm levels, and
- Integration of Industry 4.0 in vacuum coating plants.

## TAC Co-Chairs:

**Martin Engels**, *Ionbond*, martin.engels@ionbond.com

**Anas Ghailane**, *Avaluxe Coating Technologies*, AGhailane@avaluxe-technologies.de

**Jolanta Klemberg-Sapieha**, *Polytechnique Montréal*, jsapieha@polymtl.ca

**Christoph Schiffers**, *CemeCon*, christoph.schiffers@cemecon.de

**Christian Stein**, *Fraunhofer IST*, christian.stein@ist.fraunhofer.de

## Quantum Computing

Quantum computing promises to harness the power of quantum mechanics to solve problems unfathomable for classical computers to resolve. Quantum computing, once a theoretical dream, is now experiencing an unprecedented surge of progress. Driven by intense research efforts, substantial investments, and collaboration across academia and industry, quantum computing technology is rapidly approaching reality with a promise to revolutionize fields ranging from materials science and drug discovery to finance and artificial intelligence. The quantum computing session aims to explore the current state and prospects of this transformative technology.

The session welcomes researchers, academics, and industry leaders to explore the cutting edge of quantum computing and share their insights on its remarkable emergence. We seek submissions on a range of topics, including:

### Quantum Hardware and Software:

- Progress and challenges in superconducting qubits, trapped ion, topological, and other platforms,

- Novel device architectures and fabrication techniques,
- Algorithmic breakthroughs, development frameworks, and their practical applications,
- Error correction and fault-tolerance techniques, and
- Benchmarking and performance analysis.

### Scalability Challenges:

- Bridging the gap between quantum and classical systems, and
- Architectures for large-scale quantum computing.

### Applications:

- Emerging applications in materials science, drug discovery, and encryption,
- Quantum-enhanced machine learning and artificial intelligence, and
- Financial modeling and risk analysis.

### Impact:

- The ethical implications and impact of quantum computing on society,
- Educational initiatives and talent development for the quantum workforce, and
- Commercialization and industry trends in quantum technology.

## TAC Co-Chairs:

**Mike Miller**, *Angstrom Engineering*, mmiller@angstromengineering.com

**John Naylor**, *Kurt J. Lesker Company*, johnn@lesker.com

**Akhil Vohra**, *Angstrom Engineering*, avohra@angstromengineering.com

## Thin Film Contributions for the Hydrogen Economy

This session is focused on the role of physical vapor deposition (PVD) and related thin film and surface engineering technologies in the emerging hydrogen economy. This session aims to bring together experts, researchers, and industry professionals from around the world to share their knowledge and insights on the application of PVD thin film coating techniques in advancing the use of hydrogen as a clean energy source.

Participants will have the opportunity to present their research findings, case studies, and innovative approaches in utilizing PVD thin film coating technology for various aspects of the hydrogen economy. The topics of interest include but are not limited to: PVD coatings for hydrogen storage materials, PVD methods for fuel cell catalyst preparation, thin film coating-based hydrogen production and purification techniques, and advancements in thin film coating processes for the manufacturing of hydrogen-related devices and components. Specific industrial implementation of solutions is of critical importance to the SVC's international stakeholder base.

The SVC TechCon provides a unique platform for scientists, engineers, and industry leaders to collaborate, exchange ideas, and explore the potential of thin film coating technology in shaping the future of the hydrogen economy. We encourage interested individuals and organizations to submit their abstracts showcasing their contributions to this rapidly evolving field. Together, let





# Call for Papers

Abstract Submission Deadline

Guaranteed Session Placement: January 1, 2026

us uncover the transformative capabilities of thin film coating technology and pave the way for a sustainable and efficient hydrogen-powered future.

