



AVS Membership

Benefits & Activities



Science and Technology
of Materials, Interfaces, and Processing

About AVS

As a member-driven, interdisciplinary, professional Society, AVS supports networking among academic, industrial, government, and consulting professionals involved in a variety of disciplines related to the basic science, technology development, and commercialization of materials, interfaces, and processing. Each year, AVS hosts local and international meetings, publishes four journals, honors members through its awards and recognition program, provides training, and offers career services.

Founded in 1953, AVS is organized into technical divisions and groups that encompass a broad range of established as well as emerging science and technology areas. There are also regional chapters, international chapters and affiliates, and student chapters that promote communication and networking for professionals and students within a geographical region. AVS is comprised of approximately 4,000 members worldwide. AVS is a member society of the American Institute of Physics.

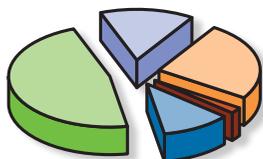
Diversity

AVS is committed to diversity and inclusiveness in our membership, as well as in all activities, events, programs, and services. Scientific and engineering innovation requires bringing together both diverse ideas and people from varied backgrounds who may have different world views and ways of solving problems. AVS works to include and engage members of all groups in our professional Society and seeks to remove obstacles to their professional growth and advancement. Through our actions at the international, national, and local levels, we strive to promote inclusion in academic, industrial and government institutions for both current and future members of our organization.

Learn more about AVS and how to take advantage of the following benefits and activities:

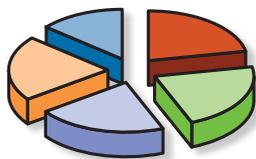
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AVS MEMBER PROFILE



AVS Membership

- 47% Academia
- 25% Industry
- 15% Gov't/Research
- 11% Other
- 2% Not For Profit



AVS Membership Disciplines

- 22% Engineering
- 22% Materials Science
- 21% Physics
- 21% Other
- 14% Chemistry



www.avs.org



Choosing AVS

Grow Personally & Professionally

Members choose AVS not only because it is important to their professional development, but for the networking opportunities it provides, as well as a high level of camaraderie they enjoy at our meetings and events. The interdisciplinary nature of AVS offers the opportunity for very unique collaborations in many different areas of science and technology. ► www.avs.org/membership

Membership Categories

Member - Professionals, corporate executives, scientists, professors who have a Bachelor's Degree or higher from a regionally accredited college or university and six full-time years of applicable employment experience in fields of interest to AVS.

Technical Specialist - Technician, Process Engineer, Design Engineer who has a minimum of two years full-time employment or experience as a technical specialist within fields of interest to AVS or has a minimum of a Bachelor's Degree or equivalent in a relevant science or engineering field. May also work in a teaching laboratory where support is given to science teachers, lecturers and students.

Early Career - Professionals working in a field of interest to AVS and are within five years of receiving their highest degree.

Student - A full time college student, either undergraduate or graduate. Please note there is a five year cap on eligibility.

Emerging Country - Residents of developing countries (listed on the member website) may be eligible for this discount, based on country of residency. Annual qualification is required.

Additional member categories include Emeritus, Honorary, and Fellow.

Corporate Membership

Corporate Membership offers you and your organization the opportunity to increase your interactions with scientists and engineers worldwide. Vote, receive priority booth selection, free job postings, a variety of discounts, display literature at all AVS events, and more.



Accessing Membership Benefits

Logging in to MyAVS, the members-only portal, from the AVS Website, provides access to the membership directory, publications and technical library content, product and registration discounts, and more. You can join, renew, and update your membership information in this portal.

Develop Your Leadership Skills

Members can participate in up to four Divisions or one Technical Group, each of which is focused around a major topical area. Members may also participate in Regional Chapters, International Chapters and Affiliates, and Student Chapters.

► www.avs.org/About/Chapters-Divisions-Groups

Divisions

- Advanced Surface Engineering
- Applied Surface Science
- Biomaterial Interfaces
- Electronic Materials and Processing
- Magnetic Interfaces and Nanostructures
- Nanometer-Scale Science and Technology
- Plasma Science and Technology
- Surface Science
- Thin Film
- Vacuum Technology

Technical Groups

- Manufacturing Science and Technology
- MEMS and NEMS

Chapters

Chapters serve members and their communities through a variety of activities such as symposia, monthly dinner meetings, short course programs, student awards, and industry tours.

