

## Curriculum Vitae: Dr. Andrew S. Wozniak

### Andrew S. Wozniak, Ph.D.

Assistant Professor  
School of Marine Science and Policy  
University of Delaware  
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### EDUCATION

University of Virginia	Biology	B.A. 2000
University of Rhode Island	Biological Oceanography	M.S. 2004
	Dr. Charles T. Roman, advisor	
College of William and Mary	Marine Science/Chemical Oceanography	Ph.D. 2010
	Drs. James E. Bauer and Rebecca M. Dickhut, Co-advisors.	

### APPOINTMENTS

2023-present *Associate Professor*, School of Marine Science and Policy, University of Delaware  
2017-2023 *Assistant Professor*, School of Marine Science and Policy, University of Delaware  
2013-2017 *Research Assistant Professor*, Department of Chemistry and Biochemistry, Old Dominion University  
2011-2013 *Visiting Assistant Research Scientist*, Physical Sciences Department, Virginia Institute of Marine Science, College of William and Mary  
2009-2012 *Post-doctoral Researcher*, Department of Chemistry and Biochemistry, Old Dominion University, Dr. Patrick G. Hatcher, advisor.

### AFFILIATIONS

*Affiliated Faculty Member*, University of Delaware Graduate Program in Water, Science, and Policy  
*Affiliated Faculty Member*, University of Delaware, DENIN

### SELECTED RECENT PEER-REVIEWED PUBLICATIONS

1. Fettrow, S. %, Jeppi, V. %, **Wozniak, A.S.**, Vargas, R., Michael, H., Seyfferth, A. L., 2023. Physiochemical controls on the horizontal exchange of blue carbon across the salt marsh-tidal channel interface, *Journal of Geophysical Research: Biogeosciences*, 128(6), p.e2023JG007404.
2. Czarnecki\*, J. I., D. F. Levia, J. R. Scudlark, T. Ouyang\*, **A. S. Wozniak**. 2023. Impacts of changes in the relative abundance of anthropogenic emission sources on rainwater dissolved organic and total reactive nitrogen composition. *JGR-Biogeosciences*, 128(2), e2022JG007056, <https://doi.org/10.1029/2022JG007056>.
3. Chin, Y.P., McKnight, D.M., D'Andrilli, J., Brooks, N., Cawley, K., Guerard, J., Perdue, E.M., Stedmon, C.A., Tratnyek, P.G., Westerhoff, P., **Wozniak, A.S.**, Bloom, P. R., Foreman, C., Gabor, R., Hamdi, J., Hanson, B., Hozalski, R. M., Kellerman, A., McKay, G., Silverman, V., Spencer, R. G. M., Ward, C., Xin, D., Rosario-Ortiz, F., Remucal, C. K., and Reckhow, D., 2023. Identification of next-generation International Humic Substances Society reference materials for advancing the understanding of the role of natural organic matter in the Anthropocene. *Aquatic Sciences*, 85(1), p.32.
4. Burdette, T.C.%, R. L. Bramblett%, A. M. Deegan%, N. R. Coffey\*, **A. S. Wozniak**, A. A. Frossard. 2022. Organic signatures of surfactants and organic molecules in surface microlayer and subsurface waters of Delaware Bay. *ACS Earth and Space Chemistry*, 6(12), pp. 2929-2943.
5. Stahl, M., J. Wassik\*\*, J. Gehring\*\*, C. Horan\*\*, **A. S. Wozniak**. 2021. Connecting the age and fraction of riverine labile organic carbon to watershed geology and land use. *JGR-Biogeosciences*, 126(9), <https://doi.org/10.1029/2021JG006494>.
6. Goranov, A.I. %, **Wozniak, A.S.**, Bostick, K.W. %, Zimmerman, A.R., Mitra S., Hatcher, P.G. 2020. Photochemistry after fire: A study of dissolved pyrogenic carbon from chars produced over a thermal gradient. *Geochimica et Cosmochimica Acta*, 290, 271-292, <https://doi.org/10.1016/j.gca.2020.08.030>.

