

4:00 PM Architectural Design, 1D Walls, 3D Plumbing, and Painting Blind en Route to Dr. Debra R. Rolison
 Multifunctional Nanoarchitectures for Energy Storage Head - Advanced Electrochemical
 Materials Section, U.S. Naval Research Laboratory

Our team at the Naval Research Laboratory looks at rate-critical chemical processes where events per second are required for high performance in such technologies as energy storage, energy conversion, (electro)catalysis, and sensing. We then design next-generation systems built around pore–solid nanoarchitectures that seamlessly embody all of the requisite rate functions for high-performance electrochemistry: molecular mass transport, ionic/electronic/thermal conductivity, and electron-transfer kinetics. We have taken the lessons from 20 years of probing the operational and design characteristics of catalytic and energy-relevant nanoarchitectures to create a zinc sponge—a stand-alone, 3D-wired anode that improves current distribution within the electrode structure during charge–discharge cycling, thwarts dendrite-formation, and can challenge the energy density of Li-ion battery packs, all while using safer aqueous-based chemistry. With this breakthrough, we are now addressing the family of zinc-based rechargeable alkaline batteries: nickel–3D zinc, silver–3D zinc, MnO₂–3D zinc, and even rechargeable 3D zinc–air. The route we have taken to move from a creative concept to a fabricated reality to the necessary fundamental characterization to prototype development (and ultimately commercialization by outside companies) will be described.

MEDAL AWARD BANQUET

5:15 p.m. Social Hour

6:15 p.m. Medal Award Dinner

Presiding: **Dr. Joseph M. Serafin**
 2018 Chair, ACS New York Section
 St. John's University

ACS Greetings: **Dr. Peter K. Dorhout**
 2018 President
 American Chemical Society

Introductory Address: **Dr. Henry S. White**
 University of Utah

Presentation of the Medal: **Dr. Joseph M. Serafin**

Acceptance Address: **Dr. Debra A. Rolison**
 Nichols Medalist

For More Information: Please visit the New York Section website at www.NewYorkACS.org

Online registration using PAYPAL for payment is available at
www.newyorkacs.org/meetings/Nichols/2018Nichols.php

Or use the Tear Off reservation form at this line **BANQUET RESERVATIONS DEADLINE – April 4, 2018**

MAIL RESERVATIONS TO:

ACS, New York Section Office
 St. John's University, Department of Chemistry
 8000 Utopia Parkway
 Queens, NY 11439

More Information:

<http://www.NewYorkACS.org>
 Phone: 516-883-7510 Fax: 516-883-4003
 E-mail: njesper1@optonline.net

		Number	Total
Symposium only:	\$65 (\$45 for ACS Members)	_____	\$ _____
Student, unemployed, retired	\$30	_____	\$ _____
50 year ACS member	\$0	_____	\$ _____
Banquet only:	\$130 (\$120 for ACS Members)	_____	\$ _____
Symposium & Banquet:	\$160 (\$130 for ACS Members)	_____	\$ _____
Table of 8 or more for symposium/banquet	\$130 per person	_____	\$ _____

Reserve our table in the name of: _____

Enclosed is my check, payable to: **NEW YORK SECTION, ACS** in the amount of \$ _____

If reservations are for more than one person, please attach a list of the guests' names, and dinner selections where needed.

DINNER CHOICES: Chicken _____ Prime Rib _____ Salmon _____ Vegetarian _____

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