Regional Chapters

- Delaware Valley
- Florida
- Hudson Mohawk
- Michigan
- Mid-Atlantic
- Minnesota
- New England
- New Mexico
- Northern California
- Ohio
- Pacific Northwest
- Prairie
- Rocky Mountain
- Southern California
- Tennessee Valley
- Texas
- Western Pennsylvania

Committees

Make a difference in the science and technology community, and consider joining an AVS Committee. Opportunities to assist with everything from preserving AVS History to recommending financial investments to forming governmental policy, legislation, and programs that have a direct bearing on the well-being of the science community and AVS in particular are available. For a complete list of AVS committees and to find some that may interest you, check out: ► <http://www.avs.org/About/Roster#standing>

International Chapters & Affiliates

- Israel Vacuum Society
- St. Lawrence AVS
- Taiwan AVS

Student Chapters

- College of Nanoscale Science & Engineering
- Dallas Metroplex
- Northwestern University
- Rensselaer Polytechnic Institute
- UCLA
- University of Alabama at Tuscaloosa
- University of Central Florida
- University of Florida
- University of Illinois at Urbana-Champaign
- University of Washington

Technical Structure



Benefits & Opportunities

Lead or volunteer on a Local, National, or International Committee or Division

Serve as an AVS Director or Officer

Start a new Student Chapter

Enroll in four Technical Divisions and one Technical Group

Enroll in Your Geographical Chapter and One Additional Chapter

Receive Membership Directory Access and a Membership Card

Enjoy Discounts on Group Term Life, Group 10-Year Level-Term Life, Group Disability Income and Group Personal Accident, and Club Quarters Hotels

“Becoming an officer in an AVS division has been a tremendous benefit to my professional life. I am surrounded by inspirational and committed colleagues, and I am in closer contact with the latest developments in my field and the researchers making them happen.”

Brian Borovsky, St. Olaf College
on volunteering

Publications Library

Broaden & Share Your Knowledge

AVS membership entitles you to free online access to all AVS publications which are highly cited, topically diverse, easy to access, and rapidly disseminated worldwide. Use the AVS Publications Library as your portal to access all four AVS journals.

► www.avs.org/publications-library

JVST A - *Journal of Vacuum Science and Technology A: Vacuums, Surfaces, and Films*
■ www.jvsta.org

JVST A publishes original research on thin films, plasmas, interfaces and surfaces. **JVST A** focuses on fundamental understanding and using this understanding to advance the state-of-the-art in various technological applications. **JVST** journals publish research articles, research letters, review articles, perspectives, shop notes, brief reports and commentaries.



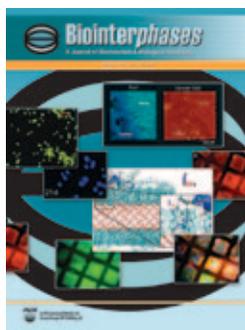
JVST B - *Journal of Vacuum Science and Technology B: Nanotechnology & Microelectronics*
■ www.jvstb.org

JVST B publishes original research that emphasizes processing, measurement and phenomena associated with micrometer and nanometer structures and devices. Processing may include vacuum processing, plasma processing and microlithography among others, while measurement refers to a wide range of materials and device characterization methods for understanding the physics and chemistry of submicron and nanometer structures and devices.



Biointerphases - *A Journal of Biomaterials and Biological Interfaces*
■ www.biointerphases.org

Biointerphases is an interdisciplinary, peer-reviewed journal featuring all aspects of quantitative soft matter interfaces: chemistry, physics, engineering, theory and modeling. Reviews, opinionated essays and original articles are published rapidly.



Surface Science Spectra - *An International Journal and Database Devoted to Archiving Spectra from Surfaces & Interfaces*
■ www.avspublications.org/sss

Surface Science Spectra publishes reference, comparison, and technical spectra representing a range of spectra including XPS, AES and SIMS. **SSS** features over 780 different materials with downloadable data, as well as, focused-topic submissions which contribute to the completeness of the archival database by including collections of spectra on materials of particular interest to the community.



