

## Publications for Dr. Gregory Frost

H-Index: 48, citations: 11,846 (Web of Science). 11 first-authored, 106 total publications.

- 1) Rudich, Y., Y. Hurwitz, G. J. Frost, V. Vaida and R. Naaman, 1993: The reactions of O(<sup>1</sup>D) with CH<sub>4</sub> and C<sub>3</sub>H<sub>8</sub> monomers and clusters. *J. Chem. Phys.*, **99**, 4500-4508.
- 2) Vaida, V., G. J. Frost, L. A. Brown, R. Naaman, and Y. Hurwitz, 1995: Spectroscopy and photoreactivity in complex environments. *Berichte der Bunsen-Gesellschaft für Physikalische Chemie*, **99**, 371-377.
- 3) Frost, G. J., and V. Vaida, 1995: Atmospheric implications of the photolysis of the ozone-water weakly bound complex. *J. Geophys. Res.*, **100**, 18803-18809.
- 4) Goss, L. M., G. J. Frost, D. J. Donaldson and V. Vaida, 1995: Photooxidation of CS<sub>2</sub> in the near-ultraviolet and its atmospheric implications. *Geophys. Res. Lett.*, **22**, 2609-2612.
- 5) Frost, G. J., L. M. Goss, and V. Vaida, 1996: Measurements of high resolution ultraviolet-visible absorption cross sections at stratospheric temperatures: 1. Nitrogen dioxide. *J. Geophys. Res.*, **101**, 3869-3877.
- 6) Frost, G. J., L. M. Goss, and V. Vaida, 1996: Measurements of high resolution ultraviolet-visible absorption cross sections at stratospheric temperatures: 2. Chlorine dioxide. *J. Geophys. Res.*, **101**, 3879-3884.
- 7) Donaldson, D. J., G. J. Frost, K. H. Rosenlof, A. F. Tuck, and V. Vaida, 1997: Atmospheric radical production by excitation of vibrational overtones via absorption of visible light. *Geophys. Res. Lett.*, **24**, 2651-2654.
- 8) Mauldin, R. L., III, S. Madronich, S. J. Flocke, F. L. Eisele, G. J. Frost, and A. S. H. Prevot, 1997: New insights on OH: Measurements around and in clouds. *Geophys. Res. Lett.*, **24**, 3033-3036.
- 9) Vaida, V., G. J. Frost, and L. M. Goss, 1997: Spectroscopic characterization of supersonic molecular beams. *Israel J. Chem.*, **37**, 387-393.
- 10) Mauldin, R. L., III, G. J. Frost, G. Chen, D. J. Tanner, A. S. H. Prevot, D. D. Davis, and F. L. Eisele, 1998: OH measurements during the First Aerosol Characterization Experiment (ACE-1): Observations and model comparisons. *J. Geophys. Res.*, **103**, 16,713-16,729.
- 11) Frost, G. J., M. Trainer, G. Allwine, M. P. Buhr, J. G. Calvert, C. A. Cantrell, F. C. Fehsenfeld, P. D. Goldan, J. Herwehe, G. Hübler, W. C. Kuster, R. Martin, R. T. McMillen, S. A. Montzka, R. B. Norton, D. D. Parrish, B. A. Ridley, R. E. Shetter, J. G. Walega, B. A. Watkins, H. H. Westberg, and E. J. Williams, 1998: Photochemical ozone production in the rural southeastern United States during the 1990 ROSE program. *J. Geophys. Res.*, **103**, 22,491-22,508.
- 12) Jobson, B. T., G. J. Frost, D. D. Parrish, S. A. McKeen, T. B. Ryerson, M. P. Buhr, M. Trainer, and F. C. Fehsenfeld, 1998: Hydrogen peroxide dry deposition lifetime determined from observed loss rates in a power plant plume. *J. Geophys. Res.*, **103**, 22,617-22,628.
- 13) Ryerson, T. B., M. P. Buhr, G. Frost, P. D. Goldan, J. S. Holloway, G. Hübler, B. T. Jobson, W. C. Kuster, S. A. McKeen, D. D. Parrish, J. M. Roberts, D. T. Sueper, M. Trainer, J. Williams, and F. C. Fehsenfeld, 1998: Emissions lifetimes and ozone formation in power plant plumes. *J. Geophys. Res.*, **103**, 22,569-22,583.
- 14) Frost, G. J., M. Trainer, R. L. Mauldin III, F. L. Eisele, A. S. H. Prevot, S. J. Flocke, S. Madronich, G. Kok, R. D. Schillawski, D. Baumgardner, and J. Bradshaw, 1999: Photochemical modeling of OH levels during the Aerosol Characterization Experiment. *J. Geophys. Res.*, **104**, 16,041-16,052.