## TAC Co-Chairs:

**Ralf Bandorf**, *Fraunhofer IST*, ralf.bandorf@ist.fraunhofer.de

**Herbert Gabriel**, *PVT Plasma und Vakuum Technik GmbH*, h.gabriel@pvtvacuum.de

**Lucia Mendizabal**, *Tekniker*, lucia.mendizabal@tekniker.es

## WebTech Roll-to-Roll Technologies and Innovation

WebTech is the forum for flexible web and roll-to-roll (R2R) processing at the SVC. It is the podium to present new achievements in processing of flexible substrates such as polymer, textile or glass. The session scope encompasses materials, manufacturing techniques, products, applications, market developments and economical aspects of this versatile high-volume manufacturing method.

The WebTech TechCon session typically features presentations on materials, deposition processes, manufacturing techniques (including "best practices"), use cases / application examples, market analysis and business perspectives in all areas related to R2R processing.

Some pertinent topic focus areas are:

- Substrate materials and technologies (polymer, flexible glass, fabrics and non-wovens, etc.),
- Deposition sources and deposition modalities specific to R2R processing,
- Inline process diagnostics and control (particularly for non-transparent coatings),
- Modeling and simulation of R2R processes,
- Examples and approaches to utilize artificial intelligence (AI), machine learning, and other "Industry 4.0" modalities in R2R,
- Aspects of progressing R2R coatings from concept demonstration to commercial scale,
- Coatings under harsh conditions,
- Interfacing with non-vacuum/atmospheric pre- and post-processing, including cleaning,
- Low-cost/high-performance barrier coatings, and,
- R2R processing for electronics, semiconductor and energy conversion applications.

## TAC Chair:

**Chris Stoessel**, *cstoessel@stoesselconsulting.net*

## Assistant TAC Chairs:

**Hazel Assender**, *University of Oxford (Begbroke)*, hazel.assender@materials.ox.ac.uk

**Simon Cheung**, *Emerson & Renwick*, s.cheung@eandr.com

**Corinne D'Ambrosio**, *NPB Technology Group*, corinne@npbtech.com

**Wolfgang Decker**, *Kurt J. Lesker Company*, wolfgangd@lesker.com

**Andy Jack**, *Emerson & Renwick*, a.jack@eandr.com

**Liz Josephson**, *Intellivation*, ljosephson@intellivation.com

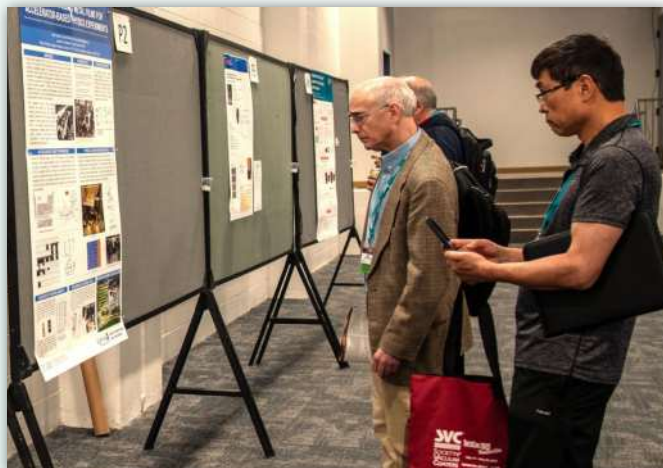
**Jaime Li**, *Eastman Chemical Co.*, Jaime.Li@eastman.com

**Robert Malay**, *Intellivation*, rmalay@intellivation.com

**Michael Mücke**, *Bühler/Leybold Optics*, michael.muecke@buhlergroup.com

**Joe Papalia**, *Deposition Technology Innovations*, jpapalia@dtifilms.com

**Jerry Wu**, *Enpack Composite*, wufujw@163.com



## Technical Poster Session

Poster Presentations serve as an important component of the Technical Program by providing a format for extended discussions of the results in a casual environment.

