



AVS SPECIALIZED TRAINING COURSES

3 Courses ❖ June 6-7, 2011 ❖ Burlington, MA

Overview of Applied Vacuum Technology

Course Objectives:

- Be introduced to the fundamental concepts of vacuum technology.
- Learn about common vacuum system hardware and instrumentation, including pumps, gauges, flanges, valves, and feedthroughs.
- Understand applications and processes involving vacuum technology.
- Benefit from a "just right" two-day course (when you don't have the time or the need to attend a four- or five-day introductory course).

Dates: June 6-7, 2011 (M-T)

Instructor: Bob Childs, Consultant/Retired Vacuum Engineer

Cost: \$950 Regular/\$300 Student

Analysis of Residual Gas Analyzer Spectra

Course Objectives:

- Learn how a residual gas analyzer (RGA) works .
- Learn how to interpret RGA mass spectra.

Date: June 6, 2011 (M)

Instructor: Bob Langley, Oak Ridge Scientific Consultants

Cost: \$575 Regular/\$150 Student

Atomic Layer Deposition

Course Objectives:

- Learn the fundamentals of ALD based on sequential self-limiting surface reactions.
- Understand the important advantages of ALD and comparison with CVD.
- Learn about ideal and non-ideal ALD and thermal and plasma-enhanced ALD.
- Understand how ALD surface chemistry and growth are studied using in situ probes.
- Learn how ALD can be utilized for thin film nanoengineering.
- Understand the many current and potential applications of ALD.

Date: June 7, 2011 (T)

Instructors: Steve George, Professor, Dept. of Chemistry & Biochemistry and Dept. of Chemical & Biological Engineering, University of Colorado at Boulder

Cost: \$575 Regular/\$150 Student

Courses by Request

AVS is pleased to announce "Courses By Request." Through an online form, you tell us which course(s) you need, the time frame in which you need them offered, how many people (other than yourself) are interested in the same course(s), and your traveling restrictions. As requests are received, the Committee will work to identify additional interested participants, and schedule the course(s) at a facility and date that will meet everyone's needs. To request an AVS Short Course just complete the "Courses By Request" online form, <http://www.avs.org/education/byrequest.aspx>. If you have any questions about AVS Short Courses send us a note at courses@avs.org or call us between 8:30 a.m. and 4:30 p.m. Pacific time at 530-896-0477.

AVS Onsite Training Program

The AVS onsite training program provides training in vacuum technology, materials and materials characterization, surface science, and thin films and processing. Courses range from basic to advanced levels and are taught by nationally and internationally recognized professionals. We offer a diversity of subjects and the flexibility of customized course programs presented at a facility you select. For more details visit www.avs.org.

Travel and Hotel Information

All short courses will be held at the Burlington Marriott Hotel, Route 128 and 3A (One Mall Road), 16 miles from downtown Boston; the hotel is a 20 minute drive from Boston. A block of rooms has been set aside at a rate of \$159 (plus tax). To receive this special rate, please mention "AVS" when calling 1-888-236-2427, or 1-781-229-6565 by May 18, 2007 .

Symposium and Exhibition

The AVS New England Chapter Annual Symposium & Exhibition will be held in conjunction with the AVS Short Course Program from June 6-7, 2011, at the Burlington Marriott Hotel, Burlington, Massachusetts. For further information, please contact Peter Somssich, at 978-750-1633 or peter.somssich@sylvania.com. Please register and find more information at www.avsnewengland.org.

For complete course descriptions and secure registration visit <http://www.avs.org/education.schedule.aspx>.