

# SCHOOL of CIVIL and CONSTRUCTION ENGINEERING

OREGON STATE UNIVERSITY

College of Engineering

**SCHULTZ, Robert J.**

Professor

**BIRTH DATE**

October 4, 1933

## DEGREES

B.S., Civil Engineering, Worcester Polytechnic Institute, 1955

M.S., Civil Engineering, Worcester Polytechnic Institute, 1960

## ACADEMIC POSITIONS

Worcester Polytechnic Institute, Graduate Assistant, 1958-1960

Manhattan College, New York, NY, Instructor, 1959-1963, Summer Surveying Camps

Oregon State University, Corvallis, OR, Assistant Professor, 1962-1965; Associate Professor, 1965-1970;  
Professor, 1970-present

Linn Benton Community College, Albany, OR, Professor, 1970-1976, Evening Classes

## NON-ACADEMIC POSITIONS

Junior Engineer, Columbia Gas System, 1955-1956

U.S. Army Corps of Engineers 2nd Lieutenant, 1956

Field Engineer, Capobianco Construction Company, 1957-1958

Communications Engineer on Arctic and Foreign Construction on Dew Line and BMEWS Sites, Western  
Electric Company, Inc., 1960-1962

Consulting, U.S. Government, Civil Defense Instructor, 1962-1970

Consulting Engineer and Surveyor, Surveying and Mapping, State of Oregon, 1967 and 1969 – “Beach  
Bill” and Corvallis Sand and Gravel Company Law Case

Principal, MSS, Inc., Engineering, Planning, and Surveying, 1972-1980

## FIELDS OF SPECIALIZATION

Civil Engineering

Surveying and Mapping

Geodesy

Photogrammetry

Boundary Law

## PROFESSIONAL ACTIVITIES

### Registration

PE State of Oregon, No. 5101

PE Commonwealth of Massachusetts, No. 10511

PLS State of Oregon, No. 1013

### Professional Societies

American Society of Civil Engineers (ASCE) – Fellow – Life Member

American Congress on Surveying and Mapping (ACSM) – Life Member

American Society for Photogrammetry and Remote Sensing (ASPRS) – Life Member Emeritus

National Society of Professional Engineers

American Geophysical Union

American Society for Engineering Education

The Professional Land Surveyors of Oregon - Life Member

### **Professional Recognition**

Chi Epsilon

Sigma Xi

General Chairman, Surveying and Mapping Conference, OSU, March 1964, 1966, 1968, 1970 and 1972

Program Chairman, Semi-Annual ACSM Convention, Portland, OR, August 1965

Moser Award Winner, Oregon State University, 1966 (\$1,000)

Chairman, ASCE, S & M Division, Committee on Land Surveying, 1966-1967

Elected Director Control Surveying Division, ACSM, 1966-1969

Oregon Governor's Committee from OSU to Investigate "Beach Bill" 1967

National Board of Directors, ACSM, 1968-1969, 1975-1978

ACSM Presidential Citation Award, 1969, 1978, 1980, 1983, 1985, 1999

Deputy Program Chairman, Semi-Annual ASP-ACSM Convention, Portland, OR, September 1969

Chairman, ASEE, Civil Engineering, Committee on Surveying, 1968-1971

Chairman, ASCE, S & M Division, Control Surveys Committee, 1969-1970

General Chairman, ASEE, National Surveying Teachers Conference VII, Oregon State University, August 1971

Chairman, ASP, Education Committee, 1972-1973

Carter Award Winner, Oregon State University, School of Engineering, 1972

Associated General Contractor's Award for Outstanding Teaching in Construction Engineering Management, CEM, Program, 1991, 1994, 1996

Department of Civil, Construction, and Environmental Engineering, Student "ASCE" Undergraduate Teaching Award, 2002

Oregon State University Richard M. Bressler Senior Faculty Teaching Award, 2002 (\$2,500)

### **Committees, Commissions, and Boards**

Invited Participant, NOAA-National Geodetic Survey, Geodesy Research Meeting, June 1972, Washington, D.C.

University Remote Sensing Committee, 1970-1980

Oregon State Board of Engineering Examiners, Ad Hoc Committee, Oregon Land Surveying Education, 1974-1975

ACSM Ad Hoc Visitors Committee to ABET for Surveying Program Accreditation, 1977-

Geomatics Program visitor, ABET - ASAC, University of Alaska, Anchorage, fall 2004

Geomatics Program visitor, ABET - EAC, The Ohio State University, Columbus, fall 2005

Oregon State Board of Engineering Examiners, 1979-1987; President, 1986-87

ABET, EAC, Commission Member, 1983-1985

ASCE, Committee on Professional Registration, 1988-1997

ABET, RAC, Commission Member, 1994-1999

American Consulting Engineers Council, ACEC, invited judge

2001 Engineering Excellence Awards

2002 Engineering Excellence Awards

## **PUBLICATIONS**

### **Books**

"Leveling," Chapter 6 in *The Surveying Handbook*, Brinker and Minnick, Van Nostrand Reinhold, 1987.