Benefits & Opportunities

FREE Online Access to all AVS publications with AVS Membership

Submit your manuscript where it will be highly cited and rapidly disseminated worldwide

Receive discounts on Individual Subscriptions to AIP Journals

Receive AVS Newsletters, including *Beneath the AVS Surface* and the *President's Message*

Receive *Physics Today*

Newsletter & Other Publications

AVS members also receive three e-newsletters and the science news publication *Physics Today*.

- **AVS Interactions** - Symposium and exhibit news
- **AVS President's Message** - Society business and member news
- **Beneath the AVS Surface** - Member, scientific and technical news and highlights

Stay Current

The AVS Technical Library contains a complete index of complimentary technical resources available to AVS Members. Use the Technical Library to stay current on events you have missed, the latest Recommended Practices, or use it as a research or teaching tool. ► <https://www.avs.org/Technical-Library/Technical-Library>

Presentations on Demand

A collection of audio recordings (with the synchronized PowerPoint presentations) from the AVS annual meetings as well as other AVS sponsored conferences.

AVS International Symposia Virtual Programs

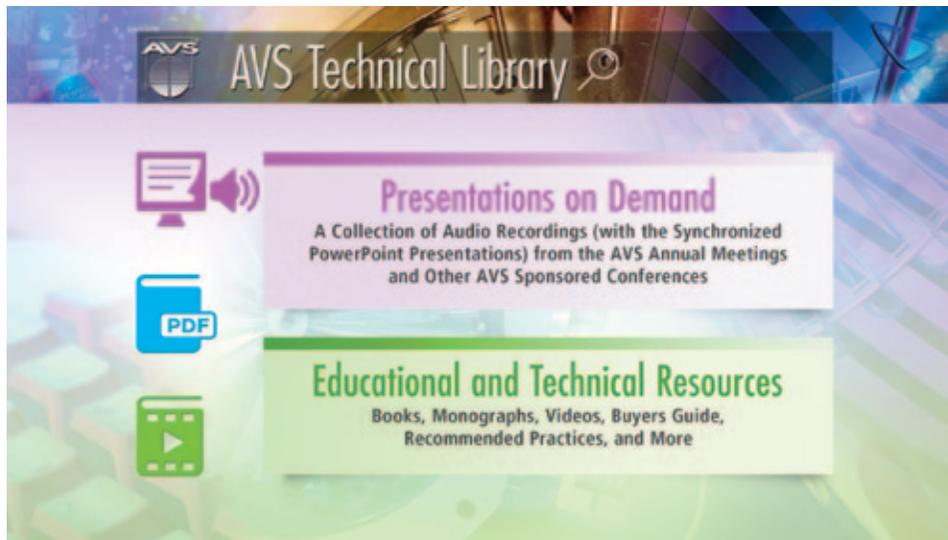
A collection of technical programs and abstracts from the AVS International Symposium & Equipment Exhibition.

Educational and Technical Resources

Books, Monographs, Videos, Buyers Guide, Recommended Practices, and more.

AVS Connects

AVS Connects is a searchable database for prospective purchasers of scientific and technical equipment and services to find company and product information, including web and e-mail links. AVS members have access to the Technical Resources section offering utilities such as conversion calculators, reference materials, and periodic tables.



“As a Professor, I find this a great way to share cutting edge research on a variety of topics with both students and colleagues on the fly. Given the use of electronic classrooms today, this has been a seamless partnership to a live lecture experience. The quality of the talks and the ability to tailor your selection, when you want to view it is a great feature.”

James Fitz-Gerald, University of Virginia
on using the Technical Library

Technical Library

Benefits & Opportunities

Free access to all resources in the Technical Library

No time to attend meetings?
Check out our Presentations on Demand to stay current

Use the Technical Library resources as a research or classroom teaching tool

Technical Meetings

Benefits & Opportunities

Attend AVS meetings at discounted registration rates

Submit an abstract to make an oral or poster presentation

Become active in a Division or Technical Group and participate on their Program Committee

Champion a Focus Topic or Topical Conference

Volunteer to moderate a session

Take advantage of networking opportunities to enhance your professional development and career growth

Expand Your Network

AVS promotes sharing of research and development findings in the science and technology community through the annual AVS International Symposium and Exhibition and numerous topical conferences held throughout the year.

