# Claudia J. Wise Physical Scientist / Chemist

#### SUMMARY OF EXPERIENCE

Ms. Wise is a retired Physical Scientist previously employed at the US Environmental Protection Agency, Corvallis Environmental Research Laboratory, Corvallis, OR. Ms. Wise has 32 years experience in chemical/biological instrumentation methods. She spent 8 years with the Western Fish Toxicology Station coauthoring journal articles dealing with bioaccumulation of Invertebrates and Fish exposed to chemical toxicity. She has contributed on many projects and authored numerous journal articles for the Watershed Ecology, Terrestrial, Ecotoxicology and Freshwater Branches studying phytotoxicity of soil and plant growth effects.

At her time of retirement, Ms. Wise was with the Watershed Ecology Stable Isotope Research Facility. She provided stable isotopic abundance analysis in conjunction with C and N Isotopes in the integrated stable isotope research facility (ISIRF). Other responsibilities included method development and writing SOP for use of ISN measurements utilizing innovative sample extraction techniques. She also served as manager in charge of overseeing prep lab activities and containment of the Enrichment and Natural Abundance facilities.

Since retirement Ms. Wise has participated as a Chemist in water quality projects in Oregon and California. Post USEPA experience includes: Preliminary Klamath River Water Quality Survey examining effects of suction dredging and written a declaration for the Superior Court of the State of California in support of suction dredge mining. Ms. Wise's current interest includes effects of suction dredging on mercury speciation and protective properties of selenium. She is an invited scientist on the California Department of Fish and Game Suction Dredge Public Advisory Committee. Ms Wise's Powerpoint presentation to the committee was titled, "Selenium Antagonism to Mercury, Does Methymercury Cause Significant Harm to Fish or Human Health." Ms. Wise also participated in a review of the new Oregon Department of Environmental Quality (ODEQ) suction dredge permit regulations where she offered ODEQ "Solutions for Regulating Turbidity in Oregon Waters Caused by Small Scale Suction Dredges".

### **EMPLOYMENT HISTORY**

US Environmental Protection Agency (EPA), Risk Characterization	06/2004-05/2006
US Environmental Protection Agency (EPA), Watershed Ecology	06/2003-06/2004
& Marine Derived Nutrients	
US Environmental Protection Agency (EPA), Terrestrial Processes	02/1993-06/2003
& Effects	
US Environmental Protection Agency (EPA), Terrestrial Toxicology	01/1990-02/1993
US Environmental Protection Agency (EPA), Ecotoxicology Branch	09/1987-01/1990
US Environmental Protection Agency (EPA), Hazardous Waste & Water	06/1985-09/1987
US Environmental Protection Agency (EPA), Western Fish Toxicology	06/1981-06/1985
US Environmental Protection Agency (EPA), Analytical Branch	06/1976- 06/1981
US Environmental Protection Agency (EPA), Administrative Branch	10/1974- 06/1976

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# Oregon State University, Corvallis, OR, Limnology Lab

10/1973-10/1974

# RESEARCH INTERESTS AND SKILLS

- Ecophysiology of forest processes.
- Plant gas exchange and plant water relations.
- Soil respiration.
- Mercury speciation in relation to effects of suction dredging

#### **EDUCATION**

**Post Graduate Study** 

Environmental Studies

B.S. Horticulture Oregon State University, June 1991

• Plant Science

A.S. Science and Technology Linn Benton Community College, June 1981

#### **HONORS**

Bronze Medal Recipient for Commendable Service,

The United States Environmental Protection Agency

• Secondary Effects of Ozone research Group: Production of high quality, world-class science that supported development of the secondary ozone standard

Team Honor Award for advancing Environmental Science, USEPA, Western Ecology Division, April 1999.

## **AWARDS**

- Scientific and Technological Achievement Level III Award the publication A Unique Study on the Ecological Effects of Climate Change on Trees. 2005.
- Special Achievement Award for Superior Accomplishment in the Environmental Protection Agency, Environmental Research Laboratory, Corvallis, OR., 2005.
- Special Achievement Award for Superior Accomplishment in the Environmental Protection Agency, Environmental Research Laboratory, Corvallis, OR., 2004.
- Special Achievement Award for Superior Accomplishment in the Environmental Protection Agency, Environmental Research Laboratory, Corvallis, OR., 1999.

