

**LIST OF Ph.D. DISSERTATIONS AND M.S. THESES
SUPERVISED BY PROFESSOR PETER V. HOBBS**

M.S. Degree

- 1) Radke, Lawrence Frederick. M.S. Thesis, "The Densification of Artificial Firn," 1966.
- 2) Farber, Robert James. M.S. Thesis, "A Study of Cloud Particles in Synoptic Storms Over the Pacific Northwest," 1971.
- 3) Bluhm, George Charles. M.S. Thesis, "An Analysis of Simultaneous Ice Nucleus Measurements at Three Sites on the North Pacific Rim," 1972.
- 4) Mach, William Howard. M.S. Thesis, "The Development of an Airborne Instrument for Investigating the Electrical Properties of Hydrometeors," 1972.
- 5) Chang, Hsien Lin Shirley. M.S. Thesis, "The Dimensions and Aggregation of Ice Crystals in Natural Clouds," 1972.
- 6) Turner, Francis Melvill. M.S. Thesis, "The Design and Development of an Airborne Ice Crystal Counter," 1972.
- 7) Eagan, Richard Charles. M.S. Thesis, "Aerosols from a Kraft Mill and from Forest Fires and Their Effects on the Microstructure of Cumuliform Clouds," 1973.
- 8) Brown, Ronald Rex. M.S. Thesis, "Cloud and Precipitation Modification in Winter Cyclonic Storms in the Pacific Northwest," 1973.
- 9) Matejka, Thomas John. M.S. Thesis, "The Dynamical and Microphysical Structure of an Occluded Front and Its Modification by Orography," 1974.
- 10) Davis, William Morgan. M.S. Thesis, "Radar and Airborne Studies of Rainbands Associated with Fronts in the Pacific Northwest," 1975.
- 11) Hegg, Dean Arnold. M.S. Thesis, "Nitrogen Oxides, Ozone, and Sulfur in Power Plant Plumes," 1976.
- 12) Bowdle, David Allen. M.S. Thesis, "Aerosol Over the High Plains of the United States," 1977.
- 13) Politovich, Marcia Kay. M.S. Thesis, "Studies of the Structure of Clouds Sampled in Eastern Montana in Summer 1976," 1978.
- 14) Persson, Per Ola Gustav. M.S. Thesis, "The Small Mesoscale Structure and Microphysics of a Narrow Cloud-Frontal Rainband," 1980.

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M.S. Degree (Continued)

- 15) Kruidenier, Melanie Ann. M.S. Thesis, "Mesoscale Organization of a Stratiform Cloud System Observed in Satellite Imagery," 1980.
- 16) Yates, John Charles. M.S. Thesis, "Measurements of Particles and Trace Gases Over North America and the North Atlantic Ocean," 1981.
- 17) Glantz, Clifford Steven. M.S. Thesis, "An Investigation of Air Pollution in the Mohave Desert and Neighboring Areas in the Southwestern United States," 1982.
- 18) Poteet, William Randall. M.S. Thesis, "The Effects of a Coal-Fired Power Plant on Regional Visibility," 1983.
- 19) Funk, Nathan Tucker. M.S. Thesis, "Evaluation of a 35 GHz Radar for Cloud Physics Research," 1983.
- 20) Schutt, David John. M.S. Thesis, "Nitric Acid and Ammonia in the Ambient Air and in the Plume from a Coal-Fired Power Plant," 1984.
- 21) Tuell, Jason P. M.S. Thesis, "Particles and Gases in the Emissions from the 1980-1981 Volcanic Eruptions of Mt. St. Helens," 1986.
- 22) Orphan, Margaret Leslie. M.S. Thesis, "Effects of Emissions from a Coal-Fired Power Plant and Soil-Derived Particles on Visibility in the Lower Colorado River Valley," 1988.
- 23) Sienkiewicz, Joseph. M.S. Thesis, "The Synoptic Evolution of a Frontal System and its Mesoscale and Microscale Structures on the Mid-Atlantic Coast of the United States," 1988.
- 24) Laursen, Krista K. M.S. Thesis, "Trace Gas Emissions from North American Biomass Fires with an Assessment of Regional and Global Fluxes from Biomass Burning," 1992.
- 25) Cahill, Catherine F. M.S. Thesis, "Compositions and Removal Rates of Aerosols in the Smoke Plumes from the 1991 Kuwait Oil Fires," 1994.
- 26) Castle, Jeffrey Alan. M.S. Thesis, "Structure and Evolution of a Drytrough from the Great Plains to the Lower Mississippi River Valley," 1994.
- 27) Ross, John L. M.S. Thesis, "Airborne Measurements of the Smoke from the Burning of Prescribed Oil Spills on the Ocean," 1995.
- 28) Garrett, Timothy J. M.S. Thesis, "Ship Tracks: An Example of Aerosol-Cloud Interactions," 1995.

**LIST OF Ph.D. DISSERTATIONS AND M.S. THESES
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M.S. Degree (Continued)

- 29) Brown, Michael James. M.S. Thesis, "Modeling the Organization of Precipitation on Cold Fronts," 1997.
- 30) Kotchenruther, Robert Alan. M.S. Thesis, "Aerosol Light-Scattering Humidification Factors for Smoke in Brazil and for Atmospheric Aerosol off the East Coast of the United States," 1997.
- 31) Hartley, William Seth. M.S. Thesis, "Airborne Study of Aerosol Optical Properties and Direct Aerosol Radiative Forcing off the East Coast of the United States," 2000.
- 32) Rose, Stanley F. M.S. Thesis, "Jet Streaks, Cold Fronts Aloft, and the Forecasting of Severe Weather in the United States," 2002.
- 33) Woods, Christopher P. M.S. Thesis, "Synergistic Interactions Between Frontal and Orographic Forcing of Precipitation: A Case Study of the 13-14 December 2001 IMPROVE-2 Precipitation Event," 2004.
- 34) Evans, Amanda. M.S. Thesis, "Observations of Cloud Structures and the Growth of Precipitation During the IMPROVE-1 Storm of February 1-2, 2001," 2004.