The Program Committee encourages poster presentations on all topics covered in the Call for Papers. A \$200 cash award for the Best Poster will be offered. **Submit an abstract for your presentation in the Poster Session before February 14, 2026.**



# Conference Calendar

Start planning now for your trip to TechCon 2026

SUNDAY April 26	MONDAY April 27	TUESDAY April 28	WEDNESDAY April 29	THURSDAY April 30
<div>Education Program</div> <div>30+ Tutorial Courses</div>				
<div>TechCon Registration Counter Hours:</div> <div>Sunday, April 267:00 a.m. – 10:00 a.m. and 4:00 p.m. – 7:00 p.m.</div> <div>Monday, April 277:00 a.m. – 6:00 p.m.</div> <div>Tuesday, April 287:00 a.m. – 5:30 p.m.</div> <div>Wednesday, April 297:00 a.m. – 5:00 p.m.</div> <div>Thursday, April 307:00 a.m. – 12:00 p.m.</div>		<div>Technical Program</div> <div>Exhibit</div> <div>Exhibit Open Hours</div> <div>11 a.m. – 6 p.m. Tuesday</div> <div>10 a.m. – 4 p.m. Wednesday</div>		
<div>Conference Registration Open</div> <div>Long Beach Convention Center</div>				

## CONFERENCE REGISTRATION FEES\*

**Back AGAIN for 2026!**

*All paid conference registrations will include one free SVC in-person tutorial at the TechCon and a 30% discount on additional courses.*

### Attendee Registration

(through March 1, 2026/after March 1, 2026)

<input type="checkbox"/> Full Conference .....	\$995.00/\$1095.00
<input type="checkbox"/> Media Personnel .....	\$0.00
<input type="checkbox"/> Student Conference .....	\$400.00/\$500.00
<input type="checkbox"/> Young Members Group Conference .....	\$400.00/\$500.00
<input type="checkbox"/> Exhibit Visitor Only .....	FREE

*SVC Membership is included with all paid conference registrations.*

*If not attending the conference, renew your membership for 2026 or join SVC on-line*

### Exhibitor Registration

(through March 1, 2026/after March 1, 2026)

<input type="checkbox"/> Exhibitor Booth Personnel and Manufacturer's Representative .....	\$0.00
<input type="checkbox"/> Exhibitor with Full Conference Registration .....	\$995.00/\$1095.00

### Special Events at the TechCon

<input type="checkbox"/> SVC Foundation Virtual 5K Run .....	\$40.00
<input type="checkbox"/> Awards Ceremony and Welcome Reception (Tuesday Evening) .....	No Fee
<input type="checkbox"/> SVC Foundation Casino Night Fundraiser (Monday Evening) .....	1 Ticket Included with Full Conference Registration (additional tickets \$75.00)
<input type="checkbox"/> Farewell Social (Thursday Evening) .....	No Fee

\* Pricing contingent on making hotel accommodations at the Hyatt Regency Long Beach/Hyatt Centric Long Beach

**2026 SVC TechCon Exhibit Administrator: Jacque Matanis, [jacque.matanis@svc.org](mailto:jacque.matanis@svc.org), +1-505-897-7743**

**2026 SVC TechCon Exhibit Committee Co-Chairs:**

Jason Hrebik, Kurt J. Lesker Company, [jasonh@lesker.com](mailto:jasonh@lesker.com)  
Steve Simons, Manitou Systems Inc., [ssimons@manitousys.com](mailto:ssimons@manitousys.com)



# Networking

## Opportunities at the 2026 TechCon



### Make Connections

The TechCon is packed with networking events designed to connect vacuum coating and surface engineering professionals with the global SVC community. Each technical and social networking event provides a different forum for invaluable face-to-face interactions and the opportunity to collaborate with technical experts.



### Technology Forum Breakfasts

Vacuum coating technology spans multiple applications and processes. Join a discussion group focused on a topic that's important to you. Enjoy the conversation over breakfast before the start of the technical program Monday, Tuesday and Thursday. Late afternoon sessions are currently under development for Monday and Thursday.

