



Science and Technology of Materials, Interfaces, and Processing Southern California Chapter

Fall 2017

Quarterly Newsletter

Special points of interest:

- Free Workshop on UHV by Agilent Oct 3, 2017
- SCCAVS Expo Oct. 3
FREE ATTENDANCE
- Speaker Dinner on Grounding by Lyncole November 7, 2017
- Science Educator's Workshop application deadline Oct 2, 2017

Contact Us:

Corinne D'Ambrosio,
Chair

corinne@sccavs.org

Jeffrey Lince, Treasurer

jeff@sccavs.org

Jim Garner, Secretary

jim@sccavs.org

Members at Large:

Tom Anderson

Greg Mills

Todd Ohaks

Fred Praudisch

Rick Seboldt

Richard Stamberg

Matt Tharpe

General Inquiries:

info@sccavs.org

FREE Workshop on Achieving Ultra High Vacuum

Contributed By Corinne D'Ambrosio and Matt Tharpe

The Southern California Chapter of the American Vacuum Society is holding an annual Equipment Exhibition, Short Course Program, and Student Poster Session at the Holiday Inn Buena Park on Tuesday, October 3, 2017. In conjunction with the program will be a FREE workshop on **"Achieving Ultra High Vacuum: Technology, Best Practices and Troubleshooting"**, brought to you by Agilent Technologies.

The workshop is FREE to attend and will be held from 10:00AM to 12:00PM at the Holiday Inn Hotel and Conference Center located at 7000 Beach Boulevard, Buena Park, CA 90620.

Topics covered will include:

- ⇒ Vacuum Fundamentals
- ⇒ Total System Gas Load
- ⇒ Measuring Vacuum
- ⇒ Vacuum Pump Selection
- ⇒ System Pumping Speed
- ⇒ Practical Applications
- ⇒ Materials & Fabrication

The workshop will include some topics not typically covered in general vacuum courses, including ion and sublimation pumps for UHV, building and troubleshooting UHV systems, and effective bakeout to achieve UHV conditions.

The speaker is Walter B. van Hemert, Senior Training Consultant for Agilent Technologies since 2010.

Mr. van Hemert has an extensive engineering background, receiving his degree in Mechanical Engineering from University of California San Jose, with a career in Vacuum Technology including Applications Engineering and Manufacturing Engineering spanning more than four decades.

He is a specialist in vacuum leak detection and ion pump application and technique for Ultra High Vacuum applications. As a long-time AVS member, Mr. van Hemert offers this FREE session at our 2017 SCCAVS Exhibition to all attendees.



Agilent Technologies

For More Information Visit: <http://www.sccavs.org/symposium2017.html>



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Science Educator's Workshop in Tampa, FL- October 30-31, 2017

AVS has conducted a two-day in-service workshop on low-pressure experiments and modeling for middle and high school science teachers from the United States and Canada since 1990. The SCCAVS sponsors a number of local teachers each year to attend the workshop from schools here in Southern California. The next workshop will be held on October 30-31 in Tampa, Florida during the AVS 64th International Symposium & Equipment Exhibition.



Vacuum System Awarded to
Workshop Attendee's School

The workshop is accredited for CEU's and is aligned with the National Science and Mathematics standards. The program is divided into two parts: (1) lectures on the underlying science and mathematical calculations and (2) hands-on experience in which a group of teachers perform experiments and develop models under the guidance of an instructor team. Upon completion of the workshop, teachers receive a vacuum system for their school identical to ones used in the workshop.

The deadline for application is OCTOBER 2, 2017.

Apply Online:

<https://www.avs.org/Form/SEW-Application>

**SOUTHERN CALIFORNIA
CHAPTER OF THE AVS :
THE SCIENCE &
TECHNOLOGY OF
MATERIALS,
INTERFACES, AND
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Mailing Address:
Southern California Chapter AVS
616 Hartford Avenue
Huntington Beach, CA 92648
info@sccavs.org

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Upcoming Events

SCCAVS Equipment
Exhibition, Short Course
Program, and Student
Poster Session
October 2-4, 2017
Holiday Inn
Buena Park, CA



AVS 64th Annual Symposium and Exhibition
Oct 29—Nov 3, 2017
Tampa Convention Center
Tampa, FL



Chapter Activities

"Grounding of High Vacuum Systems" November 7, 2017

On Tuesday, November 7th the SCCAVS will host a speaker dinner on Grounding High Vacuum Systems. The event will include a meet and greet followed by steak dinner and presentation. The presentation will discuss effective grounding to mitigate hazards created by extreme conditions in high vacuum systems. These include: effects of electrical transient, surge, static charges and EMI. Design fundamentals will be given to help you solve problems and specify grounding systems. Relevant building and electrical codes will also be discussed.

Our speaker will be Larry Labayen, Senior Applications Engineer for Lyncole Div of VFC. He has more than 20 years of experience in the telecommunications and aerospace industries. His expertise is in grounding system modeling and designs, on-site grounding system survey installation, and testing. Lyncole is a leading engineering firm specializing in grounding systems.

