



# TECHCON

★ 2 0 1 7 ★

## 60TH ANNUAL TECHNICAL CONFERENCE

RHODE ISLAND CONVENTION CENTER | PROVIDENCE, RHODE ISLAND, USA | APRIL 29 - MAY 4, 2017

Featuring the Symposium

**COATINGS FOR HEALTHCARE,  
BIOMETRIC MONITORING, AND  
BIO-INTERFACES**

**Education Program:** April 29 – May 4, 2017

**Technical Program:** May 1 – May 4, 2017

**Exhibit:** May 2 – May 3, 2017

INTERACTIVE NETWORKING ★ FORUMS ★ MEET THE EXPERTS ★ TECHNICAL DISCUSSION GROUPS

View all conference details, real-time technical program schedule,  
and full list of exhibiting companies at

[WWW.SVC.ORG/2017TECHCON](http://WWW.SVC.ORG/2017TECHCON)

Featuring the Symposium

## COATINGS FOR HEALTHCARE, BIOMETRIC MONITORING, AND BIO-INTERFACES

### Advancing Human Health through Engineered Surfaces, Wearables, Sensor Integration, and Pathogen Control

Engineered surfaces are critical enablers for effective modern health care, a sector that is expected to grow globally to \$9.3 Trillion in 2018. This Symposium highlights the contribution of the Coatings and Surface Engineering community to this important field.

The Symposium features Keynote and Invited talks from experts both from the health care practitioner as well as the technology provider perspective, and contributed talks and posters round out the Symposium session. The traditional technology sessions also address the Symposium topic with their specific expertise, but will also provide a forum for current topics of interest in their respective industry spaces. The technical program is complemented by the industry's most extensive vendor exhibit, a comprehensive tutorial course program and ample networking opportunities.

**The SVC TechCon facilitates the forum where researchers, industry practitioners, decision makers and newcomers to the field can connect, exchange ideas, and get questions answered.**

### 2017 SVC TECHCON PROGRAM COMMITTEE

- Program Chair, Ralf Bandorf, Fraunhofer Institute for Surface Engineering and Thin Films IST, Germany
- Assistant Program Chair, Manuela Junghänel, Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology FEP, Germany
- Past Program Chair, Chris Stoessel, Eastman Chemical Company
- Technical Director, Carl Lampert, Star Science



View the Technical Program Schedule: [WWW.SVC.ORG/2017TECHCON](http://WWW.SVC.ORG/2017TECHCON)

# THE 2017 SVC TECHCON DELIVERS WHAT YOU WANT MOST

6 days of technical  
expertise, solutions &  
know-how

Network with a global community of  
vacuum coating professionals

Enjoy a special  
evening at the  
historic Biltmore  
Hotel

  
**MAKE  
CONNECTIONS**

Visit the  
largest exhibit  
dedicated to  
vacuum coating  
technologies

Gain leading-edge  
information during  
the 4-day technical  
program.

Benefit from the  
technology-rich  
northeast US location.

Choose from  
education offerings  
for every skill level

## WHO SHOULD ATTEND?

**Industry Professionals** involved in vacuum equipment, parts, supplies, and coating materials and products

**Engineers and Scientists** engaged in design, development, production, and use of vacuum coatings in various applications