### **Technical Journals**

- “Control Surveys – Backbone of Surveying Education,” *Surveying and Mapping*, June 1969, Volume XXIX, No. 2, p. 291-294.
- “A Country and University Cooperative Control Survey,” (with James R. Emerson), *Surveying and Mapping*, June 1972, Volume XXXIX, No. 2, p. 223-228.

### **Technical Publications**

Professional Surveyor Magazine. Contributing Writer 2004 -

### **Conference Proceedings**

- “Control Surveys – Backbone of Surveying Education,” Papers of ACSM 28th Annual Meeting, Washington, DC, March 1968.
- “Why Formal Education? – I’m a Surveyor,” Papers of ACSM, 1968 Fall Meeting, Minneapolis, MN, September 1968.
- “Oregon Control Surveys,” Papers of ACSM 29th Annual Meeting, Washington, DC, March 1970.
- “Recommendations of the Seventh National Surveying Teachers Conference,” Proceedings of the 32nd Annual Meeting, ACSM, March 1972.
- “Oregon Land Surveying Laws Annotated,” Proceedings of the 36th Annual Meeting, ACSM, February 1976.
- “Understanding Geopotential Numbers,” (with Kenneth L. Cook), Proceedings of the 37th Annual Meeting, ACSM, March 1977.
- “Land Survey Law Pertaining to Accretions in Rivers and Streams,” Proceedings of the 38th Annual Meeting, ACSM, February-March 1978.
- “Land Data Systems and County Survey Programs,” (with Tyler B. Parsons), Proceedings of the 39th Annual Meeting, ACSM, March 1979.
- “Use of Video Tapes in Surveying Education,” Proceedings of the 40th Annual Meeting, ACSM, March 1980.
- “Surveying Education by Any Name,” Proceedings of the 41st Annual Meeting, ACSM, February 1981.
- “Sun Shots by Modern Techniques,” (with Ronald G. Cothren), Proceedings of the 42nd Annual Meeting, ACSM, March 1982.
- “A.B.E.T. – Engineering Accreditation Commission - Five Years of Experience,” Proceedings of the 45th Annual Meeting, ACSM, March 1985.
- “Earth Information Science and Technology (EIST) Education at Oregon State University,” (with A. Jon Kimerling and Ward W. Carson), Proceedings of the 1997 ACSM Annual Conference, April 1997.
- “Cooperative Education/Internships – Industries Contributions to Surveying Education,” Proceedings of the 1999 ACSM Annual Conference, March 1999
- “CECOP/MECOP Internships at Oregon State University,” Proceedings of the North American Surveying/Geomatics Teachers Conference, July 1999.
- “Student Experiences with Digital Levels,” Proceedings of the North American XVIII Surveying and Mapping Educators Conference, July 2001.
- “Beginning College Surveying and Mapping Courses”, Proceedings of the XIX North American Surveying and Mapping Educators Conference, June 2003.
- “Unwritten Boundary Agreement”, ODOT Surveyors Conference, Salem, OR, April 2007.
- “Educating the Professors”, Proceedings of the XXI North American Surveying and Mapping Educators Conference, July 2007.
- “Monuments”, ODOT Surveyors Conference, Salem, OR, April 2008.

### **Reports and Others**

- “Optical Reading Instruments,” (with J. Seaders, S.L. Cato, W.B. Dye, J.S. Matthias), Proceedings, Surveying and Mapping Conference, March 1964, Oregon State University Engineering Experiment Station.
- “An Old Approach to Surveying Education,” (with J. Seaders), Presented at Portland, OR, 1965, Meeting of the American Congress on Surveying and Mapping.
- “Oregon State Plane Coordinate System,” (with J. Seaders and W. James), Proceedings, Surveying and Mapping Conference, March 1966, Oregon State University Engineering Experiment Station.
- “Electronic Surveying Theory,” (with D. Mezera, J. Seaders), Presented at Surveying and Mapping Conference, March 1970, Oregon State University.
- “Surveying at Oregon State University,” (with D. Mezera, J. Seaders), Presented at ASEE National Surveying Teachers Conference, August 1971, Oregon State University.
- “OSU Electronic Surveying Calibration Course,” (with D. Mezera, J. Seaders), Presented at S & M Conference V, March 1972, OSU.
- “Roads and the County-A Manual for Oregon County Officials,” Complete revision of manual through 1988 laws for Association of Oregon Counties.
- “Oregon State University Surveying Education 1904 & 1994,” *The Oregon Surveyor*, Vol. XXII, No. 5, pp. 15-16, October/November 1994, Publication of the Professional Land Surveyors of Oregon (PLSO).
- “Surveying Education,” Presented at PLSO Annual Meeting, December 1997.

### **RESEARCH**

#### **Prior Research**

- Toutle River Cross Sections, U.S. Army Corps of Engineers, \$33,962, July 1, 1983-July 1, 1984.
- Forest Road Landslides, Forest Engineering, OSU, \$8,041, July 1, 1984-June 30, 1985.
- Road Manual Update, Association of Oregon Counties (AOC), \$18,045, July 1, 1988-July 1, 1990.