► www.avs.org/meetings-exhibits

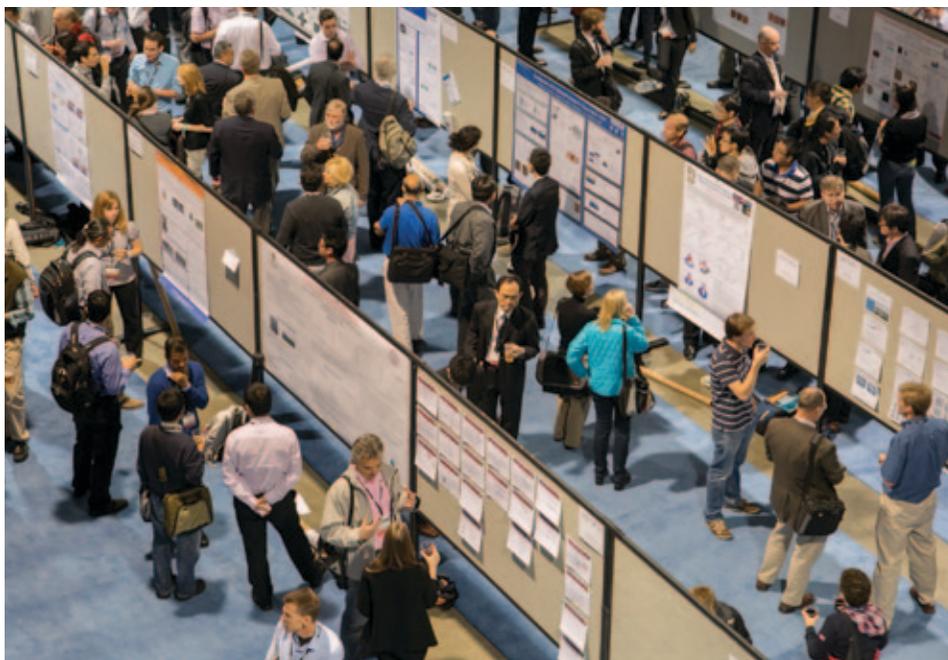
Technical Meetings

The **International Symposium and Exhibition** addresses cutting edge issues associated with materials, processing and interfaces in both the research and manufacturing communities. The weeklong Symposium fosters a multidisciplinary environment that cuts across traditional boundaries between disciplines, featuring papers from AVS Technical Divisions, Groups, Focus Topics on emerging technologies and more.

An extensive Exhibition of related equipment, tools, materials, supplies, chemicals, services, consulting, technical literature, and new technologies are showcased during the week. As an AVS member you will receive reduced registration fees.

Endorsed and Sponsored Topical Conferences

AVS also endorses and sponsors many topical conferences each year. These conferences with a specialized focus are held worldwide. Members are encouraged to organize a topical conference in their area of expertise. AVS staff can provide a full range of fee-based conference management services and promotional assistance.



“AVS has been a technical home where I can meet and get updated on the great research my friends and colleagues do. The contacts and activities AVS has provided for me have been crucial to the success of my career. The AVS technical program allows me to see the best work from a wide range of subjects unlike at other meetings where I find my interactions very focused on a small technical area.”

Angus Rockett, University of Illinois, Urbana-Champaign
on attending an AVS Technical Meeting

Enhance Your Career

AVS organizes science outreach activities that inform and instruct teachers, students, and the general public of the science and technology interests of AVS. The Society also provides a variety of professional outreach and career service opportunities to AVS Members, with special focus on Student Members.

► www.avs.org/Education-Outreach

Educational Outreach

The Society conducts various local and national educational programs for engineers, scientists, and technicians and supports numerous outreach activities aimed at teacher enhancement and student science awareness and education. Through programs like the Science Educators Workshop, AVS is able to share the collective individual expertise of its members and educate practicing professionals, students, schools, and science teachers.

Short Courses

Short courses provide training for technicians, scientists, and engineers in three broad categories: Vacuum and Equipment Technology; Materials and Interface Characterization; and Materials Processing. Courses are scheduled regionally throughout the year or can be customized and taught onsite at your facility. AVS members are entitled to reduced registration fees.

Student Activities

Did you know that 25% of AVS membership is comprised of students? Students represent the future of AVS and can take advantage of many opportunities and services, including student chapters, awards, career services, publications and technical libraries, short course and more.

