
LONGENECKER and ASSOCIATES

Gary Marlin Sandquist

EXPERIENCE SUMMARY

- Owner and Manager, Applied Science Professionals, LLC (ASP-LLC)
- Professor Emeritus of Mechanical Engineering, University of Utah
- Certified Quality Auditor (ASQ), Registrar Accreditation Board Certified Provisional Auditor (RAB)
- Chief Scientist & Quality Assurance Officer – URS Corporation (URS), QA Officer – URS-LANL Office
- Former Director of Nuclear Engineering Program and TRIGA Reactor Supervisor, University of Utah
- Distinguished Visiting Professor, Nuclear Engineering, Department of Physics, U.S. Military Academy
- Distinguished Visiting Professor Department of Civil & Mechanical Engineering, U.S. Military Academy
- Adjunct Professor of Civil Engineering, University of Utah
- Professor, Affiliate Faculty, Idaho State University, Pocatello, Idaho
- Registered Professional Engineer (Mechanical: UT, MN, NY, Nuclear: CA, Structural: UT)
- Former NRC Licensed Senior Reactor Operator (U.S. NRC)
- American Board Certified Health Physicist (AB-CHP)
- Diplomate: Environmental Engineer (DEE), American Academy of Environmental Engineers (ACEE)
- Nuclear Science Expert for United Nations, International Atomic Energy Agency (UN-IAEA)
- Observer, Accreditation Board for Engineering and Technology (ABET)
- Member: ANS, ASME, HPS, ASQ, ASEE, Pi Tau Sigma, Tau Beta Pi, Sigma Xi, Alpha Nu Sigma
- Technical Speaker, Nuclear Energy Institute (NEI), Senior Member, American Society for Quality (ASQ)
- Commander, U.S. Naval Reserve - Retired (USNR)
- Fellow American Nuclear Society (ANS) and American Society of Mechanical Engineering (ASME)

EDUCATION

- B.Sc. Mechanical Engineering, University of Utah, 1960
- M.S. Engineering Science, University of California Berkeley, 1961.
- Ph.D. Mechanical and Nuclear Engineering, Minor - Mathematics, University of Utah, 1964
- MBA Executive-Masters Degree in Business Administration, University of Utah, 1995
- Ppostdoctoral Fellow, Nuclear Engineering, Mass Institute of Technology, 1969 - 1970
- Sabbaticals: Ben Gurion University-Negev, Nuclear Engineering Department, Beer Sheva, Israel, Jan-May 1986
- Technion University, Nuclear Engineering Department, Haifa, Israel, May - Jun 1986

ACADEMIC EXPERIENCE

- Professor, Mechanical Engineering, University of Utah, Aug 1965 - present
- Visiting Scientist, Nuclear Engineering, Massachusetts Institute of Technology, Sep 1969-Aug 1970
- Associate Research Professor of Surgery, University of Utah, Jul 1974 - Jun 1986
- Visiting Professor, Nuclear Engineering Department, Ben Gurion University-Beer Shiva, Israel, Jan-Jun 1986

- Visiting Professor, Physics & Civil & Mechanical Departments, US Military Academy, West Point, NY, Aug 2003-May 2005

TECHNICAL EXPERIENCE

- Nuclear, mechanical, structural engineering. Extensive experience with QA program development & auditing including NQA-1,
- DOE 414 series, 10CFR830, ISO 9001 Standards. Lead Auditor
- Technical consultant to industry, universities, state and federal government agencies, technical organizations

RESEARCH

- Nuclear science & engineering, Nuclear materials, Safeguards and nonproliferation issues (IAEA), Risk assessment,
- Reactor physics, Health physics, Nuclear research reactors, Criticality evaluations, Environmental radiation monitoring
- Mechanical and Structural Engineering, Applied math / physics, Supervised 19 PhD students and 65 MS students

CONTRACTS AND GRANTS

- Principal Investigator for 51 major R&D Contracts and Grants with a total worth over \$4.5M
- Funding sources include DOE, DOD, EPA, EPRI, NIH, NRC, NSF, Industry, State & Local Government

PUBLICATIONS

- 696 publications & presentation in nuclear science, engineering, energy, health physics, & environmental sciences including:
- 5 Books and Book chapters, 193 Journal, Conference & Professional Publications, 150 Technical oral presentations
- 346 Technical Reports for Academic, Industrial and Government Agencies
- Developed 17 major Technical Computer Codes used in industry and by government agencies
- Participated in 196 Technical Meetings, Conferences, Workshops, Seminars, Government Hearings

LISTINGS

- Listed in 45 directories, citations, editorial boards, and honors including: Who's Who in America, American Men & Women of Science, Who's Who in Atoms, Who's Who in Engineering, Who's Who in Science and Engineering, Who's Who in the West, International Who's Who in Education, Who's Who in Nuclear Energy, Who's Who in the World, Who's Publishing in Science, Who's Who in American Education, Who's Who in the United States, International Directory of Nuclear Criticality Safety, Who's Who Registry of Business Leaders
- Editor-Int'l Journal Nuclear Energy, Science, Tech., Glen Murphy Award-Nuclear Engineering Education (ASEE-1984)

CLEARANCES

- Inactive Security Clearances: Top Secret Clearance, DOD-SBI- 28 Nov 1990, Ref: DON CAF WASH DC/170842A Dec 90
- Q Clearance, DOE/NV No. VG 60188, Nevada Operations Office, Box 98518, Las Vegas, NV