

# **ERIC S. SALTZMAN**

## **Curriculum Vitae**

(revised October 2008)

### **PERSONAL:**

Present Position: Professor

Office Address: Earth System Science Department  
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Date and Place of Birth: November 28, 1955; Brooklyn, New York

### **EDUCATION:**

B.S., 1977 Geology, University of Rochester  
M.S., 1983 Rosenstiel School of Marine and Atmospheric Science, University of Miami  
Ph.D., 1986 Rosenstiel School of Marine and Atmospheric Science, University of Miami

### **POSITIONS HELD:**

1985-1989 Assistant Professor, Marine and Atmospheric Chemistry, University of Miami  
1990-1995 Associate Professor, Marine and Atmospheric Chemistry, University of Miami  
1994-1998 Chairman, Marine and Atmospheric Chemistry, University of Miami  
1995-2000 Professor, Marine and Atmospheric Chemistry, University of Miami  
1998-2000 Program Manager, Atmospheric Chemistry, National Science Foundation (IPA)  
2003-2007 Chairman, Earth System Science, University of California, Irvine  
2000- Professor, Earth System Science, University of California, Irvine

**SPECIAL INTERESTS:** Atmospheric Chemistry, Biogeochemical Cycles, Air/Sea Exchange

### **PROFESSIONAL ACTIVITIES:**

NSF, NASA Advisory and Review Panels (Polar Programs; IGERT, GTE, Instrument Incubator)  
U.S. Civilian Research and Defense Fund Review Panel (1996, 1999; 2001, 2003, 2004, 2005, 2006)  
NSF HAIPER (high altitude research aircraft) Advisory Committee (2000-2005)  
Chair, NSF review of NCAR Atmospheric Chemistry Division (2001)  
Chair, NCAR Observational Facilities Advisory Panel (2002)  
Chair, Ice Core Working Group (advisory to NSF; 2003-present)  
NSF ice core sample allocation committee (2003-present)  
NCAR/ACD Advisory Committee (2003-present)  
SOLAS Implementation Committee (present)  
Chief Scientist, R/V Wecoma PHASE-1 Equatorial Pacific cruise (2004)  
US SOLAS Vice Chair  
Lecturer, SOLAS Summer School, Cargese, Fr. (2003, 2005)  
SOLAS Summer School Organizing Committee (2006)  
Associate Editor, Global Biogeochemical Cycles (2004-8)  
Associate Editor, Atmospheric Chemistry and Physics (2008-present)

## **REVIEWING/EDITING**

Book Editor – Biogenic Sulfur in the Environment (ACS Symposium Series), Gas Transfer at Water Surfaces (AGU Monograph Series), Surface Ocean Lower Atmosphere Studies (AGU Books)

Associate Editor – Geophys. Res. Letters (1990-93), Global Biogeochem. Cycles (2004-2008), Atmospheric Chemistry and Physics

Reviewer – J. Geophys. Res., Geophys. Res. Letters, Marine Chemistry, Science, Nature, Geobiology, Limnol. and Oceanogr., Atmos. Environ., Earth and Planetary Science Letters, Chemosphere, Proc. Nat'l Acad. Sci., Environmental Chemistry

## **PROFESSIONAL SOCIETY MEMBERSHIPS**

American Geophysical Union

## **TEACHING**

Introduction to Marine and Atmospheric Chemistry

Introduction to Earth and Environmental Science (undergraduate)

Atmospheric Chemistry (undergraduate and graduate)

## **RESEARCH FELLOWSHIPS**

Texaco Graduate Fellowship, (Univ. of Miami) 1977-1981

Visiting Scientist, Department of Meteorology, Univ. of Stockholm (1991, 1993)

Fellow, Cooperative Inst. of Marine and Atmos. Sciences, NOAA/Univ. of Miami (1998-2000)

## **GRADUATE/POST-DOCTORAL ADVISING**

Current Students: Michael Lawler, Ph.D.  
Kristal Verhulst, Ph.D.

Previous Students: D. Cooper, Ph.D.  
S. Yvon, Ph.D.  
P. Whung, Ph.D.  
M. Zheng, M.S.  
M. Gallagher, M.S.  
D. King, Ph.D.  
M. Davis, M.S.  
G. Zhu, M.S.  
E. Dahl, Ph. D.  
C. Tatum, M.S.  
A. O'Connor, M.S.  
C. Marandino, Ph.D.  
B. Finley, Ph.D.  
E. Parker, M.S.

Postdoctoral Associates: D. Cooper  
P.Y. Whung  
C. Germain  
D.B. King  
W. De Bruyn  
R. Rhew  
M. Williams  
C. Marandino

## **JOURNAL ARTICLES**

Harrison, C. G. A., G. W. Brass, E. S. Saltzman, J. L. Sloan II, J. Southam, and J. M. Whitman, 1981. Sea level variations, global sedimentation rates and the hypsographic curve, *Earth Planet. Sci. Lett.*, 54: 1-16.

