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Education

University of Arizona	GPA: 3.92/4.00	2018-present
Ph.D., Chemical Engineering; Minor in Atmospheric Sciences		
University of Arizona	GPA: 3.72/4.00	2014-2018
B.S., Chemical and Environmental Engineering; Minor in Mathematics and Chemistry		
McCook Community College	GPA: 3.77/4.00	2011-2012
Associates in Applied Science (Emergency Medical Services)		
Pima Community College	GPA: 4.00/4.00	2010-2011
National and State Emergency Medical Technician (EMT-B) certifications.		

Professional Experience

Naval Research Laboratory, Graduate Intern	06/2020-09/2020, 06/2021-08/2021
<ul style="list-style-type: none">- Worked with Dr. Peng Xian as part of the Naval Research Enterprise Internship Program. Evaluated the capabilities of a global atmospheric aerosol reanalysis model called the Navy Aerosol Analysis and Prediction System with a focus on the Arctic region.	
Los Alamos National Laboratories, Graduate Research Assistant	06/2018-08/2018
<ul style="list-style-type: none">- Research assistant for Dr. Manvendra Dubey. Analyzed and acquired data from laboratory combustion experiments with a focus on characterizing the impacts of biomass burning on the environment.	
Los Alamos National Laboratories, Undergraduate Student	05/2017-08/2017
<ul style="list-style-type: none">- Worked in a variety of capacities including field work and programming. Required the use of several programming languages as well as fundamental knowledge of chemical and environmental engineering.	
CSL Plasma, Paramedic (supervisor)	06/2012-05/2018
<ul style="list-style-type: none">- (Highest position achieved) Medical Operations Supervisor. Managed medical operations and staff for a high-volume plasma collection center. Required technical knowledge, interpersonal skills, and leadership skills.	

Honors

Graduate:

Achievement Rewards for College Scientists (ARCS) Foundation Scholarship	2021
<ul style="list-style-type: none">- Scholarship awarded from the Phoenix chapter of ARCS for “academically outstanding United States citizens studying to complete degrees in science, engineering and medical research”	

Naval Research Enterprise Internship Program **2020, 2021**

- Competitive internship awarded to 800 university students per year to participate in research at a Department of Navy (DoN) laboratory during the summer

University Fellow **2018**

- Offered to the University's highest-ranked incoming doctoral and masters students.

Harvill Fellow **2018**

- Offered to outstanding College Of Engineering applicants who graduated from the UofA.

Undergraduate:

Dean's List **2016-2017**

Academic Distinction **2017**

Departmental Honors **2016**

Publications

J. S. Schlosser, S. Stamnes, et al (**TBD**) Polarimeter and lidar derived fine mode aerosol number concentration. *Atmospheric Chemistry and Physics*.

J. S. Schlosser, S. Stamnes, et al. (**TBD**) Validation of aerosol optical and microphysical properties in marine environments using CAMP²Ex in-situ, polarimetric, and lidar data. *Atmospheric Chemistry and Physics: CAMP²Ex Special Issue*.

J. S. Schlosser, C. Stahl, et al. (**TBD**) Evidence of haze-driven secondary production of supermicrometer aerosol nitrate and sulfate in size distribution data in South Korea. *Journal of European Geosciences Union – Atmospheric Chemistry and Physics*.

H. Ahmady-Birgani, P. Ravan, **J. S. Schlosser**, A. Cuevas-Robles, M. AzadiAghdam, & A. Sorooshian, (**2021**). Is There a Relationship between Lake Urmia Saline Lakebed Emissions and Wet Deposition Composition in the Caucasus Region? *ACS Earth and Space Chemistry*, 5(10), 2970-2985. doi:10.1021/acsearthspacechem.1c00320

J. S. Schlosser, H. Dadashazar E.-L. Edwards, A. Hossein Mardi, G. Prabhakar, C. Stahl, et al. (**2020**). Relationships between supermicrometer sea salt aerosol and marine boundary layer conditions: Insights from repeated identical flight patterns. *Journal of Geophysical Research: Atmospheres*, 125, e2019JD032346. <https://doi.org/10.1029/2019JD032346>

A. Sorooshian, A. F. Corral, R. A. Braun, B. Cairns, E. Crosbie, R. Ferrare, J. Hair, M. M. Kleb, A. Hossein Mardi, H. Maring, A. McComiskey, R. Moore, D. Painemal, A. Scarino, **J. S. Schlosser**, T. Shingler, M. Shook., W. Hailong., Z. Xuben., L. Ziemba, P. Zuidema. (**2020**), Atmospheric Research Over the Western North Atlantic Ocean Region and North American East Coast: A Review of Past Work and Challenges Ahead, *Journal of Geophysical Research: Atmospheres*, 125(6), doi:10.1029/2019jd031626.

