
Instructor Resume

Jon S. Wilson

Consultant and Lecturer in Shock and Vibration to
Technology Training, Inc.

Jon S. Wilson has over 50 years experience in environmental measurements, testing and education, including dynamics, climatics and test instrumentation.

EXPERIENCE

- 1985–Present **The Dynamic Consultant.** Mr. Wilson's consulting practice concentrates upon selection, application and calibration of environmental test and measurement equipment. His consulting clients include the National Institute of Standards and Technology (formerly National Bureau of Standards) and leading U.S. instrumentation manufacturers. He also conducts lectures and workshops in environmental measurements and testing, mainly in shock and vibration, arranged through Tustin Technical Institute.
- 1974–1985 **Endevco Dynamic Instruments** Division of Becton-Dickinson Corporation, San Juan Capistrano, California, as Applications Engineering Manager for a broad line of piezoelectric and piezoresistive accelerometers, pressure sensors and signal conditioners. He worked with aerospace, automotive, test laboratory, weapons test, biomechanics, packaging, transportation and pyroshock measurements. Along with defining and developing new products, he formally and informally trained his fellow employees, also Endevco's sales organization and customers in solving dynamics measurement problems and in selecting optimum instrumentation.
- 1965–1974 **Motorola Semiconductor Products Division**, Phoenix, Arizona, as senior test engineer and environmental laboratory manager. His work included the preparation of test procedures and reports; scheduling and general management of three-shift, seven-day laboratory operation. He assisted in the development of Particle Impact Noise Detection (PIND) test equipment and procedures; managed procurement, installation and training for helium and radioactive krypton leak detection systems; developed and tested the first high speed centrifuge for 100,000g testing of large quantities of semiconductors; trained his fellow engineers, also technicians and inspectors in all phases of climatic, dynamic and mechanical testing.
- 1961–1965 **ITT Cannon Electric**, Phoenix, Arizona, as senior test engineer, performing chemical, electrical, mechanical, dynamic and environmental tests on hermetic connectors, umbilical connectors and cable assemblies for Poseidon, Titan, DynaSoar and Sidewinder programs. He set up and maintained Cannon's calibration program for all electrical and mechanical measuring equipment.
- 1958–1961 **Chrysler Corporation**, Engineering Division, Detroit, Michigan, two year training program, followed by assignment as test engineer in the Engine Development Program, performing development tests on experimental aluminum and "slant six" engines.
- 1957–1958 **Oklahoma University**, as student instructor, taught Mechanical Engineering Laboratory undergraduate courses.

EDUCATION

Bachelor of Science degree in Mechanical Engineering, University of Oklahoma, 1958
Master of Automotive Engineering, Chrysler Institute of Engineering, 1961
Master of Science, Industrial Engineering, Arizona State University in 1969

TECHNICAL SOCIETIES

Institute of Environmental Sciences and Technology (IEST), twenty-five year Fellow. Mr. Wilson has served as national director, chapter president, etc. He is also founding chairman and member of the IES Pyro Shock Committee and participates in the IES Shock and Vibration Technical Committee. Member, DT&E Recommended Practices Committee. Recipient of IEST's Reliability Test & Evaluation Award in 2006.

Instrument Society of America, member. Chairman, SP37-14 Committee (Acceleration Transducer Standard).

Society of Automotive Engineers, member.

Toastmasters International, member. (CTM, ATM)

PUBLICATIONS

"A Bit More (or Less) Accuracy?" *Test Engineering and Management*, April-May, 1996.

Textbook: *Instrumentation for Test and Measurement*, 1993, Tustin Technical Institute, Inc., Santa Barbara, California.

Textbook: *Dynamic Pressure Measurement Technology*, 1991, Endevco, San Juan Capistrano, California.

Textbook: *Data Acquisition in Mechanical Dynamics*, 1990, Tustin Technical Institute, Inc., Santa Barbara, California.

Textbook: *Shock and Vibration Measurement Technology*, 1987, Endevco, San Juan Capistrano, California.

"Accelerometers for Pyroshock Measurements," presented at Institute of Environmental Sciences Annual Meeting, May 1986.

"State-of-the-art Accelerometer Characteristics for Pyrotechnic Shock Measurement," (invited paper) presented at 56th Shock and Vibration Symposium, October 1985, Monterey, California; published in the 56th *Shock and Vibration Bulletin*, August, 1986, Shock and Vibration Information Center, Naval Research Laboratory, Washington, D.C.

"Application of Silicon Strain Gage Technology to Aerospace Acceleration and Pressure Measurements," (Co-author, Robert M. Whittier) presented at WESCON 1981.

"Programmable Signal Conditioners for Vibration and Dynamic Pressure Transducers," *Noise and Vibration Control Worldwide*, May/June 1981.

"Noise Suppression and Prevention in Piezoelectric Transducer Systems," *Sound and Vibration*, April 1979.

"Performance Characteristics and the Selection of Accelerometers," *Sound and Vibration*, March 1978.

"Measuring and Recording Transients," *Measurements and Control*, December 1977.

"Accelerometers and other Motion Transducers," *Sound and Vibration*, March 1977.

"Optimum Automation for High Volume Testing of Small Components," (Co-author Erle A. Lewis, Jr.) presented at Institute of Environmental Sciences Annual Meeting, April 1971.