Saltzman, E. S. and E. J. Barron, 1982. Deep circulation in the late cretaceous: oxygen isotope paleotemperatures from inoceramus remains in DSDP cores, *Paleogeo. Paleoclim. Paleoecol.*, 40: 167-181.

Zika, R.G., E.S. Saltzman, W.L. Chameides, and D.D. Davis, 1982. H<sub>2</sub>O<sub>2</sub> levels in rainwater collected in South Florida and the Bahama Islands. *J. Geophys. Res.*, 87: 5015-5017.

Zika, R. G. and E. S. Saltzman, 1982. Interaction of ozone and hydrogen peroxide in water: implications for analysis of H<sub>2</sub>O<sub>2</sub> in air. *Geophys. Res. Letts.*, 9: 231-234.

Alt, J. C., J. Honnorez, H. W. Hubberten, and E. S. Saltzman, 1983. Occurrence and origin of anhydrite from DSDP Leg 70, Hole 504B, Costa Rica rift. In: Cann, J. R. et al., Init. Repts., Wash. (U.S. Govt. Printing Office), *DSDP*, 69: 547-550.

Harrison, C. G. A., K. J. Miskell, G. W. Brass, E. S. Saltzman, and J. L. Sloan II, 1983. Continental hypsography, *Tectonics*, 2: 357-377.

Saltzman, E. S., G. W. Brass, and D. A. Price, 1983. The mechanism of sulfate aerosol formation: chemical and sulfur isotopic evidence. *Geophys. Res. Letts.*, 10: 513-516.

Saltzman, E. S., D. L. Savoie, R. G. Zika, and J. M. Prospero, 1983. Methane sulfonic acid in the marine atmosphere. *J. Geophys. Res.*, 88: 10897-10903.

Magaritz, M., R. Y. Anderson, W. T. Holser, and E. S. Saltzman, 1983. Isotope shifts in the late Permian of the Delaware Basin, Texas, precisely timed by varved sediments. *Earth and Planet. Sci. Lett.*, 66: 111-124.

Zika, R. G., J. W. Moffett, R. G. Petasne, W. J. Cooper, and E. S. Saltzman, 1985. Spatial and temporal variations of hydrogen peroxide in Gulf of Mexico waters. *Geochim. Cosmochim. Acta*, 49: 1173-1184.

Saltzman, E. S., D. L. Savoie, J. M. Prospero, and R. G. Zika, 1985. Atmospheric methanesulfonic acid and non-sea-salt sulfate at Fanning and American Samoa. *Geophys. Res. Lett.*, 12: 437-440.

Zika, R. G., E. S. Saltzman, and W. J. Cooper, 1985. Hydrogen peroxide concentrations in the Peru upwelling area. *Mar. Chem.*, 17: 265-275.

Saltzman, E. S., D. L. Savoie, J. M. Prospero, and R. G. Zika, 1986. Methane sulfonic acid and non-sea-salt sulfate in the Pacific Ocean; regional and seasonal variations. *J. Atmos. Chem.*, 4: 227-240.

- Saltzman, E. S., D. L. Savoie, J. M. Prospero, R. G. Zika, and B. Mosher, 1986. Elevated atmospheric sulfur levels off the Peruvian Coast. *J. Geophys. Res.*, 91: 7913-7918.
- de Mello, W. Z., D. J. Cooper, W. J. Cooper, E. S. Saltzman, R. G. Zika, D. L. Savoie, and J. M. Prospero, 1987. Spatial and diel variability in the emissions of some biogenic sulfur compounds from a Florida Spartina Alterniflora coastal zone. *Atmos. Environ.*, 21: 987-990.
- Cooper, D. J., W. Z. de Mello, W. J. Cooper, R. G. Zika, E. S. Saltzman, D. L. Savoie, and J. M. Prospero, 1987. Short-term variability in biogenic sulfur emissions from a Florida Spartina Alterniflora marsh. *Atmos. Environ.*, 21: 7-12.
- Cooper, W. J., E. S. Saltzman, and R. Zika, 1987. The contribution of rainwater to variability in surface ocean hydrogen peroxide. *J. Geophys. Res.*, 92: 2970-2980.
- Cooper, D. J. and E. S. Saltzman, 1987. Uptake of carbonyl sulfide by silver nitrate impregnated filters: implications for the analysis of low level atmospheric H<sub>2</sub>S. *Geophys. Res. Lett.*, 14: 206-209.
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- Plane, J. M. C. and E. S. Saltzman, 1987. A study of the reaction Li + HCl by the technique of time-resolved laser induced fluorescence spectroscopy of Li(2<sup>2</sup>P<sub>J</sub> - 2<sup>2</sup>S<sub>1/2</sub>, λ = 670.7 nm) between 700 and 1000K. *J. Chem. Phys.*, 87: 4606-4611.
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- Mayewski, P. A., M. S. Twickler, W. B. Lyons, M. J. Spencer, D. A. Meese, A. J. Gow, P. Grootes, T. Sowers, M. S. Watson, and E. S. Saltzman, 1990. The Dominion Range ice core, Queen Maude Mountains, Antarctica - general site and core characteristics with implications. *J. Glaciol.*, 36: 11-16.
- Cooper, D. J. and E. S. Saltzman, 1991. Measurements of atmospheric dimethyl sulfide and carbon disulfide in the Western Atlantic boundary layer. *J. Atmos. Chem.*, 12: 153-168.
- Legrand, M., C. Feniet-Saigne, E. S. Saltzman, C. Germain, N. I. Barkov and V. N. Petrov, 1991. Ice-core record of oceanic emissions of dimethyl sulphide during the last climate cycle. *Nature*, 350: 144-146.

