

# **CURRICULUM VITAE**

**Gary E. Pawlas**

## **1. Education**

Ph.D. Engineering Science, U. of Toledo, Toledo, OH, 1991.

M.S. Mechanical Engineering, University of Colorado, Boulder, CO, 1983.

B.S. Mechanical Engineering, University of Cincinnati, Cincinnati, OH, 1981.

## **2. Academic and Industrial Experience (See Appendices A, B, C & D)**

Instructor & Director, Industry/University Cooperative Project Center, Department of Mechanical Engineering, University of Colorado, Boulder, CO, 2007-Present.

Instructor & Assistant Director, Industry/University Cooperative Project Center, Department of Mechanical Engineering, University of Colorado, Boulder, CO, 2004-2007.

Adjunct Faculty Member, Department of Mechanical Engineering, University of Colorado, Boulder, CO, 2002-2004.

Director of Technology Development, Brooks Instruments, Hatfield, PA, 2000-2002.

Research Director, Micro Motion, Inc., Boulder, CO, 1995-2000.

Research Engineer, Micro Motion, Inc., Boulder, CO, 1992-1995.

Member of Technical Staff, A.T. & T. Bell Laboratories, Whippany, NJ, 1984-1985.

## **3. Professional Recognition**

Member, American Society of Mechanical Engineers, 1979-Present.

Member, American Institute of Aeronautics and Astronautics, 1984-Present.

## **4. Administrative and Leadership Positions Held**

Director of the Industry/University Cooperative Project Center, Mechanical Engineering Department, 2007-Present.

Assistant Director of the Industry/University Cooperative Project Center, Mechanical Engineering Department, 2004-2007.

Member of the Industrial Relations Committee, Mechanical Engineering Department, 2004-Present.

Member Executive Committee, 2007 National Capstone Design Course Conference, Mechanical Engineering Department, 2006-2007.

Demonstrated industrial experience includes the ability to fund, develop and execute multi-year research and product development projects on schedule. Successfully created and led multi-disciplinary teams (mechanical, electrical, software) ranging in size from 5 to 14 members with an experience level from technician to Ph.D. Industrial activities resulted in three product development efforts, over 40 patent disclosures, and 20 filed patents.

## **5. Summary of Grant History**

- \$615,000 Industrially sponsored projects, Industry/University Cooperative Project Center, 2005-Present.
- \$242,000 Engineering Excellence Fund awards in conjunction with Industry/University Cooperative Project Center, PI & Co-PI, 2005-Present.
- \$186,000 Durning Lab Remodel in conjunction with Industry/University Cooperative Project Center, Co-PI, 2006.
- \$131,000 Wind Turbine CFD Research (NREL), PI, 2007-Present
- \$231,000 Wind Turbine Gearbox Analysis (NREL), subcontract, 2007-Present
- \$40,000 Wind Farm Power Optimization, UCB Energy Initiative, 2009

## **6. Representative Patents**

US Patent #7,114,517: High purity fluid delivery system, issued October 3, 2006.

US Patent #7,005,019: Manufacturing flow meters having a flow tube made of a fluoropolymer substance, issued February 28, 2006.

US Patent #6,776,053: Flowmeter for the precision measurement of an ultra-pure material flow, issued August 17, 2004

US Patent #6,606,917: High purity Coriolis mass flow controller, issued August 19, 2003.

US Patent #6,249,752: Vibrating conduit parameter sensors, operating methods and computer program products utilizing normal modal decomposition, issued June 19, 2001.

## **7. Representative Publications**

T. Pankratz and G. Pawlas, "Improved Mass Flowrate Measurement of Gases Using Coriolis Mass Flowmeters", presented at Sensors 1995, Nuremberg, Germany, May 1995.

T. Patten and G. Pawlas, "Use of Coriolis Meters in Gas Applications", presented at 3rd International Symposium on Fluid Flow Measurement, San Antonio, Texas, March 1995.

G. Pawlas and T. Pankratz, "Fluid Mechanics Effects in Coriolis Mass Flowmeters", presented at FLOMEKO '94, East Kilbride, Scotland, June 1994.

G. Pawlas, R. Garnett, and C. Stack, "Fluid-Structure Interaction Analysis of a Coriolis Mass Flowmeter", AIAA 93-3086, July 1993.

C. Stack, R. Garnett, and G. Pawlas, "A Finite Element for the Vibration Analysis of a Fluid Conveying Timoshenko Beam", AIAA 93-1552, April 1993.

G. Pawlas and T. Keith, "Swirling Transonic Nozzle Flow", AIAA 91-2479, June 1991.

G. Pawlas and T. Keith, "Analysis of a Swirl Stabilized Arcjet Thruster", AIAA 91-1995, June 1991.

G. Pawlas and T. Keith, "Numerical Modeling of a Vortex Stabilized Arcjet Thruster",  
AIAA 89-2724, June 1989.