RMC-AVS 2024

Annual Symposium & Equipment Exhibit

September 19, 2024

Charging Up for the Future!

At the
DoubleTree by Hilton Hotel Denver-Westminster
8773 Yates Drive
Westminster, Colorado

Symposium
Equipment Exhibit

AVS Short Courses
Poster Session

WELCOME to the 2024 Symposium of the Rocky Mountain Chapter of the American Vacuum Society. Thank you for joining us today!

The topic of this year's technical session is "Charging Up for the Future". I've always been excited about next generation technologies, and thinking about how some new technology may drastically change how we do things, e.g., novel batteries, quantum computing, clean electricity generation, and novel materials enabling all these technologies. The symposium today features many talks on battery technologies, as well as talks on photovoltaics and novel phenomena in light-matter interaction.

I am pleased to welcome over 20 vendors, showcasing the latest in vacuum products and services, to our 2024 Symposium. Please take a moment to visit some of these vendors and learn about the latest products in vacuum technology. Company representatives will be available to provide details about their equipment and answer questions about their products. The Vendor Exhibit is open from 10:00 a.m. to 6:00 p.m.

In addition to the vendor exhibit, the poster session starts at 3:30 p.m. and will feature posters from the Colorado Front Range and beyond. The happy hour with complimentary beverages and appetizers starts at 4:00 p.m. At 5:45 p.m. cash awards will be presented to the top three student posters. Door prizes will also be given away during this time (you must be present to win!).

This year we were pleased to offer a wide program of short courses taught by leaders in their respective fields. The slate of course topics span a wide range of vacuum technologies, system design, and troubleshooting. The chapter strives to provide in demand content at this annual symposium, and suggestions for course topics are always appreciated. We also do on-site teaching at your location when the demand is large enough.

The Rocky Mountain Chapter of the AVS is an all-volunteer organization. Thank you to the many volunteers whose efforts keep the chapter running all year long and allow us to present this annual symposium today. I would also like to thank all the symposium sponsors, attendees, exhibitors, and speakers for helping to make this symposium a success.

The Rocky Mountain AVS Chapter is always looking for volunteers to get involved in the chapter and make this symposium a successful event. If you would like to get more involved with the chapter, please contact me, or any Rocky Mountain AVS Chapter board member. In addition, please feel free to provide any suggestions that would help us improve for the 2025 Symposium.

We hope you find the symposium stimulating, informative, and useful for your professional careers.

Cristian Ciobanu
2024 Chair of the Rocky Mountain Chapter
American Vacuum Society

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2024 Annual Symposium & Equipment Exhibit Overview

8:00 a.m.	Registration begins.
9:00 a.m. - 11:30 a.m.	Morning Oral Session
9:00 a.m. - 12:00 p.m.	Introduction to Vacuum Technology J.R. Gaines (K.J. Lesker, in Private Dining Room)
10:00 a.m.	Vendor Exhibit opens.
11:30 a.m. - 1:30 p.m.	Free Lunch in the Exhibit Area
1:30 p.m. - 3:30 p.m.	Afternoon Oral Session
3:30 p.m.	Poster Session opens.
4:00 p.m. - 6:00 p.m.	Social hour, Vendor Exhibit and Student Poster Session (Authors will be present from 3:30 p.m. to 5:15 p.m. Winners announced by 5:45 p.m.)

Vendor information is posted online at https://www.rmcavs.org/vendor-exhibit/.

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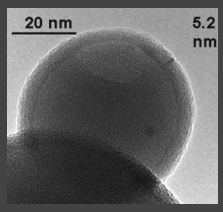

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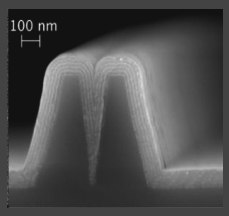

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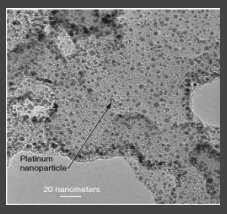

