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**EDUCATION:**

University of Puget Sound, B.S. Chemistry, second major Mathematics, 1997

**RESEARCH AREAS:**

Cloud microphysical and radiative properties, cloud retrieval validation, assessment of cloud model parameterizations, cloud type classification, Arctic meteorology and climate.

**PROFESSIONAL APPOINTMENTS:**

NOAA/ETL, Radar Meteorology and Oceanography Division; August 1998 - Present

**FIELD EXPERIENCE:**

January 2000-February 2000: High Altitude Weather Characterization Experiment (Boston)

March 1999: Repairing a NOAA/ETL depolarization lidar (DABUL) in Barrow, Alaska.

November 1997 - October 1998: Surface Heat Budget of the Arctic Program (Arctic Ocean)

**REFEREED PUBLICATIONS:**

Shupe, M.D., T. Uttal, S.Y. Matrosov, and A.S. Frisch, 2001: Cloud water contents and hydrometeor sizes during the FIRE-Arctic Clouds Experiment, *J. Geophys. Res.*, 106, 15,015-15,028, 2001.

Hobbs, P.V., A.L. Rangno, M.D. Shupe, and T. Uttal, 2001: Airborne studies of cloud structures over the Arctic Ocean and comparisons with deductions from ship-based 35 GHz radar measurements, *J. Geophys. Res.*, 106, 15,029-15,044, 2001.

Minnis, P., D.R. Doelling, V. Chakrapani, D.A. Spangenberg, L. Nguyen, R. Palikonda, T. Uttal, R.F. Arduini, and M. Shupe, 2001: Cloud coverage during FIRE ACE derived from AVHRR data, *J. Geophys. Res.*, 106, 15,215-15,232, 2001.

Khvorostyanov, V.I., J.A. Curry, J.O. Pinto, M.D. Shupe, B.A. Baker, and K. Sassen, 2001: Modeling with explicit spectral water and ice microphysics of a two-layer cloud system of

altostratus and cirrus observed during the FIRE Arctic Clouds Experiment, *J. Geophys. Res.*, 106, 15,099-15,112, 2001.

Intrieri, J.M., M.D. Shupe, T. Uttal, and B.J. McCarty, 2001: Annual Cycle of Arctic Cloud Geometry and Phase from Radar and lidar at SHEBA *J. Geophys. Res.*, in press.

Intrieri, J.M., C.F. Fairall, M.D. Shupe, O.G.P. Persson, E.L. Andreas, and R.M. Moritz, 2001: Annual cycle of cloud forcing over the Arctic. *J. Geophys. Res.*, in press.

Schweiger, A., R. Lindsay, J. Francis, J. Key, J.M. Intrieri, and M.D. Shupe, 2001: Validation of TOVS Path-P data during SHEBA. *J. Geophys. Res.*, in press.

E.R. Westwater, Y. Han, M.D. Shupe, and S.Y. Matrosov, 2001: Analysis of integrated cloud liquid and precipitable water vapor retrievals from microwave radiometers during SHEBA, *J. Geophys. Res.*, in press.

Frisch, A.S., M.D. Shupe, S.Y. Matrosov, I. Djalalova, G. Feingold, and M. Poellot, 2001: On the Retrieval of Effective Radius with Cloud Radars. *J. Atmos. Ocean Tech.*, submitted.