H. Ahmady-Birgani, P. Ravan, **J. S. Schlosser**, A. Cuevas-Robles, M. AzadiAghdam, and A. Sorooshian. (**2020**), On the chemical nature of wet deposition over a major desiccated lake: Case study for Lake Urmia basin, *Atmospheric Research*, 234, 104762, doi:<https://doi.org/10.1016/j.atmosres.2019.104762>.

J. S. Schlosser, R. Braun, T. Bradley, H. Dadashazar, A. B. MacDonald, A. M. Aldhaif, Azadi M. Aghdam, A. Hossein Mardi, P. Xian, and A. Sorooshian (**2017**), Analysis of Aerosol Composition Data for Western United States Wildfires Between 2005-2015: Dust Emissions,

Chloride Depletion, and Most Enhanced Aerosol Constituents, J. Geophys. Res. Atmos., 122, doi:10.1002/2017JD026547.

Presentations

J. S. Schlosser, “Relationships between Supermicrometer Sea Salt Aerosol and Marine Boundary Layer Conditions: Insights from Repeated Identical Flight Patterns”. 2020 The American Association for Aerosol Research 38th Annual Conference, Virtual 10/08/2020

J. S. Schlosser, “Predicting the Optical Absorption Properties of Biomass Burning using Absorption Ångstrom Exponent (AAE)”. 2018 American Geophysical Union Conference Poster Symposium. Washington, DC. 12/14/18. LA-UR-18-31354.

J. S. Schlosser, “Gross Alpha: What Is It, and What’s In It?”. 2017 LANL Student Symposium. Los Alamos, NM. 08/09/17. LA-UR-17-26564.

J. S. Schlosser, “Introduction to Water Chemistry”. Three-part lecture series. 7/12/17, 07/25/17, 07/26/17. LA-UR-17-25611, LA-UR-17-26277, and LA-UR-17-26534.

Research Experience

Optical and Microphysical Modeling of Aerosol Particles: Experience in the development of an improved algorithm for retrieving refractive index and hygroscopic growth factors of aerosol particles from a series of bulk measurements. The robustness of this algorithm was demonstrated using remote sensing and in-situ data from the Cloud, Aerosol and Monsoon Processes Philippines Experiment (CAMP²Ex). This work resulted in the development of four sub-procedures for use by the greater science community.

Flight Based Aerosol and Cloud Analysis: Experience with operational support of a large-scale NASA funded science mission known as Aerosol Cloud meTeorology Interactions oVer the western ATlantic Experiment (ACTIVATE). Experience with quality control and analysis of data gathered using a suite of in-situ instruments during the MONterey Aerosol Research Campaign (MONARC).

Application Development: Designed and constructed an application for the planning, tracking, and guiding of NASA science flights. This application was developed to the specifications of NASA researchers and has proven to be robust during the ACTIVATE.

Lab Based Aerosol and Gas Measurements: Experience with G2401 Gas Concentration Analyzer, Condensation Particle Counter-Scanning Mobility Particle Sizer (CPC-SMPS) system, Laser Aerosol Spectrometer (LAS), Single Particle Soot Photometer (SP2), and Photo-Acoustic Aerosol Absorption Spectrometer (PASS-3).

Environmental Remediation Engineering: Exposure to all facets of large scale, high value, environmental remediation project including modeling, logistics and project planning, and field-based research in secured areas. Included research of Chromium, Royal Demolition eXplosive, and environmental radio nucleotides.

Ground Based Temporal Data Analysis: Proficient in utilizing EPA IMPROVE data.

Membrane Mass Transfer Measurements: Experience in bench scale membrane distillation

experiments for characterization of mass transfer properties.

Software

MATLAB, Microsoft Excel (VBA for Excel), Igor Pro, Julia, Microsoft Access (SQL for Access), Python, R, Fortran, Aspen, MCNP, Turbo CAD.