

BIOSKETCH OF L. ZANE SHUCK

EXPERIENCE

60 years professional experience, including: college and university teaching, research and administration; planning, conducting and managing national energy research programs; consulting & employed in design and sales in manufacturing industry; oil and gas well operator in WV & OH including developing over 65 wells; conducting interdisciplinary research in biomechanics (patent), hydraulic fracturing (patents) rheology, human gut gastroenterology (patents), and, proprietor and executive officer in consulting and R & D companies. Inventor, and real estate developer. Elected to Tau Beta Pi Engineering Honorary Society; Member/officer/organizer in several professional societies such as ASEE, ASME, SPE.

Founder and President, Technology Development Inc. (1980-present)

Founder and President, The WMAC Foundation non-profit (1997-present)

WVU, Professor Mechanical Engineering and Associate Director, Engineering

Experiment Station. Member Graduate Faculty, master and doctoral theses advisor (1976-80). WVU Adjunct Professor (1980-85)

US Dept. of Energy, Supervisory Mechanical Engineer (1970-76)

National Science Foundation Science Faculty Fellow, & Res. Engineer WVU (1968-70)

W.Va. Tech, Associate Professor & Chairman, Dept. of Mechanical Engineering (1960-65); Sabbatical 1966

EDUCATION

BSME - W.Va. Institute of Technology, 1958

MSME -West Virginia University, 1965

Ph.D. - West Virginia University, 1970 Theoretical and Applied Mechanics, Biomechanics

Graduate, post-doctoral, and summer programs at Iowa State University (1962), Wayne State University (1965), and summer programs Massachusetts Institute of Technology (1961, 1962, 1963, 1965);

Numerous supervision, management, and new computer technology training courses

PUBLICATIONS, PATENTS, FILMS

62 publications, 25 patents (including first patent ever awarded through WVU), Producer 3 technical films for U.S. Dept of Energy; Supervision/Comm. WVU 5 masters theses and 8 Ph.D. dissertations

5 new patents 2013-2018 New Human Healthcare Gastrointestinal Research & Patient Treatment System

PUBLIC SERVICE

Member, WV Region VI Planning and Development Council (2000 - present)

Member, Morgantown Chamber of Commerce Vision 2000 Infrastructure Comm. (1992 - 01)

Chairperson, Monongalia Co. West Run Expressway Committee (2000)

Member, Dunkard Creek Watershed Association (1997 - 2005)

Founder and Chair, Appalachian Rivers Conference & Exhibit 1998,1999, 2000. Co-sponsored by and held at the U.S. Dept. of Energy National Energy Technology Laboratory, '99 and '00.

Member, WVU – WVU Tech Colleges of Engineering Advisory Committee, (2002 – 2018)

ANCILLARY INFORMATION

Registered Professional Engineer, WV & OH; Certified by National Council of Engineering Examiners;

Science Advisor WV Governor John D. Rockefeller IV (78-81); Science and Technology Coordinator WV

Legislature (79-80); ASTM Award (70); ASME Ralph James National Award (80); Editor Transactions

Journals and Symposia Proceedings; Licensed Surveyor WV; WVU honor of "The L. Zane Shuck

Nanobiotechnology Laboratory"; 18 invited national lectures; US Dept. Energy Award "Most patents awarded in one year ever by a federal government employee"(1975); security Q clearance; Founder and President

National Society for Innovators and Entrepreneurs (2012). Cited by several Who's Who organizations.

WV Inventors Council; (2019) Marquis Who's Who Top Research Scientist/Engr. & Lifetime Achiever Awards