

Chemistry Department NeWS

AY22 and PUBS 2021

Promotions

Promotion to Assoc Professor

Dr. Leighanne A Basta

Dr. Ina O'Carroll

Dr. Melonie A Teichert

Promotion to Professor

Dr. Amy H R MacArthur

Promotion to Lieutenant Commander

Corey J Fugate

Awards

Navy Medicine's Biochemistry Officer of the Year

LT Nicholas C Nelson

Civillian Faculty Service Award

Dr. Maria J Schroeder

Military Professor Teaching Award

CDR David P Durkin

Apgar Award for Excellence in Teaching

Dr. Melonie A Teichert

ACS **Braude Award** for Research with Undergraduates

Dr. Dianne J Luning Prak

Special Recognition : [Biophysical Society Bulletin](#)

Dr. Elizabeth A Yates

Special Recognition : [Gordon Research Conference Chair - for Tribology](#)

Dr. Judith A Harrison

Midshipman Awards

[School of Math & Science Student Awards - AY22](#)

Chemistry major **MIDN 1/C Anders Guldranson** was selected for the competitive Barry Goldwater Scholarship for his research on ionic liquids under the guidance of CDR Dave Durkin and Professor Paul Trulove. Anders has already co-authored two research articles and will be conducting research as a Trident and a Bowman Scholar during AY2023. Anders was one of 417 Goldwater scholars selected from over 5,000 nationwide applications

Publications

December 2021

Assistant Professor Michael Konopka and collaborators published an article on the "[In vivo quantification of polyhydroxybutyrate \(PHB\) in the alphaproteobacterial methanotroph, *Methylocystis* sp. Rockwell.](#)" in *Applied Microbiology and Biotechnology*.

November 2021

Assistant Professor Melonie Teichert, Associate Professor Amy MacArthur, and Professors Virginia Smith, Dianne Luning Prak, and Shirley Lin published an article entitled "[A Program-Level Assessment of Student Understanding of Bonding in the Chemistry Major.](#)" in *Journal of Chemical Education*.

October 2021

Assistant Professor Jennifer Guerard and collaborators published an article on the "[Behavior of potentially toxic elements from stoker-boiler fly ash in Interior Alaska: paired batch leaching and solid-phase characterization.](#)" in *Environmental Science and Pollution Research International*.

Assistant Professor Julia Pribyl Ham published a book chapter entitled "[Surface and Particle Modification via RAFT Polymerization: An Update. In RAFT Polymerization: Methods, Synthesis, and Applications.](#)"

September 2021

CDR Dave Durkin, Professor Virginia Smith, and Dr. Ashlee Aiello published an article entitled "[Fe-based Single-Atom Catalysis for Oxidizing Contaminants of Emerging Concern by Activating Peroxides.](#)" in *Journal of Hazardous Materials*.

August 2021

Professor Christine Copper and **Midshipmen Aimee Dervishian, Conner King** and **Justin Goodwin** published a paper entitled: "[Micellar Electrokinetic Chromatographic Analysis of Historic Dyes and Their Photofading Products.](#)" in *Chromatographia*.

Professor Dianne Luning Prak published an article entitled "[Properties of Two-Component Mixtures of Isobutylcyclohexane \(1\) or tert-Butylcyclohexane \(1\) with n-Dodecane \(2\) or n-Hexadecane \(2\): Densities, Surface Tensions, Viscosities, and Speeds of Sound at 0.1 MPa and Various Temperatures](#)" in *Journal of Chemical Engineering Data*.

July 2021

Associate Professor Ron Siefert and collaborators published an article entitled "[Micelle formation, structures, and metrology of functional metal nanoparticle compositions.](#)" in *AIMS Materials Science*.

June 2021

CDR David Durkin, Dr. Tyler Cosby, and collaborators published an article entitled "[Photothermal actuation of levitated pyrolytic graphite revised.](#)" in *APL Materials*.

Professor Jamie Schlessman and collaborators published an article entitled "[Control of distal lysine coordination in a monomeric hemoglobin: A role for heme peripheral interactions.](#)" in *Journal of Inorganic Biochemistry*.

Dr. Tyler Cosby, CDR Dave Durkin, Professor Paul Trulove and collaborators published an article entitled "[Ion Dynamics and Transport Properties of Lewis-Acidic Imidazolium Chloroaluminate Ionic Liquids.](#)" in *Journal of the Electrochemical Society*.

Assistant Professor Leighanne Basta and collaborators published an article entitled "[Atypically Modified Carbapenem Antibiotics Display Improved Antimycobacterial Activity in the Absence of \$\beta\$ -Lactamase Inhibitors](#)" in *ACS Infectious Diseases*.