

Update 28 April 04

ALFRED H. SOELDNER

Senior Instructor, Botany & Plant Pathology
Facility Manager: Electron Microscope Facility

Phone: 541-737-5465/5245/5247
Fax: 541737-3573

PRINCIPAL DUTIES

Responsible for EM services, operation, and training related to electron microscopy and x-ray spectrometry, maintain microscopes and support equipment. Provide specimen preparation services, instruction, lectures, demonstrations. Manage records, price schedules, policy; consult and promote sales. Develop techniques and applications using EM and/or EDX in all pertinent fields. Acquire basic and support equipment, administrate equipment purchases/installations.

TEACHING DUTIES

BI 466/566 - Electron Microscopy

Bot 505A - Reading and Conference in Electron Microscopy; training courses: TEM/SEM operation, microchemical/microstructural analysis, specimen preparation for TEM/SEM.

Bot 508 -Workshop/Light Microscope.

EDUCATION

1990 KEVEX Image Analysis School, San Carlos, CA
1983 KEVEX X-Ray Analysis School, Foster City, CA
1980 AMRAY Operators Course, Bedford, MA
1971 70th Philips X-Ray Analytical School, Anaheim, CA
1967 B.S., Oregon State University, Corvallis
1964 A.A.S., State University of New York, Farmingdale

PROFESSIONAL EXPERIENCE

Sr. Instructor w/tenure: July 1, 1989 to present

Graduate Faculty: December 1, 1989.

Instructor: April 1, 1980 to July 1, 1989 (Fixed term appointment)

Research Assistant, Unclassified: April 1, 1966 to April 1, 1980

Self employed: Electron Micro-tech Service, February 1, 1964 to April 1, 1966

EQUIPMENT GRANTS

2004 \$ 17,500 (State of Oregon Risk Management Division)
Reimbursement appeal, loss incurred in prolonged power brown out

2001 \$ 15,000 (OSU Research Office)
Uninterruptable Power Supplies of Transmission and Scanning Electron
Microscopes

1999 \$142,083 (National Science Foundation) - Failed
Modernize Teaching Lab Light Microscopes (with Bruce McCune)

1999 \$15,900 (OSU Research Office)
Modernize Image Processing for Electron Microscope Facility

1996 \$30,000 (OSU Research Office)
X-Ray Energy Spectrometer

1996 \$16,000 (OSU Research Office)
Field Emission Scanning Electron Microscope

1995 \$21,180 (National Science Foundation)
Instrumentation for Biological Research Program, Field Emission Scanning Electron
Microscope

1995 \$91,950 (National Science Foundation)
Instrumentation for Biological Research Program, Field Emission Scanning Electron
Microscope

1994 \$3,000 (Roger & Betty Olleman)
Donation toward Field Emission Scanning Electron Microscope

1994 \$61,000 (OSU Research Office, Academic Deans)
Marching Funds for Field Emission Scanning Electron, Microscope and X-ray Spectrometer

EQUIPMENT GRANTS (continued)

1993 \$2,000 (AFI Associates, Inc.)
Donation toward Field Emission Scanning Electron Microscope

1988 \$407,000 (Murdock Charitable Trust: \$342,000; OSU Research Office: \$65,000)
Scanning transmission electron microscope, x-ray spectrometer and image analyzer

1982 \$67,650 (OSU Research Council)
KEVEX 7077 X-ray energy spectrometer

1980 \$55,000 (OSU Research Council)
AMRAY 1000a scanning electron microscope and modify space

1973 \$17,000 (OSU Research Council)
MSM-2 Mini-SEM scanning electron microscope

RECENT PUBLICATIONS

1. Doss, Robert P., Joachim Deisenhofer, Hans-Albrecht von Nidda, Alfred H. Soeldner, Ruth P. McGuire. 2003. Melanin in the Extracellular Matrix of Germlings of *Botrytis cinerea*. *Photochemistry* 63:687-691.
2. Yolanda Maya, Alejandro Lopez-Cortes, Al Soeldner. 2002. Cyanobacterial Microbiotic Crusts in Eroded Soils of a Tropical Dry Forest in the Baja California Peninsula, Mexico. *Geomicrobiology Journal* 19:1-14.
3. Apple, M., Tiekotter, K., Snow, M., Young, J., Soeldner, A., Phillips, D., Tingey, D., Bond, B. 2002. Needle anatomy changes with increasing tree age in Douglas fir. *Tree Physiology* 22: 129-136.
4. Soeldner, A. 1998. Uranium Is The Issue. *Microscopy Today* 98-9:24-25.