**Technicians** responsible for the operation and maintenance of vacuum equipment, supplies and materials

**Consultants** providing vacuum coating processing solutions to clients

**Academics** sharing cutting-edge surface engineering research to build collaborations with industry

**Students** looking to advance their careers and build industrial connections

**SATURDAY, APRIL 29, 2017**

Education Program Full Day Tutorials

**SUNDAY, APRIL 30, 2017**

Education Program Full Day Tutorials

**MONDAY, MAY 1, 2017**

Technology Forum Breakfast

Education Program Full and Half Day Tutorials

Donald M. Mattox Tutorial Presentation

*Highlighting SVC's 60th Anniversary*

Technical Program with Special Keynote Presentation

Young Members Group Social

Awards Ceremony and Welcome Reception

**TUESDAY, MAY 2, 2017**

Technology Forum Breakfast

Education Program Full and Half Day Tutorials

Technical Program with Special Keynote Presentation

EXHIBIT HALL OPEN

Symposium Forum

Meet the Experts Corner

Oral Poster Presentations and Poster Session

HEURÉKA! Session

Exhibit Reception

Networking Event at the Biltmore Hotel *ticket required*

**WEDNESDAY, MAY 3, 2017**

TAC Breakfast Meeting

Education Program Full and Half Day Tutorials

Technical Program with Special Keynote Presentation

EXHIBIT HALL OPEN

SVC Business Meeting

Vendor Innovators Showcase

Meet the Experts Corner

Beer Blast in the Exhibit Hall

**THURSDAY, MAY 4, 2017**

Technology Forum Breakfast

Education Program Half Day Tutorials

Technical Program with Special Keynote Presentation

# TUTORIAL COURSE ROSTER

All tutorial courses are full day unless designated  
AM or PM

**Full Day Courses:** 8:30 am – 4:30 pm  
**Half Day Courses:** AM 8:30 am – 12:00 pm  
PM 1:00 pm – 4:30 pm

Tutorial course fees include entrance admission to the Welcome Reception on May 1, and the Exhibit Hall on May 2&3, including the Exhibit Reception and the Beer Blast.

*This preliminary roster is subject to change.*

## SATURDAY, APRIL 29

- C-103 Introduction to Physical Vapor Deposition (PVD) Processes *S. Ismat Shah*
- C-205 Introduction to Optical Coating Design *Robert Sargent*
- V-207 Practical Aspects of Vacuum Technology: Operation and Maintenance of Production Vacuum Systems  
*Robert Langley*

## SUNDAY, APRIL 30

- C-208 Sputter Deposition in Manufacturing *David Glocker*
- C-322 Characterization of Thin Films *Tom Christensen*
- C-217 Practical Production of Optical Thin Films *Ron Willey*
- V-204 Vacuum Systems, Materials, and Operation *John O'Hanlon*

## MONDAY, MAY 1

- C-203 Sputter Deposition 2-Day Tutorial Course **Monday and Tuesday** *Joe Greene*
- C-323 High Power Impulse Magnetron Sputtering *Arutiun P. Eghisarian & André Anders*
- C-341 Processing on Flexible Glass – Challenges and Opportunities **PM** *Manuela Junghänel*

## TUESDAY, MAY 2

- V-208 Basic Analysis of Mass Spectrometer Spectra *Robert Langley*
- C-210 Introduction to Plasma Processing Technology **AM** *Hana Baránková & Ladislav Bárdoš*
- C-337 ITO and Alternative TCO: From Fundamentals to Controlling Properties *Clark Bright*

## WEDNESDAY, MAY 3

- C-311 Thin Film Growth and Microstructure Evolution *Joe Greene*
- C-333 Practice and Applications of High Power Impulse Magnetron Sputtering (HIPIMS) **AM**  
*Ralf Bandorf & Arutiun P. Eghisarian*
- C-329 Properties and Applications of Tribological Coatings *Allan Matthews & Gary Doll*
- C-306 Non-Conventional Plasma Sources and Methods in Processing Technology **PM**  
*Hana Baránková & Ladislav Bárdoš*
- M-102 Introduction to Ellipsometry **AM** *James Hilfiker*

## THURSDAY, MAY 4

- C-320 Diamond Like Carbon Coatings – from Basics to Industrial Realization **AM**  
*Thomas Schuelke & George Savva*
- C-326 Manufacture of Precision Evaporative Optical Coatings **AM** *Jim Oliver*
- C-316 Introduction to Atomic Layer Deposition (ALD) Processes, Chemistries, and Applications **AM** *Brian Willis*



[WWW.SVC.ORG/2017EDUCATION](http://WWW.SVC.ORG/2017EDUCATION)





## TECHCON FAST FACTS

**April 29 – May 4, 2017**

Rhode Island Convention Center  
Providence, Rhode Island

### Exhibit

Tuesday, May 2, 2017  
10:00 am – 6:00 pm

Wednesday, May 3, 2017  
10:00 am – 5:00 pm

## RESERVE A BOOTH TODAY!

Prime booths will sell quickly. Booths are assigned on a first-come, space-available basis.