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Mulvaney, R., E. C. Pasteur, D. A. Peel, E. S. Saltzman and P.-Y. Whung, 1992. The ratio of MSA to non-sea-salt sulphate in Antarctic Peninsula ice cores. *Tellus*. 44B: 295-303.

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Saltzman, E.S., S.A. Yvon, and P.A. Matrai, 1993. Low-level detection of atmospheric sulfur dioxide measurement using HPLC/Fluorescence Detection. *J. Atmos. Chem.*, 17, 73-90.

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sulfide: aircraft results for concentrations at the parts-per-trillion level. *J. Geophys. Res.*, 98, 23,373-23,388.

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Pilinis, C.P., D.B. King, and E.S. Saltzman, 1996. The oceans - a source or sink of methyl bromide?, *Geophys. Res. Lett.*, 23, 817-820.

Yvon, S.A., E.S. Saltzman, D.J. Cooper, T.S. Bates, and A.M. Thompson, 1996. Atmospheric dimethylsulfide cycling at a tropical South Pacific station (12S, 135W): A comparison of field data and model results, *J. Geophys. Res.*, 101, 6899-6909.

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Mayewski, P.A., M.S. Twickler, S.I. Whitlow, L.D. Meeker, Q. Yang, J. Thomas, K. Kreutz, P.M. Grootes, D.L. Morse, E.J. Steig, E.D. Waddington, E.S. Saltzman, P.-Y. Whung, and K.C. Taylor, 1996. Climate change during the last deglaciation in Antarctica, *Science*, 272, 1636-1638.

De Bruyn, W.J. and E.S. Saltzman, 1997. Solubility of methyl bromide in pure water, seawater, and NaCl solution, *Marine Chemistry*, 56, 51-58.

Silvente, E., R.C. Richter, M. Zheng, E.S. Saltzman, and A.J. Hynes, 1997. Relative quantum yields for O'D production in the photolysis of ozone between 301 and 336 nm: Evidence for the participation of a spin forbidden channel, *Chemical Physics Letters*, 264, 309-315.

De Bruyn, W.J. and E.S. Saltzman, 1997. Diffusivity of methyl bromide in water, *Marine Chemistry*, 57, 55-59.

Carsey, T.P., D.D. Churchill, M.L. Farmer, C.J. Fischer, A.A. Pszenny, V.B. Ross, E.S. Saltzman, M. Springer-Young, and B. Bonsang, 1997. Nitrogen oxides and ozone production in the North Atlantic marine boundary layer, *J. Geophys. Res.*, 102, 10653-10,666.

Ayers, G.P., J.M. Caine, R.W. Gillett, E.S. Saltzman, and M. Hooper, 1997. Sulfur dioxide and dimethyl sulfide in marine air at Cape Grim, 41°S, *Tellus*, 49B, 292-299.

King, D.B. and E.S. Saltzman, 1997. Removal of methyl bromide in coastal seawater; chemical and biological rates, *J. Geophys. Res.*, 102, 18715-18721.

Petit, J.R., I. Basile, A. Leruyet, D. Raynaud, C. Lorius, J. Jouzel, M. Stievenard, V. Y. Lipenkov, N. I. Barkov, B. B. Kudryashov, M. Davis, E. Saltzman & V. Kotlyakov, 1997. Four climate cycles in Vostok ice core, *Nature*, 387, 359-360.

Gallagher, M.S., D.B. King, P.-Y. Whung, and E.S. Saltzman, 1997. Performance of the HPLC/Fluorescence SO<sub>2</sub> detector during the GASIE instrument intercomparison experiment, *J. Geophys. Res.*, 102, 16247-16254.

Stecher, H.A. III, G.W. Luther III, D.L. MacTaggart, S.O. Farwell, D.R. Crossley, W.D. Dorko, P.D. Goldan, N. Beltz, U. Krischke, W.T. Luke, D.C. Thornton, R.W. Talbot, B.L. Lefer, E.M. Scheuer, R.L. Benner, J. Wu, E.S. Saltzman, M.S. Gallagher, and R.J. Ferek, Results of the gas-phase sulfur intercomparison experiment (GASIE): Overview of experimental setup, results, and general conclusions, *J. Geophys. Res.*, 102, 16219-16236.

Saltzman, E.S., P.-Y. Whung, and P.A. Mayewski, 1997. Methanesulfonate in the Greenland Ice Sheet Project 2 ice core, *J. Geophys. Res.*, 102, 26649-26657.

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