

MICHEL ELIZABETH HOLDER, Associate Professor

EDUCATION:

1992 PhD in Electrical Engineering from Vanderbilt University with a minor in Mathematics.

1987 Master of Science with a major in Electrical Engineering (Instrumentation/Control) University of Tennessee at Chattanooga

1985 B.S.in Engineering - Mechanical (Systems) University of Tennessee at Chattanooga and University of Tennessee at Knoxville

18 1/2 years with UTC

Promoted to Associate Professor 2004

WORK HISTORY:

Recycled Wood Products, Div. of HVMH Corporation, Chattanooga, TN

VP ENGINEERING, RESEARCH AND DEVELOPMENT

Total responsibility for design and fabrication of second generation process equipment, instrumentation and automation using an OMRON programmable controller. Extensive use of hydraulics and air.

Recycled Wood Products, Inc., Chattanooga, TN

PLANT MANAGER AND CEO

Formed corporation based upon my process for producing artificial fire logs from biomass. Personally handled all phases of engineering, manufacturing, and marketing from development of the conceptual design, to the building of the actual manufacturing facility. Obtained patents on the process and capitalized the corporation. Sold to HVMH in 1981.

Holder Contracting Company, Chattanooga, TN

OWNER/CONTRACTOR

Engaged in residential and commercial building and remodeling. Designed all structures built and participated in all phases of construction.

ITT Data Services, Paramus, NJ

SENIOR PROGRAMMER/ANALYST

Developed detailed program specifications for a sales-revenue reporting system for ITT World Communications and served as project leader during implementation of the system. Generated two APAR's to IBM, Poughkeepsie, to correct DOS software. Wrote several software packages.

CONSULTING

C&D Technologies, Dunlap, TN. Currently redesigning the quality control procedure and test station for a major industrial battery manufacturer.

PATENTS:

Patent #5,413,222 (5/9/95) - Method of separating a particular metal fraction from a stream of materials containing various metals.

Patent #4,436,426 (3/13/84) - Method for making an artificial fuel log

Patent #4,220,453 (9/2/80) - Process for producing artificial fire logs

LICENSURE

Registered Professional Electrical Engineer in Tennessee, 1997

RECENT PUBLICATIONS

A Modified Karnaugh Map Technique, IEEE Trans. Educ., vol. 48, no. 1, pp. 206-207, Feb. 2005

Thevenin's Theorem and a Black Box, Manuscript #E-2007-000312.R3 in publication queue for IEEE Transactions on Education

PROFESSIONAL SOCIETIES

Life Member Institute of Electrical and Electronics Engineers

SERVICE

Member of UTC Admissions Committee for 11 years, Chair for 5 years

Member of UTC Faculty Senate for past 2007 – 2009

Consultant through the UT Industrial Services

TIME ALLOCATION

Electrical Engineering Program - 90 %

Research and Scholarly Activities – 10 %