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- Special Achievement Award for Superior Accomplishment in the Environmental Protection Agency, Environmental Research Laboratory, Corvallis, OR., 1998.
- Director's Technical Contribution Award, USEPA, Corvallis Environmental Research Laboratory, April 1990- June 1990.

#### **PUBLICATIONS**

Effects of elevated CO<sub>2</sub> and O<sub>3</sub> on soil respiration ponderosa pine, (with D.T. Tingey, M.G. Johnson, E.H. Lee, R. Waschmann, D.M. Olszyk, L.S. Watrud, and K.K. Donegan. Soil Biology and Biochemistry 38 1764-1778, 2006.

Xeromorphy increases in shoots of *Pseudotsuga menziesii* (Mirb.) Franco seedlings with exposure to elevated temperature but not elevated CO<sub>2</sub>, (with David Olszyk, Martha Apple, Barbara Gartner, Rachel Spicer, Erica Buckner, Annick Benson-Scott and David Tingey), Trees - Structure and Function Volume 19, Number 5, 552-563, 2005.

CO<sub>2</sub> and O<sub>3</sub> alter photosynthesis and water vapor exchange for *Pinus ponderosa* needles, (with D.M. Olszyk, D.T. Tingey, C. Davis), Phyton 42, 121-134, 2002.

Biomass allocation for *Pseudotsuga menziesii* seedlings exposed to elevated temperature and elevated CO<sub>2</sub> over four growing seasons, (with D.M. Olszyk, M. G. Johnson, D.T. Tingey, P. T. Rygiewicz, E. Vaness, A. Benson. M. J. Storm), New Phytologist, 2000.

Phenology and growth of shoots, needles, and buds of Douglas-fir seedlings with elevated CO<sub>2</sub> and (or) temperature, (with David Olszyk, Erica VanEss, Martha Apple, David Tingey), Canadian Journal of Botany 76:1991-2001, 1999. EPA/600/J-99/223 1J.

Effects of elevated temperature and CO2 on shoot growth and phenology of Douglas-fir seedlings, (with David Olszyk, Martha Apple, David Tingey), Climate Change, 1999.

Elevated temperature but not elevated CO<sub>2</sub> affects long-term patterns of stem diameter and height of douglas-fir seedlings, (with David Olszyk, Erica VanEss, David Tingey), Canadian Journal of Forest Research 28: 1046-1054, 1998.

NHEERL-COR-2140J. EPA/600/J-99/007. 970609.

Interactive effects of increased CO<sub>2</sub> and increased O<sub>3</sub> on injury to rice and flacca tomato, (with D. M. Olszyk), Ecosystems and Environment 66:1-10, 1997.

Interactive effects of increased CO<sub>2</sub> and increased O<sub>3</sub> on injury to rice and flacca tomato, (with D. M. Olszyk), <u>Environmental Pollution</u>. 1996. ERL-COR-1556J.

Influence of zeolite on the phytotoxicity of soil removed from a hazardous waste site contaminated with heavy metals. (with D.F. Krawczyk, J.S. Fletcher, M.L. Robideaux), Submitted to Environmental Pollution, 1991. ERL-COR-1063J.

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Survival, reproduction, and bioconcentration of invertebrates and fish exposed to hexachlorophonzene, (with A. V. Nebeker, William L. Griffis, Elmina Hopkins, Janet Barbetta), Environmental Toxicology and Chemistry 8:601-61, 1989.

NHEERL-COR-839J.

Relative sensitivity of *chirmomus tentaus* cheronomour tentons life stages to Copper, (with A. V. Nebeker, M. A. Cairns), Environmental Toxicology and Chemistry 3:151-158, 1984. EPA/600/J-84/031. NHEERL-COR-231J

# ABSTRACT, POSTER PRESENTATION

Effects of CO2 and O3 on carbon flux for ponderosa pine plant litter/soil system. (with D.M. Olszyk, D. T. Tingey, M. Johnson)

Effects of elevated CO2 and temperature on growth of Douglas-fir, (with D.M. Olszyk, E. VanEss, D. Tingey), 28th Air Pollution Workshop, Apr 15-18, Raleigh, NC., 1996.

Effects of elevated temperature and CO2 on shoot growth and Phenology of Douglas-fir seedlings, (with D.M.Olszyk, M. Apple, D. T. Tingey. The Gordon Conference on Temperature Stress In Plants, January 26-31, Ventura, CA. 1997.