► www.avs.org/Membership/Student-Activities

Professional Outreach

AVS hosts several outreach events and activities aimed at individual career growth. Outreach activities have covered everything from federal funding, to writer's workshops, to work-life satisfaction.

Career Services

Connect with skilled job seekers and top companies in physics, engineering, vacuum science, and technology. AVS offers members free access to the online career center where you can post or review resumes or participate at our annual Career Center held during the International Symposium and Exhibition. ► career.avs.org

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“The membership of AVS is highly multidisciplinary. Being a part of the Society has broadened both my technical knowledge and professional network. I would not be in my current position without the contacts I made in AVS.”

Susan B. Sinnott, University of Florida
on how AVS helps your career

Educational & Professional Outreach



Benefits & Opportunities

Take advantage of **FREE career enhancement opportunities** through the online career center and at AVS meetings

Need training? Take short courses at discounted registration rates

Have expertise? Teach a short course or develop a webinar or other educational/technical resources

Start or join a Student Chapter

Awards & Recognition



Benefits & Opportunities

Nominate your colleagues for outstanding research contributions or be recognized yourself

“It means so much to me to win this award, because I look out into this audience, and I see my professional family. The AVS is my professional home, and it has such a distinctive persona. It’s warm and welcoming, yet it maintains the highest professional standards and attracts the very best scientists. Every time I attend an AVS meeting, I see old friends, I make new friends, and I come away absolutely thrilled to be working in such an exciting field. So tonight, I’d like you to share in this Award with me by (at least in your mind’s eye), reaching over your shoulder and giving yourself a pat on the back for being part of such a great organization.”

Pat Thiel, Iowa State University
on receiving the Medard Welch Award

Gain Recognition

Recognition of outstanding scientific research and technological innovation is one of the most important activities within AVS. Through our prestigious awards program, the Society seeks to honor a wide range of extraordinary member and student member accomplishments vital to progress in fields of interest to AVS.

► www.avs.org/awards-recognition

Professional Awards

Medard W. Welch Award- recognizes and encourages outstanding research in the fields of interest to AVS.

Gaede-Langmuir Award- recognizes and encourages outstanding discoveries and inventions in the sciences and technologies of interest to AVS.

John A. Thornton Memorial Award/Lecture- recognizes outstanding research or technological innovation in the areas of interest to AVS, with emphasis on the fields of thin films, plasma processing, and related topics.

Peter Mark Memorial Award- recognizes outstanding theoretical or experimental work by a young scientist or engineer.

George T. Hanyo Award- recognizes outstanding performance in technical support of research or development in areas of interest to AVS.

Society Honors & Recognition

Fellow of the Society- recognizes members who have made sustained and outstanding technical contributions in areas of interest to AVS.

Honorary Membership- recognizes eminent service to AVS or outstanding contributions in science, engineering, or allied fields of interest to AVS.

In addition, AVS offers other special Society awards.

AVS Excellence in Leadership Recognition- recognizes individuals who not only excel in science and/or engineering, but who also, through mentoring, have enhanced the careers of future generations who might not otherwise have considered or had access to opportunities in science, engineering, and technology.

Student Awards

Russell & Sigurd Varian Award- recognizes and encourages excellence in continuing graduate studies in the sciences and technologies of interest to AVS.

Nellie Yeoh Whetten Award- recognizes and encourages excellence by women in graduate studies in the sciences and technologies of interest to AVS.

Dorothy M. and Earl S. Hoffman Award- recognizes and encourages excellence in graduate studies in the sciences and technologies of interest to AVS.

Dorothy M. and Earl S. Hoffman Scholarship- recognizes and encourages excellence in continuing graduate studies in the sciences and technologies of interest to AVS.

Graduate Research Award (GRA)- recognizes and encourages excellence in graduate studies in the sciences and technologies of interest to AVS.

Division & Technical Group Awards

In addition, many AVS Divisions, Technical Groups, and Focus Topics offer professional and student awards annually at the AVS International Symposium and Exhibition.



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▶ **Networking**

▶ **Publishing**



▶ **Career Services**



▶ **Training & Professional
Development**

▶ **Technical Conferences,
Meetings, & Exhibits**



▶ **Professional &
Student Awards**



▶ **Leadership Opportunities**

▶ **Technical Resources &
Presentations on Demand**



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