

# JOHN A. WILLIAMS, PHD, PE, ASA, MBA, CFEI

American Institute of Chemical Engineers (AIChE) Fellow Accredited Senior Appraiser (ASA), MBA from U of Chicago in Finance Certified Fire and Explosion Investigator (CFEI) by NAFI Professional Engineer licensed in 20+ States

Dr. Williams is an International engineering and energy technology expert specializing in engineering analysis and financial appraisals of Renewable Energy (solar, wind, biogas, ethanol, biomass, geothermal, waste-to-energy); Conventional Energy (oil, gas, nuclear, coal); Power Generation and Electricity distribution; and Manufacturing Technologies. His synergistic expertise in intellectual property (trade secrets, patents), economic damages, licensing and royalty structures, energy markets and trading, regulatory analysis, the energy transition, forensic investigations, product contaminations, industrial accidents, origin and causation, project management, costs, and construction.

With over 40 years of industrial experience, beginning in operations in 1977, Dr. Williams has led EPS, a full-service engineering firm, since 1995. Since 1996, he has been recognized by professional organizations for developing and instructing courses in project management, cost engineering, and financial evaluation methods. His

exceptional ability to analyze complex technical and financial matters and express them in understandable terms has made him a sought-after expert witness in litigation risk and exposure, dispute resolution, and high-stakes litigation.



1991-1994

# PROFESSIONAL EXPERIENCE:

EPS, Inc. (Environmental and Production Solutions, Inc.)

Founder and General Manager

Engineering, Procurement, Construction Management (EPCM)

Energy, Materials, Chemicals, and Refining Facilities

University of Utah - Department of Chemical Engineering
Adjunct Professor
Salt Lake City, UT
2022-2024

ATA Consulting
President
Alternate Energy Technologies, Costing & Valuation Services

South Bend, IN
1994-1995

Bayer Corporation Elkhart, IN

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

Monsanto Corporation

Engineering Technology Specialist

1988-1991

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

Babcock and Wilcox Company
Research Engineer II
1986-1988

Power and Steam Generation, Combustion, Gasification Oil, Gas, Coal, Biomass, Sewage, Refuse, and Waste-to-Energy

# PROFESSIONAL EXPERIENCE (CONTINUED):

#### Center for Catalytic Science and Technology

Newark, DE 1979-1981

Engineering Technician

Oil Refining and Gas Processing; Gasification and Liquefaction

Newark, DE

#### Department of Chemistry

Organic Chemist, University of Delaware

Chemical Synthesis and Laboratory Analytical Methods

1978-1979

#### The Budd Company

United Steelworkers Operator (USW Union)

Heavy Equipment, Cranes, and Machinery Operator

Downingtown, PA

#### PROFESSIONAL ENGINEERING LICENSURE:

Alabama, California, Colorado, Delaware, Florida, Illinois, Indiana, Kentucky, Louisiana, Massachusetts, Michigan, Mississippi, Missouri, North Carolina, Ohio, Oklahoma, Oregon, South Dakota, Texas, Utah, Virginia, Washington, and Wisconsin.

### ACCREDITED SENIOR APPRAISER:

American Society of Appraisers - Machinery & Technical Specialties: Energy, Environmental, and Manufacturing Technologies and Operations

ME 201AC: Introduction to Machinery and Equipment Valuation

ME 202AC: Machinery and Equipment Valuation Methodology

ME 203AC: Machinery and Equipment Valuation - Advanced Topics and Case Studies

ME 204AC: Machinery and Equipment Valuation - Advanced Topics and Report Writing

USPAP Appraisal 15 Hour Equivalent

USPAP Appraisal 7 Hour Update

### CERTIFIED FIRE AND EXPLOSION INVESTIGATOR:

National Association of Fire Investigators

1987 The Center for Professional Advancement - Industrial Explosion Control

# 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: Hydropyrolysis 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, Marketing (Technology) University of Chicago, Chicago, Illinois

Awarded 1994

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)

National Association of Fire Investigators (NAFI)

American Chemical Society (ACS)

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

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

American Society of Agricultural & Biological Engineers (ASABE)

#### PUBLICATIONS AND PROFESSIONAL PRESENTATIONS:

Energy Technologies 2022: Industry Perspective, Presented at the Engineering National Advisory Council, College of Engineering, University of Utah, September 2022.

Detailed Capital Cost Estimation, Chemical Engineering Progress, July 2021.

Early-Stage Capital Cost Estimation, Chemical Engineering Progress, April 2021.

How Do Regulations Affect the Energy Industry: 2019, Presented at the Department of Chemical Engineering of the University of Utah, Salt Lake City, November 2019.

Economic Obsolescence in Petroleum Operations, Presented at the Western States Petroleum Association and Petroleum Standards Advisory Committee Conference in Bakersfield, California, February 2019.

#### PUBLICATIONS AND PROFESSIONAL PRESENTATIONS (CONTINUED):

Oil Refining and Energy Facility Obsolescences in a Changing Market, Presented at the Western U.S. Oil Refining & Midstream Seminar, South Lake Tahoe, California, August 2017.

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

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

Valuing Oil, Gas, and Refining Facilities Utilizing Cost Approach Considerations for Appraisals, Presented at the Western U.S. Oil Refining & Midstream Seminar, South Lake Tahoe, California, August 2015.

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, Illinois May 2000.

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

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

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

