CURRICULUM VITAE

Pamela S. Rickly

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Education

Ph.D., School of Public and Environmental Affairs
Indiana University, 2018
Dissertation: *Measurements of Hydroxyl Radical Reactivity and Potential Interferences using the Laser-Induced Fluorescence-Fluorescence Assay by Gas Expansion Technique*
Advisor: Dr. Philip Stevens

Master of Science, School of Public and Environmental Affairs
Indiana University, 2011
Thesis: *Experimental and theoretical studies of the ozonolysis of ocimene*
Advisor: Dr. Philip Stevens

Bachelor of Arts, Geography – Atmospheric Science
Indiana University, 2009
Minor: Mathematics

Academic Positions

2018-present	Research Scientist I at the Cooperative Institue for Research in Environmental Sciences and the National Oceanic and Atmospheric Administration
2008-2018	Research Assistant, Indiana University, School of Pulic and Environmental Affairs

Research Interests

- Chemical kinetics
- Photochemistry
- Ozonolysis
- LabVIEW applications
- Chemical box modeling
- Radical reactions
- Urban and forested environments
- Criegee intermediates
- Instrumentation

RESEARCH, PUBLICATIONS, & PRESENTATIONS

Field Campaigns

2019	Fire Influence on Regional to Global Environments and Air Quality (FIREX-AQ)
2016	Program for Research on Oxidants: PHotochemistry, Emissions, and Transport – Atmospheric Measurements of Oxidants in Summer (PROPHET-AMOS), Pellston, MI

2015	Indiana Radical, Reactivity and Ozone Production Intercomparison (IRRONIC), Bloomington, IN
2012	Program for Research on Oxidants: PHotochemistry, Emissions, and Transport (PROPHET), Pellston, MI

Publications

Lew, M. L., **Rickly, P. S.**, Bottorff, B. P., Sklaveniti, S., Léonardis, T., Locoge, N., Dusanter, S., Kundu, S., Wood, E., and Stevens, P. S.: OH and HO2 radical chemistry in a midlatitude forest: Measurements and model comparisons, *Atmos. Chem. Phys. Discuss.*, https://doi.org/10.5194/acp-2019-726, 2020.

Rollins, A. W., **Rickly, P. S.**, Gao, R.-S., Ryerson, T. B., Brown, S. S., Peischl, J., and Bourgeois, I.: Single-photon laser-induced fluorescence detection of nitric oxide at sub-parts per trillion mixing ratios, *Atmos. Meas. Tech. Discuss.*, https://doi.org/10.5194/amt-2020-24, 2020.

Kundu, S., Deming, B. L., Lew, M. M., Bottorff, B. P., **Rickly, P.**, Stevens, P. S., Dusanter, S., Sklaveniti, S., Leonardis, T., Locoge, N., and Wood, E. C.: Peroxy radical measurements by ethane – nitric oxide chemical amplification and laser-induced fluorescence during the IRRONIC field campaign in a forest in Indiana, *Atmos. Chem. Phys.*, 19, 9563–9579, https://doi.org/10.5194/acp-19-9563-2019, 2019.

Millet, D. B., Alwe, H. D., Chen, X., Deventer, M. J., Griffis, T. J., Holzinger, R., Bertman, S. B., **Rickly, P. S.**, Stevens, P. S., Léonardis, T., Locoge, N., Dusanter, S., Tyndall, G. S., Alvarez, S. L., Erickson, M. H., Flynn, J. H. Bidirectional ecosystem-atmosphere fluxes of volatile organic compounds across the mass spectrum: How many matter? *ACS Earth Space Chem.*, 2(8), 764-777, https://doi.org/10.1021/acsearthspacechem.8b00061, 2018.

Rickly, P. S. and Stevens, P. S.: Measurements of a potential interference with laser-induced fluorescence measurements of ambient OH from the ozonolysis of biogenic alkenes, *Atmos. Meas. Tech.*, 11, 1–16, https://doi.org/10.5194/amt-11-1-2018, 2018.

