



JOHN A. WILLIAMS, PH.D., M.B.A., P.E., ASA

Licensed Professional Engineer, Accredited Senior Appraiser

Dr. Williams has performed the analysis and complete appraisal of 7 major petrochemical complexes with over 20,000 equipment assets. Since 1996, he has instructed cost estimating and project evaluation techniques for the American Institute of Chemical Engineers and the American Society of Mechanical Engineers. Dr. Williams is an expert in Project Conceptualization & Design, Cost Estimating, Financial Evaluations, and Project Management.

Dr. Williams has led EPS since 1995, a full-service engineering firm, delivering engineering, procurement, and construction services (EPC) for refining, chemicals, power generation, equipment fabrication, and material-making facilities. Dr. Williams engineering experience began in 1978 and has progressed for over four decades inside process facilities designing, constructing, analyzing, and operating equipment and systems.



PROFESSIONAL EXPERIENCE:

EPS (Environmental and Production Solutions)

Founder and General Manager
Engineering, Procurement, Construction Management (EPCM)
Energy, Materials, Chemicals, and Refining Facilities

South Bend, IN
1995-present

ATA Consulting

President
Alternate Energy Technologies, Costing & Valuation Services

South Bend, IN
1994-1995

Bayer Corporation

Senior Scientist, Process Development, Scale-Up Operations
Citric Acid, Sodium Citrate, Succinic Acid, and Bioproducts
Fermentation, Recover, and Purification Manufacturing Operations

Elkhart, IN
1991-1994

Monsanto Corporation

Engineering Technology Specialist
Manufacturing R&D, Design, Optimization, and Retrofitting
Analysis and Expansions of Chemical Plants and Facilities

Akron, OH
1988-1991

Babcock and Wilcox Company

Research Engineer II
Power Generation, Equipment Design, Field Engineering
Oil, Gas, Coal, Biomass, Sewage, Refuse, and Waste-to-Energy

Alliance, OH
1986-1988

PROFESSIONAL EXPERIENCE (CONTINUED):

Center for Catalytic Science and Technology Newark, DE
Engineering Technician 1979-1981
Oil Refining and Gas Processing; Gasification and Liquefaction

Department of Chemistry Newark, DE
Organic Chemist, University of Delaware 1978-1979
Chemical Synthesis and Laboratory Analytical Methods

The Budd Company Downingtown, PA
United Steelworkers Operator (USW Union) 1977
Heavy Equipment, Cranes, and Machinery Operator

PROFESSIONAL ENGINEERING LICENSURE:

States of California, Florida, Illinois, Indiana, Kentucky, Louisiana, Michigan, Missouri, Ohio, Texas, Utah, and Virginia.

ACCREDITED SENIOR APPRAISER:

American Society of Appraisers - Machinery & Technical Specialties

ASME AND AICHE LECTURER:

Developer, Author, and Instructor for the American Institute of Chemical Engineers (AIChE) and the American Society of Mechanical Engineers (ASME).

- **Conceptual Development and Cost Estimating of Engineering Projects**
2000-present: Cost Estimating, Project Management, and Construction
- **Practical Project Evaluation: Capital and Operating Cost Estimation**
1996-present: Costs, Operations Analysis, Valuation Analytics

EDUCATION:

Ph.D., Department of Chemical and Fuels Engineering Awarded 1990
University of Utah, Salt Lake City, Utah
Dissertation: Ignition of Solid Fuels in Fluidizing Bed Combustion

M.S., Department of Chemical and Fuels Engineering Awarded 1984
University of Utah, Salt Lake City, Utah
Thesis: Hydroxyolysis of Aromatic Ethers Oil and Gas Refining

B.S., Department of Chemistry Awarded 1981
University of Delaware, Newark, Delaware

M.B.A., Graduate School of Business: Finance Awarded 1994
University of Chicago, Chicago, Illinois

HONORS:

Distinguished Service Award 2018, University of Utah, College of Engineering

Distinguished Alumni Award 2015, University of Utah, Department of Chemical Engineering

BOARD MEMBERSHIP SERVICE:

Industrial Advisory Board, Department of Chemical Engineering, University of Utah 2015-present

Engineering National Advisory Council, College of Engineering, University of Utah 2016-present

PROFESSIONAL AFFILIATIONS:

American Institute of Chemical Engineers (AIChE)

American Society of Mechanical Engineers (ASME)

American Society of Appraisers (ASA)

American Chemical Society (ACS)

AACE International (formerly the Association for Advancement of Cost Engineering)

American Society of Heating, Refrigerating & Air-Conditioning Engineers (ASHRAE)

PUBLICATIONS AND PROFESSIONAL PRESENTATIONS:

Economic Obsolescence in Petroleum Operations, Presented at WSPA PSAC Conference, February 2019

How Do Regulations Affect the Energy Industry: 2017, Presented at the Department of Chemical Engineering of the University of Utah, November 2017.

How Do Regulations Affect the Energy Industry, Presented at the University of Utah College of Engineering, September 2016.

Contingency in Capital Cost Estimation, Chemical Engineering Progress, June 2007.

Keys to Bioreactor Selection, Chemical Engineering Progress, March 2002.

Revamping and Retrofitting Pneumatic Conveying Systems: Practical Approaches, Presented at the Powder & Bulk Solids Conference, Rosemont, IL May 2000.

Optimize Distillation System Revamps, Chemical Engineering Progress, March 1998.

Revamping Distillation Column Operation: Practical Approaches, Presented at the AIChE National Meeting, Houston, TX March 1997.

Process Development Utilizing Environmental Premises. AIChE National Meeting, Los Angeles, CA March 1991.