Ph.D. Degree

- 1) Dye, James Eugene. Ph.D. Dissertation, "The Influence of Environmental Parameters on the Freezing and Fragmentation of Suspended Water Drops," 1967.
- 2) Alkezweeny, Abdul Jabbar. Ph.D. Dissertation, "The Fragmentation of Freezing Water Droplets in Free Fall," 1968.
- 3) Ketcham, Warren Milford, Jr. Ph.D. Dissertation, "Some Interfacial Phenomena Associated with the Freezing of Water," 1968.
- 4) Radke, Lawrence Frederick. Ph.D. Dissertation, "Automatic Counting of Cloud Condensation Nuclei," 1968.
- 5) Burrows, Donald Allen. Ph.D. Dissertation, "The Role of Ice in Cloud Electrification," 1968.
- 6) Levin, Zev. Ph.D. Dissertation, "Splashing of Water Drops: A Study of the Hydrodynamics and Charge Separation," 1970.

**LIST OF Ph.D. DISSERTATIONS AND M.S. THESES
SUPERVISED BY PROFESSOR PETER V. HOBBS**

Ph.D. Degree (Continued)

- 7) Lamb, Dennis. Ph.D. Dissertation, "Growth Rates and Habits of Ice Crystals Grown from the Vapor Phase," 1970.
- 8) Hindman, Edward Evans, II. Ph.D. Dissertation, "The Nature of Aerosol Particles from a Paper Mill and Their Effects on Clouds and Precipitation," 1975.
- 9) Scott, Bryan Cosby. Ph.D. Dissertation, "A Theoretical Study of the Evolution of Mixed Phase Cumulus Clouds," 1976.
- 10) Eltgroth, Mark Willkie. Ph.D. Dissertation, "A Numerical Model of Particle Interactions in the Plumes from Coal-Fired Power Plants and Comparisons with Field Measurements," 1978.
- 11) Stith, Jeffrey L. Ph.D. Dissertation, "A Comparison of Some Natural and Anthropogenic Sources of Particles and Gases in the Atmosphere," 1978.
- 12) Hegg, Dean Arnonld. Ph.D. Dissertation, "Gas-To-Particle Conversion in the Plumes from Coal-Fired Electric Power Plants," 1979.
- 13) Matejka, Thomas John. Ph.D. Dissertation, "Mesoscale Organization of Cloud Processes in Extratropical Cyclones," 1980. Professor R. Houze was official chairperson.
- 14) Parsons, David Brian. Ph.D. Dissertation, "Origin, Behavior, and Dissipation of Mesoscale Rainbands including the Effects of Orography and Comparison with Theory," 1982.
- 15) Herzegh, Paul Haskins. Ph.D. Dissertation, "Precipitation Development in Midlatitude Cyclones: A Study of Cloud Structures and Processes," 1983.
- 16) Rutledge, Steven Allan. Ph.D. Dissertation, "A Numerical Study of Cloud and Precipitation Processes in Mesoscale Rainbands," 1983.
- 17) Businger, Steven. Ph.D. Dissertation, "Cyclonic Vortices in Polar Airmasses," 1986.
- 18) Knight, David J. Ph.D. Dissertation, "A Numerical Modeling Study of Frontogenesis and Cold-Frontal Rainbands," 1987.
- 19) Hertzman, Owen. Ph.D. Dissertation, "Three-Dimensional Kinematics of Rainbands in Midlatitude Cyclones," 1988.

**LIST OF Ph.D. DISSERTATIONS AND M.S. THESES
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Ph.D. Degree (Continued)

- 20) Brock, Charles A. Ph.D. Dissertation, "Microphysical, Chemical and Meteorological Aspects of Aerosol Hazes in the Arctic," 1990. Professor L. Radke was official chairperson.
- 21) Geerts, Bart. Ph.D. Dissertation, "Retrieval of Pressure, Temperature and Cloud Structure in Frontal Rainbands," 1990.
- 22) Barth, Mary C. Ph.D. Dissertation, "Numerical Modeling of Cloud Chemistry and Acid Deposition Associated with the Interactions of Two Rainbands and Some Comparisons with Observations," 1991.
- 23) Martin, Jonathan E. Ph.D. Dissertation, "Structure and Propagation of Fronts East of the Rocky Mountains and Their Relationship to Precipitation," 1992.
- 24) Ackerman, Andrew S. Ph.D. Dissertation, "A Numerical Modeling Study of the Effects of Variations in Aerosol Concentrations on Stratiform Clouds in the Marine Boundary Layer," 1994.
- 25) Herring, John A. Ph.D. Dissertation, "Radiative Properties, Dynamics, and Chemical Evolution of the Smoke from the 1991 Kuwait Oil Fires," 1994.
- 26) Perry, Kevin Dwayne. Ph.D. Dissertation, "Some Effects of Cumulus Clouds on their Surroundings," 1995.
- 27) Reid, Jeffrey Spencer. Ph.D. Dissertation, "Emission, Evolution, and Radiative Properties of Particles from Biomass Burning in Brazil," 1998.
- 28) Garrett, Timothy J. Ph.D. Dissertation, "Radiative Properties of Arctic Clouds," 2000.
- 29) Sinha, Parikhit. Ph.D. Dissertation, "Emissions from Savanna Fires in Southern Africa," 2004.

12 October 2004