ACS Local Section
Portland
American Chemical Society

Portland Section Meeting Notice

Vol 64 no 2 http://www.acsportland.org February 2025

Transformative Brilliance: The Photostability of Silver Nanoparticles Unveiled!

a talk by

Dr. Marilyn Rampersad Mackiewicz
Associate Professor of Chemistry, Oregon State University

Thursday February 13, 2025, 6:30-9 PM

The February meeting features a catered dinner from a local Portland eatery, a keynote lecture from **Dr. Mackiewicz** and a short talk by Oregon State University graduate student **Anshika Nagar**. This event is all ages welcome and encouraged. Bios and talk summaries are on page 2 of this newsletter.

Dinner Reservations

Venue: Helioterra Winery
2025 SE 7th Ave.
Portland, OR 97214

Schedule: Doors open at 6:30pm on Thursday February 13th

Helioterra Winery is a women-owned and operated small scale winery.
Wines are available from Helioterra for purchase,
as well as beer and non-alcoholic beverages.

Abstracts and Bios next page.

Irving Rettig, Chair
Vacant, Chair-Elect
Ken Schriver, Past Chair
Hannah Boxberger, Secretary
Robin Terjeson, Treasurer
Andrew Baggett, Councilor
Jim Tung, Councilor
Kathy Carrigan, Alt. Councilor
Marcie Merritt, Alt. Councilor
Wilbes Mbiya, Director At Large
Hannah Boxberger, Webmaster
Martha Dibblee, Email, Newsletter

Transformative Brilliance: The Photostability of Silver Nanoparticles Unveiled!

Marilyn Mackiewicz

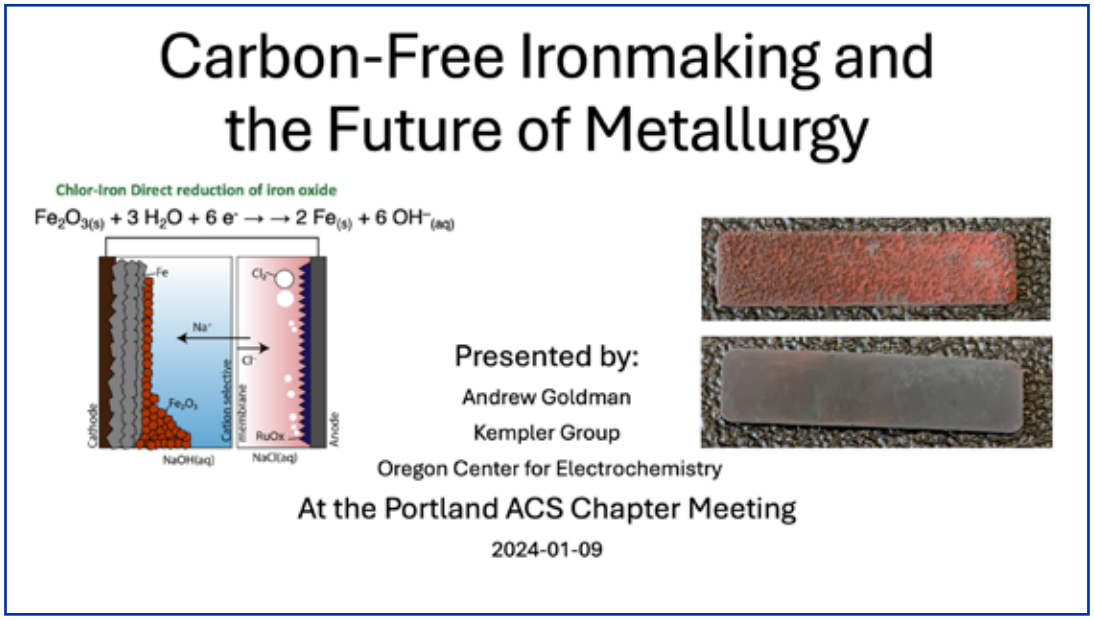
Talk Summary: Imagine harnessing the power of light to revolutionize the way we create materials! In our upcoming talk, we'll dive into the exciting world of transforming diverse chemical substances into highly uniform batches of nanomaterials. This innovation is crucial for groundbreaking applications in imaging, drug delivery, and understanding the interactions and toxicity of nanomaterials in biological systems. We'll explore how light alters the optical properties of silver nanoparticles and drives their shape transformation. Additionally, we'll share insights on protecting these light-sensitive silver nanoparticles from unwanted surface oxidation, paving the way for new possibilities in crafting uniform nanomaterial samples of various sizes and shapes. Join us as we illuminate the potential of using specific light wavelengths and photon flux to shape the future of optical applications!

Speaker Bio: Marilyn Rampersad Mackiewicz is an associate professor at Oregon State University. She earned her Bachelor of Arts degree in Psychology and Chemistry from Hunter College, City University of New York, where she participated in the NIH Minority Access to Research Careers (MARC) program. In 2005, Dr. Mackiewicz obtained her Ph.D. in Bioinorganic and Organometallic Chemistry from Texas A&M University, where she worked under the supervision of Marcetta Y. Darensbourg. Currently, the research teams in the Mackiewicz lab are focused on developing nanomaterials for biomedical applications, including sensing, imaging, and drug delivery.

Student talk at next month's Portland Section Meeting

Anshika Nagar

Oxidant-Resistant Nickel and Cobalt Nanoparticles for X-Fluorescence Microscopy Imaging. Anshika Nagar, Oregon State University graduate student. In the dynamic field of material science, finding ways to stabilize nanomaterials that are prone to surface oxidation and the release of metal ions, particularly cobalt and nickel, is absolutely vital. These stabilization strategies not only boost the durability and performance of these nanomaterials but also unlock exciting possibilities for their use across various industries. By effectively controlling oxidation and reducing ion release, we can ensure that these materials are both safe and effective, paving the way for advancements in cutting-edge technologies like catalysis, electronics, and biomedicine. In this brief presentation, I will share two innovative approaches designed to stabilize these materials, minimize their degradation, and enhance their biocompatibility. Join me as we explore the future of nanomaterials and their transformative potential!



At the January Portland Section meeting University of Oregon electrochemistry masters student Andrew Goldman presented a talk based on this slide prior to Dr. Paul Kempler's talk. This year's ACS Portland Chair is featuring student speakers during each monthly meeting.