Date: Tuesday, November 7th, 2017

Location: Sizzler Restaurant, 2880 Sepulveda Blvd, Torrance, CA 90505.
½ mile west of Crenshaw Blvd., Phone: 310-539-1617

Schedule:

6:30 Meet & Greet
7:00 Dinner
7:30 Presentation
8:30 End

Cost: Signature Value Menu 6oz Tri Tip Steak (which also includes unlimited salad bar): \$25. Includes a fountain drink. *Menu price includes presentation. Advance payment is required.*

Reservations: Send a check payable to SCCAVS along with Registration Form (found on next page) so that it is received by the deadline of Oct 31, 2017.



LARRY LABAYEN
SENIOR APPLICATIONS ENGINEER



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Continued from Page 1

Lyncole Speaker Dinner (Cont'd)

Registration Form

Deadline: Oct. 31, 2017. Payment by check only (No Credit Cards or POs accepted).

Send to: SCCAVS, 616 Hartford Ave, Huntington Beach, CA 92648

For additional information, contact: info@sccavs.org

Check enclosed, payable to SCCAVS (Make selection below)

General Registration (\$25) Student (\$15)

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2017 Elmer Carvey Scholarship

Contributed By Jeff Lince

The Southern California Chapter of the AVS Science and Technology Society (SCCAVS) currently administers a scholarship program for undergraduate students planning a career in the physical sciences. It is the **2017 Elmer Carvey Memorial Scholarship** -- established in honor of Elmer Carvey, an active member of the SCCAVS from 1964 until 1982.

This Scholarship is valid for undergraduate studies at any public four-year college in California, i.e. California State University or University of California. The stipend is \$1,500 and may be used for tuition. The award is for one year, but may be renewed. Applications are accepted from students in physics, chemistry, materials science and engineering. Applicants should be planning research in areas of interest to the SCCAVS, including surface and thin film science, nanotechnology, the understanding of materials properties, and the development of new materials and devices. (Biological sciences are generally not covered by this Scholarship unless the student's study area is interdisciplinary and involves areas of interest listed above.)

The 2017 Elmer Carvey Scholarship winners are **Ronnie Garcia of UCLA** and **Catrina Wilson of UCSB**. More information about their research and interests to follow in our December newsletter.

To apply for next year's scholarship contact jeff@sccavs.org

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September/October 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
24	25	26	27	28	29	30
1	2 <i>Short Courses</i>	3 <i>SCCAVS Expo</i>	4 <i>Short Courses</i>	5 ◦ <i>Full Moon</i>	6	7
8	9	10	11	12	13	14
15	16	17	18	19 • <i>New Moon</i>	20	21
22	23	24 <i>Chapter Meeting</i>	25	26	27	28
29	30 <i>SEW</i>	31 <i>SEW</i>				

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of Materials, Interfaces, and Processing
Southern California Chapter

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2017 SCCAVS Short Course Registration Still Open

October 2-4, 2017,

**AVS Southern California Chapter Short Course Program
 Holiday Inn Buena Park Hotel & Conference Center
 7000 Beach Blvd.
 Buena Park, CA 90620**

**Class Hours – 8:30 a.m.-5:00 p.m.
 Breaks: 10:00 a.m. and 2:30 p.m.
 Lunch: 12:00-1:00 p.m. *Included***

REGISTRATION DEADLINE: September 29, 2017

<https://www2.avs.org/shortcourses/schedule/sccavs/regform.html>

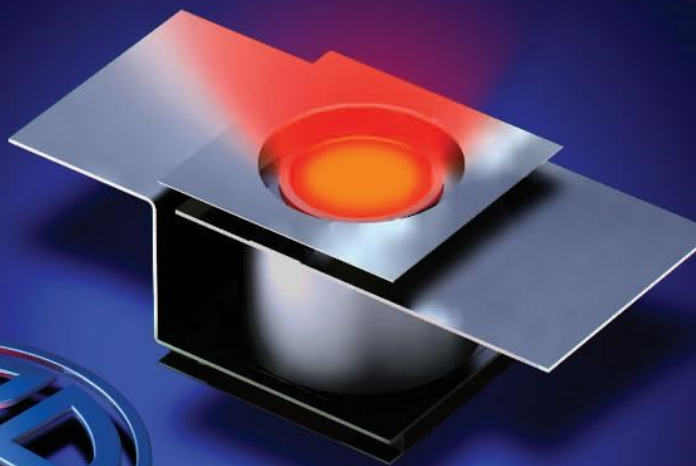
****FOR COURSE AVAILABILITY CONTACT:
 Heather Korff, 530-896-0477, heather@avs.org**

<i>Monday, October 2</i>	<i>Tuesday, October 3</i>	<i>Wednesday, October 4</i>
Fundamentals of Vacuum Technology (Day 1)	Fundamentals of Vacuum Technology (Day 2)	N/A
Operation and Maintenance of Vacuum Pump-	Operation and Maintenance of Vacuum	Vacuum Leak Detection

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