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7. **Wozniak, A. S.**, A. I. Goranov<sup>o</sup>, S. Mitra, A. R. Zimmerman, K. W. Bostick<sup>o</sup>, D. R. Schlesinger<sup>o</sup>, S. C. B. Myneni, P. G. Hatcher. 2020. Molecular heterogeneity in pyrogenic dissolved organic matter from a thermal series of oak and grass chars. *Organic Geochemistry* 104065, <https://doi.org/10.1016/j.orggeochem.2020.104065>.
8. Estes, E. R., D. Berti, N. R. Coffey<sup>\*\*</sup>, M. F. Hochella Jr., **A. S. Wozniak**, and G. W. Luther III. 2019. Abiotic synthesis of graphite in hydrothermal vents. *Nature Communications* 10(1), pp. 1-6. <https://doi.org/10.1038/s41467-019-13216-z>.
9. **Wozniak, A.S.**, Prem, P. M.<sup>\*\*</sup>, Obeid, W., Quigg, A., Xu, C., Zhang, S., Santschi, P. H., Schwehr, K. A., Hatcher, P. G. 2019. Rapid degradation of oil in mesocosm simulations of marine oil snow events. *Environmental Science and Technology* 53, (7), 3441-3450 <https://doi.org/10.1021/acs.est.8b06532>.
10. Bostick, K. <sup>o</sup>, A.R. Zimmerman, P. G. Hatcher, S. Mitra, **A. S. Wozniak**. 2018. Production and composition of pyrogenic dissolved organic matter. *Frontiers in Earth Science – Biogeosciences*, 6, 43. <https://doi.org/10.3389/feart.2018.00043>
11. **Wozniak, A. S.**, R. U. Shelley, S. M. McElhenie<sup>o</sup>, A. S. Willoughby<sup>o</sup>, W. M. Landing, P. G. Hatcher. 2015. Insights into potential Fe-binding aerosol water soluble organic ligands from the 2011 US GEOTRACES cruise. *Marine Chemistry*, 173, 162-172, doi:10.1016/j.marchem.2014.11.002.

### CURRENT FUNDING (~\$2.5M to UD)

1. RII Track-1: Water Security in Delaware's Changing Coastal Environment, National Science Foundation EPSCoR Research Infrastructure Improvement and the State of Delaware (OIA1757353, 10/1/18- 9/31/23; \$260,457 to Wozniak), Lead PI K Messer, PI and Research Lead, H Michael, PIs V Kalavacharla, D Sparks, M D'Souza. **Wozniak** serves as Co-Lead (with A. Andres, D. Jaisi, W.-J. Cai) for Threat 3, Estuarine Nutrient Sources and Loading, Eutrophication, and Acidification.
2. NSF AGS (Chemical Oceanography): Collaborative Research: Impacts of surface ocean surfactant sources and transformations on their chemical composition and air-sea relevant properties, A. Frossard (U. Georgia) and **A. S. Wozniak** (~\$452,301 to UD), October 1, 2022 to September 30, 2025.
3. NERRS Science Collaborative: Do prescribed burns of *Phragmites australis* during salt marsh restoration increase denitrification and carbon sequestration ecosystem services?, **A. S. Wozniak** (UD), K. St. Laurent (DNREC), \$598,966, October 1, 2021 to September 30, 2024.
4. NSF AGS (Chemical Oceanography): Collaborative Research: Hydrothermal vent systems mediate the formation and fate of refractory aromatic carbon in the deep ocean, **A. S. Wozniak**, G. Luther, S. Shah Walter (UD), S. Wagner, \$1,437, 470 (\$1,035,261 to UD), September 1, 2022 to August 31, 2025.
5. Reducing Uncertainty in Soluble aerosol Trace Element Deposition (RUSTED), R. S. Shelley et al. SCOR Working Group Proposal (\$45,000 total; A.S. Wozniak listed as Associate Member, No funds requested for UD).

### COURSES TAUGHT

MAST 382 Introduction to Ocean Studies (3cr), MAST453/653 Marine Organic Geochemistry (3 cr), MAST 447/647 Current Methods in Chemical Oceanography, MAST 646 Chemical Oceanography, MAST 407 Research Experience in Marine Science, MAST 468 Undergraduate Research