

37th Annual Symposium of the Pacific Northwest Chapter of AVS ‘The Science and Technology Society’ (PNWAVS)

Date: September 9-11, 2026

Location: Discovery Hall, Pacific Northwest National Laboratory (PNNL), WA

Website: [PNWAVS Symposium](https://www.pnwavs.org)



Symposium Overview

The PNWAVS Annual Symposium is a forum to discuss the latest advancements in surface, interface, and vacuum research within the Pacific Northwest region. The 2026 event commemorates the 64th anniversary of the PNWAVS chapter, the oldest in AVS. Topics will encompass developments in the fields of surface science, state-of-the-art characterization methods, and applications of surface science to a variety of material systems, including semiconductors, oxides, critical minerals, ceramics, metals, polymer composites, and biomaterials. This year, one session will focus on emerging techniques to integrate AI/ML-enabled workflows for surface and bulk characterization. The 2026 symposium will be held at Discovery Hall on the PNNL campus. PNNL is one of the 17 national laboratories of the Department of Energy and is renowned for breakthrough research in energy resilience, national security, chemistry, and Earth sciences. PNNL also stewards the Atmospheric Radiation Measurement (ARM) and Environmental Molecular Sciences Laboratory (EMSL) user facilities that attract multiple users from across the globe to conduct cutting edge research at PNNL campus.

Objective

The theme of this meeting will highlight fundamental and applied collaborative research to understand the interactions occurring at surfaces and interfaces. The symposium aims to foster interaction among participants from industry, government, and academic laboratories. The program will feature both invited and contributed papers presented through oral and poster sessions and student participation is strongly encouraged.

Sessions

Contributions are encouraged from all areas of surface and vacuum science, with highlighted topics including:

- Electronic, Optoelectronic and Quantum Materials
- Extraction and Separation of Critical Minerals and Materials

Abstract Deadline: June 1, 2026
Emerging Leader Award Application Deadline: July 1, 2026
<https://www.pnwavs.org>

- Catalytic Materials and Mechanisms
- Energy Storage and Conversion
- Advanced Methods in Characterization of Evolving Surfaces and Interfaces
- Integration of AI and Machine Learning Workflows in Synthesis and Advanced Characterization

WORKSHOP

A full day Workshop on Autonomous Scientific Workflows will be held on Sep 9, 2026 covering topics related to autonomous synthesis, optimization and characterization of materials. The workshop will include dedicated laboratory tours. The workshop will provide specialized insights into realizing the potential of AI/ML enabled workflows in materials discovery and characterization with sessions focused on introducing the topic, demonstrating use cases and hands-on training. As seats are limited, students and faculty members interested in attending this workshop are encouraged to reach out to Shuttha Shutthanandan at shuttha@pnnl.gov.

Call for Contributed Papers

Participants are invited to submit papers for both oral and poster sessions. Submitted abstracts will be evaluated by the program committee and placed in appropriate technical sessions. **Abstracts must be submitted by June 1, 2026**, via the [conference website](#) with detailed preparation instructions available online.

Poster Presentations

A poster session and reception will take place on the evening of September 10, 2026. The session includes a student poster competition with cash awards:

- Graduate competition winner: \$500 + \$500 towards expenses to attend the 2026 or 2027 AVS International Symposium
- Undergraduate competition winner: \$350
- Additional cash awards for 2nd place, 3rd place, and honorable mentions

Emerging Leader Research Award

Early career researcher attendees from Universities and National Labs are encouraged to apply for the Emerging Leader Research Award. The award has been established to recognize exemplary contributions to advancing the understanding of surface, interface, vacuum, and/or thin film science and technology. Researchers within 10 years of receiving their PhD

are eligible. **The application deadline is July 1, 2026**, and applications can be submitted via this [Link](#). For more information, please contact Ajay Karakoti at Ajay.Karakoti@pnnl.gov

Registration

- General attendees: \$200
- Postdoctoral fellows: \$150
- Students: \$50

The registration fee covers the final program, lunches (September 10 and 11), refreshments, receptions, and the banquet dinner on September 10th. Register via the [symposium website](#).

Non-US citizens must register by July 15, 2026.

Student Participation

To promote student engagement, PNWAVS will subsidize accommodation for a limited number of registered students on a first come first serve basis. For more information, contact Theva Thevuthasan at theva@pnnl.gov.

Vendor Exhibit

Surface, thin film, and vacuum equipment manufacturers are invited to exhibit and/or sponsor the symposium. The exhibit will be on September 10, 2026. For details, contact Joe Gray at joegrays3@palmborgassociates.com or Theva Thevuthasan at theva@pnnl.gov. Registration for vendors is available [here](#). The cost for one exhibitor table is \$650.

Banquet

The banquet will be held on the evening of September 10th, 2026. Further details will be provided.

Accommodations

Blocks of rooms will be available at local hotels in Richland. Check the symposium website for current information.

Transportation and Local Activities

Pasco Airport (PSC) is conveniently served by Delta, United, Alaska/Horizon, American, and Allegiant airlines connecting to the Tri-Cities area, which comprises the cities of Richland, Pasco, and Kennewick. Situated approximately 220 miles southeast of Seattle, WA, and 210 miles east of Portland, OR, the Tri-Cities area offers a strategic location for travelers coming from both major cities and beyond. Richland has limited Uber and taxi services, and the best in-town transportation option is rental car.

The Tri-Cities area is conveniently situated within a 1-2 hour drive of both the Cascade Mountain range to the west and the stunning Blue Mountains to the east. Within this short driving distance, one can access remarkable attractions such as Mount Rainier National

Park, Mount St. Helens National Volcanic Monument, Columbia Gorge National Scenic Area, and the impressive Grand Coulee Dam. The convergence of the Columbia, Snake, and Yakima rivers in the Tri-Cities area provides ample opportunities for water sports and fishing enthusiasts. Additionally, the Tri-Cities Winery Association boasts numerous wineries scattered throughout the valley, welcoming visitors daily to explore and indulge in the region's vibrant wine culture.

Conference Chairs

- Chair - Ajay Karakoti, Pacific Northwest National Laboratory
- Co-Chair - Jean-Sabin McEwen, Washington State University

Program Committee

- Ajay Karakoti, Pacific Northwest National Laboratory
- Jean-Sabin McEwen, Washington State University
- Karthik Srinivasan, Boise State University
- David Bergsman, University of Washington
- Tim Kowalczyk, Western Washington University

Conference Arrangements

Heather Roney, Pacific Northwest National Laboratory

Local Arrangements

Bhuvana Sivakumar Modachur, Pacific Northwest National Laboratory

Heather Roney, Pacific Northwest National Laboratory

Shuttha Shutthanandan, Pacific Northwest National Laboratory

Tiffany Kaspar, Pacific Northwest National Laboratory

Theva Thevuthasan, Pacific Northwest National Laboratory