

Portland Section 2019 March 21 Meeting Notice

Seeing Gold: Evolving Nanotechnologies for Advancing the Field of Ophthalmology

a talk presented by

Dr. Marilyn Mackiewicz

Research Faculty, Department of Chemistry, Portland State University

7:30 pm Thursday March 21, 2019

Reed College Vollum Lounge

3203 SE Woodstock Blvd, Portland, OR 97202

[map](#)

[Dinner Reservations](#)

Dinner reservations FIRM deadline 9 PM Monday March 18

Prices increase after the deadline! (including at the door)

Schedule: 6:00 pm social • 6:45 pm buffet dinner • 7:30 pm program and talk

Portland Section webpage <http://www.acsportland.org>

Bio: Dr. Mackiewicz received her BA degree in chemistry and psychology at Hunter College the City University of New York. She earned her Ph.D. in inorganic chemistry from Texas A&M University (2005), with Professor Marcetta Y. Darensbourg and then joined Intel as a process engineer before returning to academia. She currently is research faculty at Portland State University in the department of chemistry where she spends time creating interdisciplinary partnerships between Portland State University, Oregon Health and Science University, Oregon State University, and Legacy Research Institute. She enthusiastically works on developing nanostructured materials for environmental and biomedical applications as well as robust undergraduate research models.

Abstract: Glaucoma and Age-related Macular Degeneration (AMD) are two leading causes of blindness in persons over the ages of 40-60. By 2020, 76 million people are projected to have Glaucoma, while 196 million are projected for AMD worldwide. Current standard-of-care approaches to glaucoma and AMD diagnosis and management are limited and are based on detecting loss of vision early and on therapeutic strategies that do not work in all patients. Thus, there is a critical need for early diagnosis and advanced therapeutic strategies that can halt or reverse vision loss. Our research over the year have focused on developing nanotechnologies for a variety of biomedical applications. Here we will discuss two of those evolving nanotechnologies to advance the field of ophthalmology: a platform for early diagnosis of glaucoma and a nanoparticle-based research tool to advance research in stem cell-based therapies that repair vision loss.