- 15) Frost, G. J., G. B. Ellison, and V. Vaida, 1999: Organic peroxy radical photolysis in the near-infrared: Effects on tropospheric chemistry. *J. Phys. Chem. A*, **103**, 10,169-10,178.
- 16) Baumann, K., E. J. Williams, W. M. Angevine, J. M. Roberts, R. B. Norton, G. J. Frost, F. C. Fehsenfeld, S. R. Springston, S. B. Bertman, and B. Hartsell, 2000: Ozone production and transport near Nashville, Tennessee: Results from the 1994 study at New Hendersonville. *J. Geophys. Res.*, **105**, 9137-9153.
- 17) Dye, J. E., B. A. Ridley, W. Skamarock, M. Barth, M. Venticinque, E. Defer, P. Blanchet, C. Thery, P. Laroche, K. Baumann, G. Hübner, D. D. Parrish, T. Ryerson, M. Trainer, G. Frost, J. S. Holloway, T. Matejka, D. Bartels, F. C. Fehsenfeld, A. Tuck, S. A. Rutledge, T. Lang, J. Stith, and R. Zerr, 2000: An overview of the Stratospheric-Tropospheric Experiment: Radiation, Aerosols, and Ozone (STERAO)-Deep Convection experiment with results for the July 10, 1996 storm. *J. Geophys. Res.*, **105**, 10023-10045.
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- 19) Thomas, E., G. J. Frost, and Y. Rudich, 2001: Reactive uptake of ozone by proxies for organic aerosols: Surface-bound and gas phase products. *J. Geophys. Res.*, **106**, 3045-3056.
- 20) Ryerson, T. B., M. Trainer, J. S. Holloway, D. D. Parrish, L. G. Huey, D. T. Sueper, G. J. Frost, S. G. Donnelly, S. Schauffler, E. L. Atlas, W. C. Kuster, P. D. Goldan, G. Hübner, J. F. Meagher, and F. C. Fehsenfeld, 2001: Observations of ozone formation in power plant plumes and implications for ozone control strategies. *Science*, **292**, 719-723.
- 21) Moise, T., R. K. Talukdar, G. J. Frost, R. W. Fox, and Y. Rudich, 2002: Reactive uptake of  $\text{NO}_3$  by liquid and frozen organics. *J. Geophys. Res.*, **107**, doi:10.1029/2001JD000334.
- 22) Kim, C.-H., S. M. Kreidenweis, G. Feingold, G. J. Frost, and M. K. Trainer, 2002: Modeling cloud effects on hydrogen peroxide and methylhydroperoxide in the marine atmosphere. *J. Geophys. Res.*, **107**, doi:10.1029/2000JD000285.
- 23) Fried, A., Y.-N. Lee, G. J. Frost, B. Wert, B. Henry, J. R. Drummond, G. Hübner, and T. Jobson, 2002: Airborne  $\text{CH}_2\text{O}$  measurements over the North Atlantic during the 1997 NARE Campaign: Instrument comparisons and distributions. *J. Geophys. Res.*, **107**, doi:10.1029/2000JD000260.
- 24) Frost, G. J., A. Fried, Y.-N. Lee, B. Wert, B. Henry, J. R. Drummond, M. J. Evans, F. C. Fehsenfeld, P. D. Goldan, J. S. Holloway, G. Hübner, R. Jakoubek, B. T. Jobson, K. Knapp, W. C. Kuster, J. Roberts, J. Rudolph, T. B. Ryerson, A. Stohl, C. Stroud, D. T. Sueper, M. Trainer, and J. Williams, 2002: Comparisons of box model calculations and measurements of formaldehyde from the 1997 North Atlantic Regional Experiment. *J. Geophys. Res.*, **107**, doi:10.1029/2001JD000896.
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- 27) Kovacs, T.A., W. H. Brune, H. Harder, M. Martinez, J. B. Simpas, G. J. Frost, E. Williams,

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- 30) Harwood, M. H., J. M. Roberts, G. J. Frost, A. R. Ravishankara, and J. B. Burkholder, 2003: Photochemical studies of  $\text{CH}_3\text{C}(\text{O})\text{OONO}_2$  (PAN) and  $\text{CH}_3\text{CH}_2\text{C}(\text{O})\text{OONO}_2$  (PPN):  $\text{NO}_3$  quantum yields. *J. Phys. Chem. A*, **107**, 1148-1154.
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- Frost, E. J. Williams, C. A. Stroud, B. T. Jobson, J. M. Roberts, S. R. Hall, R. E. Shetter, B. Wert, A. Fried, B. Aliche, J. Stutz, V. L. Young, A. B. White, and R. J. Zamora, 2003: OH and HO<sub>2</sub> concentrations, sources and loss rates during the Southern Oxidants Study in Nashville, Tennessee, summer 1999. *J. Geophys. Res.*, **108**, 4617, doi:10.1029/2003JD003551.
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