### To all of our SVC Stakeholders:

The **Technology Forum Breakfasts** have emerged as one of the most significant networking events at the TechCon. These breakfasts, held from 7:00 a.m. to 8:30 a.m. during the TechCon are "loosely" organized around a specific topic where we provide a moderator, a continental breakfast, plenty of seating, and an opportunity for free form discussion to take place. In the TFBs problems are solved, new ideas are vetted, relationships are made and rekindled; all in the spirit of camaraderie that has made the SVC the most unique technical conference in our field. This year we are expanding the program even further with early evening sessions under development for Monday, April 27 and Thursday, April 30. Please be sure to check the daily schedule (the TFBs are offered on Monday, Tuesday, and Thursday of the TechCon) to find those topics that interest you! And remember, we are always looking for new topics as well as moderators to get the discussion going in the mornings. Good luck and have fun!

— Frank Zimone, Executive Director



### Exhibit Networking

Enjoy more opportunities than ever to visit the Exhibit Hall.

- Welcome Lunch and Cocktail Hour are two separate events held in the exhibit hall during the first day of the technical exhibition.

- Poster Session ■ Beer Blast

### Additional Networking:

- Technical Program Keynote Presentations
- Exhibitor Innovator Showcase
- Colloquium Round Table Discussions

### SVC Foundation Networking Events

#### CASINO NIGHT

Come and join us for an evening of fun and networking, all to help a great cause at the Annual SVC Foundation Casino Night on Monday, April 27, 2026. *Additional Casino Night tickets can be purchased on-line during TechCon registration or at the TechCon. This is a wonderful opportunity to entertain friends and customers who may not be registered for the conference.*

#### RUN FOR A CAUSE!

Register for the Annual 5K Fun Run and support the scholarship efforts of the SVC Foundation. Bib pickup is tentatively scheduled for 5:30 a.m. on Wednesday, April 29, 2026.



**Back by Popular Demand:** FREE Technical Conference Admission for April 28<sup>th</sup> & 29<sup>th</sup>  
Two-day free passes will be heavily promoted to drive in foot traffic to the SVC Exhibition from local industry and adjacent expositions.



# Networking

## Opportunities at the 2026 TechCon



### 2026 SVC TechCon Farewell Social

Date: **Thursday, April 30, 2026**

#### *Everyone is invited to attend*

The **Farewell Social** will be the last networking event of the TechCon and will commemorate what promises to be the most successful TechCon yet! Come join us as we celebrate our Young Members and all the new connections that were made after a densely packed four day program.

### Job Board

There will be a Job Board in the exhibit hall adjacent to the poster session. Open positions as well as resumes of those looking for a position can be posted. Messages for interested parties, either potential employer or employee, can also be posted on the board.



### 2026 SVC Awards Ceremony and Welcome Reception

Date: **Tuesday, April 28, 2026**

#### *Everyone is invited to attend*

The **Awards Ceremony** will introduce and recognize the Nathaniel Sugarman Memorial Award recipient, SVC Fellow-Mentor Award recipients, and Sponsored Student awardees.

The **Welcome Reception** is a popular networking event at the TechCon. It offers a relaxed venue to meet friends and colleagues and provides the opportunity to make new connections. In 2026 the Welcome Reception will be broken into a lunch at 1:00 p.m. and a cocktail hour at 5:00 p.m.; all held in the exhibit hall.



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# Education Program

## FROM THE EDUCATION DIRECTOR

Certainly the 2026 TechCon in Long Beach feels like an eternity from now, but you can rest assured that planning is well underway! Since we all said goodbye in Nashville, we spent time assessing the program and thinking about new courses to offer. We learned that our offerings in Nashville continued to be well subscribed, with an average course enrollment that was comparable to the last few years. Several of our courses did quite well. For example, “Troubleshooting for Thin Film Deposition Processes” (C-212), taught by Mike Miller; “Diamond Like Carbon Coatings-From Basics to Industrial Realization” (C-320), taught by Lars Haubold, Christian Stein, and George Savva; “Application of Reactive Sputtering” (C-338), taught by Ralf Bandorf and Holger Gerdes; “Deposition Process Simulation” (M-250) taught by Dennis Barton; and “Materials for PVD Applications” (C-110) taught by Christos Pernagidis and Anas Ghailane all had outstanding attendance. The latter was a new course offering this year, which makes its large enrollment great to see. As for new courses in Long Beach, we are actively developing courses on topics that will help our members develop the skills needed to excel in our craft. And while the ink is not yet dry on our Long Beach program, we expect to exceed the 30 courses that were offered in Nashville. Stay tuned!