**10' x 10' space: \$2,595**

**For more information contact:**

**CHRISTINA SANDOVAL**  
*Global Exhibition Manager*

[christina.sandoval@asminternational.org](mailto:christina.sandoval@asminternational.org)  
(440) 338-5422

Registration Options	Member		Non-Member	
	Through March 31	After March 31	Through March 31	After March 31
Full Conference	\$625	\$735	\$760	\$865
Presenter	\$520	\$645	\$630	\$750
Student	\$80		\$140	
Student Presenter	\$55		\$125	
*Young Member	\$265		\$340	
*Young Member Presenter	\$185		\$245	
<b>Exhibit Visitor</b>	<b>FREE</b>		<b>FREE</b>	

*\*Age 35 or younger during 2017.*

Conference registration includes entry to the entire four-day Technical Program, Exhibit Hall and all related activities, Welcome Reception, Technology Forum Breakfasts, Meet the Experts Corner, Industry-Government Forum.

Exhibit Visitors receive entrance to the two-day Exhibit and all related activities, including access to the technical presentations made inside the exhibit hall. Lunch tickets not included.

Cancellation Policy: Only conference registration and tutorial course cancellations received on or before March 31, 2017 will be refunded. Refunds will be made after receipt of written notice, less a \$25 service fee for the TechCon and each individual tutorial course. No refunds will be made after March 31.

# MAKE CONNECTIONS

## 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.

## TAC BREAKFAST

The SVC Technology Advisory Committees (TAC) shape the future of the SVC TechCon Technical Program. Join colleagues with a special interest in your vacuum coating technology to discuss next year's TechCon technology focus and direction.

## MEET THE EXPERTS CORNER

Bridging the gap between vacuum coating problems and solutions! A panel of experts helps you problem-solve challenges with equipment, applications or processes.

## INDUSTRY-GOVERNMENT FORUM

Learn about industrial and government initiatives impacting the future of the vacuum coating industry. Hear from a panel of individuals directly involved in implementing these programs and engage in fresh discussions about future technologies and strategies.

## AWARDS CEREMONY AND WELCOME RECEPTION

Celebrate the individuals who make a significant impact on the success of the SVC and the vacuum coating community. The Awards Ceremony will be held on Monday, May 1, immediately followed by the Welcome Reception for an evening of casual networking.

## YOUNG MEMBERS GROUP AND SVC MENTORS SOCIAL

Students and Young Members (35 and younger) are invited to attend this event on May 1 during the lunch break, designed to offer one-on-one discussions with volunteer mentors from industry and academia within various sectors of the vacuum coating community.

## TUESDAY EVENING NETWORKING EVENT

Experience the grandeur of the historic Biltmore Hotel in Providence during this special networking dinner. Ticket purchase required.

## EXHIBIT NETWORKING

Enjoy more opportunities than ever to visit the Exhibit Hall. Technical Program Keynote Presentations, Lunch, Exhibit Reception, Specialty Desserts, Heuréka! Session, Vendor Innovators Showcase, Poster Session, and Beer Blast.

## SVC FOUNDATION NETWORKING EVENTS

### FUN FOR A CAUSE!

Register for the Annual 5K Fun Run and Golf Tournament and support the Foundation's scholarship efforts.

Networking Event details are published on the SVC TechCon website



[WWW.SVC.ORG/2017TECHCON](http://WWW.SVC.ORG/2017TECHCON)



Society of Vacuum Coaters  
9639 Kinsman Road  
Materials Park, OH 44073-0002

### **60th Annual Technical Conference**

Rhode Island Convention Center

Providence, Rhode Island

Learn more at **[SVC.org](http://SVC.org)**