Hansen, R. F., Griffith, S. M., Dusanter, S., **Rickly, P. S.**, Stevens, P. S., Bertman, S. B., Carroll, M. A., Erickson, M. H., Flynn, J. H., Grossberg, N., Jobson, B. T., Lefer, B. L., and Wallace, H. W.: Measurements of total hydroxyl radical reactivity during CABINEX 2009 – Part 1: field measurements, *Atmos. Chem. Phys.*, 14, 2923–2937, https://doi.org/10.5194/acp-14-2923-2014, 2014.

In Preparation/Under review

Rickly, P. S., Xu, Lu, Crounse, J. D., Wennberg, P. O., and Rollins, A. W. Improvements to a laser-induced fluorescence instrument for measuring SO2: impact on accuracy and precision, *Atmos. Meas. Tech. Discuss.*, in review, 2020.

Rickly, P. S., Guo, H., Nault, B. A., Campuzano-Jost, P., Jimenez, J. L., Rollins, A. W. Emission factors and evolution of SO2 measured from biomass burning during FIREX-AQ, *Atmos. Chem. Phys.*, in preparation, 2020.

Conferences

2020	American Geophysical Union (poster presentation) "Emission factors and evolution of SO2 measured from biomass burning during FIREX-AQ"
2020	FIREX-AQ Science Team Meeting "Emission factors and evolution of SO2 measured from biomass burning during FIREX-AQ"
2020	University of Colorado Rendezvous (poster presentation) "Emission factors and evolution of SO2 measured from biomass burning during FIREX-AQ"
2019	American Geophysical Union (poster presentation) "Recent Improvements and Intercomparison of a Laser-Induced Fluorescence Instrument for Measuring SO2"
2017	American Geophysical Union (paper presentation) "Measurements of total OH reactivity during PROPHET-AMOS 2016"
2016	American Geophysical Union (poster presentation) "Measurements of total OH reactivity during PROPHET-AMOS 2016"
2016	Center of Excellence for Women in Technology (poster presentation) "OH Radical Reactivity in an Indiana Forest: Measurements and Model Comparisons"
2016	Association of SPEA PhD Students (paper presentation) "OH Radical Reactivity in an Indiana Forest: Measurements and Model Comparisons"
2015	American Geophysical Union (poster presentation) "OH Radical Reactivity in an Indiana Forest: Measurements and Model Comparisons"
2015	Association of SPEA PhD Students (paper presentation) "Measurements of the OH Radical Yield from the Ozonolysis of Biogenic Alkenes: A Potential Interference with Laser-Induced Fluorescence Measurements of Ambient OH"
2014	Atmospheric Chemical Mechanisms (poster presentation) "Measurements of the OH Radical Yield from the Ozonolysis of Biogenic Alkenes: A Potential Interference with Laser-Induced Fluorescence Measurements of Ambient OH"
2014	Center of Excellence for Women in Technology (poster presentation)

"Laboratory Measurements of Potential Interferences with the Detection of OH Radicals using Laser-Induced Fluorescence at Low Pressure"

2013 American Geophysical Union (poster presentation)
"Laboratory Measurements of Potential Interferences with the Detection of OH Radicals Using Laser-Induced Fluorescence at Low Pressure"

2012 Women in Science, Technology, Informatics, and Mathematics (poster presentation)
"Experimental and theoretical studies of the ozonolysis of ocimene"

Informal Talks

2014 School of Public and Environmental Affairs Subs and Science brown bag lunch
"Laboratory Measurements of Potential Interferences with the Detection of OH Radicals Using Laser-Induced Fluorescence at Low Pressure"

2013 School of Public and Environmental Affairs Subs and Science brown bag lunch
"Laboratory Measurements of Potential Interferences with the Detection of OH Radicals Using Laser-Induced Fluorescence at Low Pressure"

AWARDS AND SERVICE

Awards

2020 NASA Group Achievement Award for FIREX

2018 AAAS/Science Program for Excellence in Science one-year membership

Public Service

Volunteer, WonderLab Museum of Science, Health, and Technology