Since some of you reading this might have missed us this year, we remind you that most of our courses are offered in our “on-site” program, where the instructors come to teach their course in the comfort of your own facilities. Alternatively, we have a portfolio of “on demand” educational videos as well. So, if you have new employees who need training or “seasoned” ones who need a refresher, contact us to see how we can help meet your needs.

Whether you want to add to your skills or refresh your old ones, understand the technology or the science behind it, or look into emerging science and technology, I’m sure we have a course that satisfies your needs. To see a listing of all the courses and offering platforms, please visit the SVC website and follow the “education” link.

If you have some questions, please ask. We are always happy to help!

— Scott Walton, SVC Director of Education  
[scott.walton@svc.org](mailto:scott.walton@svc.org)



**All paid TechCon conference registrants receive one complimentary seat in any tutorial and a 30% discount for any additional tutorials purchased.**

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# About Our Venue

## Long Beach Convention Center, Long Beach, California, USA

The 2026 TechCon will be held in the “Center” of Southern California... the Long Beach Convention & Entertainment Center. Located in the heart of Long Beach, the Convention Center is an urban waterfront destination. The building has an impressive architectural design, modern enhancements, and eye-catching décor. The glass dome of the Atrium provides illumination by sunlight in daytime and by colorful LED lights in the evening. The exhibit hall and meetings rooms are perfectly suited for the TechCon and our emphasis on networking and technical exchange. Overlooking bustling Rainbow Harbor, Queen-sway Bay, and Pacific Ocean beachfront, the Center sits in the middle of Long Beach’s downtown waterfront, within walking distance to first-class accommodations, shopping, dining, attractions, sightseeing along picturesque bays, and 5 1/2 miles of sandy beach. Long Beach is convenient to Los Angeles International, Long Beach, and Orange County Airports.

Room blocks and discounted rates have been organized for TechCon attendees. These accommodations are available at:

- \$309 USD (double occupancy) - Hyatt Regency Long Beach Hotel, 200 S. Pine Avenue, Long Beach, CA 90802

Located on a premier waterfront spot in the heart of downtown, Hyatt Regency Long Beach is the only 4 Diamond Award-winning Long Beach, California, hotel with all 531 rooms and suites offering ocean or harbor views. The Hyatt Regency Long Beach is connected directly to the Long Beach Convention Center and will house the majority of the TechCon’s social events as well as meeting space/classrooms for the TechCon TFB and tutorial programs.

- \$319 USD (double occupancy) - Hyatt Centric The Pike Long Beach Hotel, 285 Bay St, Long Beach, CA 9080

Hyatt Centric The Pike Long Beach pays homage to the fascinating history of The Pike, an amusement park founded in 1902 that was a thriving destination for its bathhouse, wooden roller coaster, arcades and exciting family fun until 1979. This luxe hotel possesses a rooftop pool and bar with 360° panoramic views, places you in the middle of the neighborhood action so you can explore Long Beach’s bustling shopping areas, non-stop nightlife and the rolling surf of California’s Pacific Ocean. The hotel is a two-minute walk from the Long Beach Convention Center.

**Important note!** Discounted room rates are available **exclusively** on the dedicated hotel pages that will be accessible on the SVC 2026 TechCon registration site. **The SVC does not engage with any third-party companies to provide hotel accommodations.** Be aware that in all cases, organizations representing themselves as affiliated with the SVC when it comes to hotel accommodations for the TechCon are likely to have malicious motives leading to a nefarious outcome if you rely on them.