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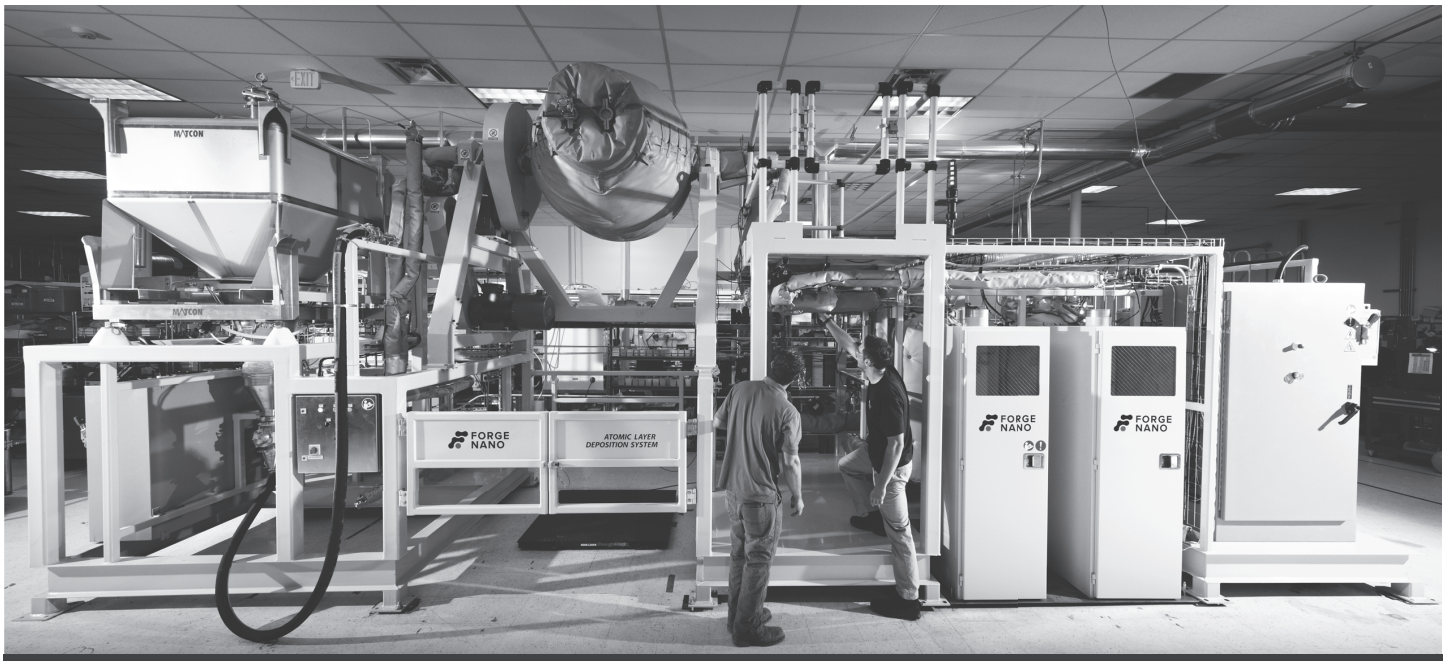

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SYMPOSIUM PROGRAM

9:00 a.m. - 9:30 a.m.	**Stress and Chemical Engineering Methods for Suppressing Cracking/Dendrites in Solid-State Electrolytes** *Prof. Chunmei Ban, University of Colorado Boulder*
9:30 a.m. - 10:00 a.m.	**Site Disorder Drives Cyanide Dynamics and Fast Ion Transport in Li_6PS_5CN** *Prof. Annalise Maughan, Colorado School of Mines*
10:00 a.m. - 10:30 a.m.	***Coffee Break and Vendor Exhibits***
10:30 a.m. - 11:00 a.m.	**Manufacturing-Scale Atomic Layer Deposition for Battery Applications** *Dr. Arrelaine Dameron, Forge Nano*
11:00 a.m. - 11:30 a.m.	**Flow Batteries for Affordable, Grid-Scale Energy Storage** *Dr. Jessica Murdzek, Otoro Energy, Inc.*
11:30 a.m. - 1:30 p.m.	***Lunch and Vendor Exhibits***
1:30 p.m. - 2:00 p.m.	**Strong Light-Matter Coupling in 2D Materials** *Prof. Sean Shaheen, University of Colorado*
2:00 p.m. - 2:30 p.m.	**Cracked Film Lithography for Bifacial CdTe Photovoltaics** *Dr. Christopher Muzzillo, NREL*
2:30 p.m. - 3:00 p.m.	**Using Soft XAS Measurements to Probe Defect Structure in Biomass Electrocatalysts** *Prof. Nicholas Bedford, University of New South Wales*
3:30 p.m. - 6:00 p.m.	***Poster Session, Vendor Exhibits, and Social Hour***

Poster Session prizes provided by MKS https://www.mks.com/.

Abstracts are posted online at https://www.rmcavs.org/2024-symposium/.

Notes

Notes

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