CURRICULUM VITA

<u>Name</u>

John L. Morrison, Professor of Electrical Engineering

Degrees with Fields, Institutions, and Dates

Ph.D. Electrical Engineering, University of Idaho, 1992 M.S. Electrical Engineering, University of Conn., 1968 B.S. Electrical Engineering, University of Conn., 1967

Other Related Experience

Electrical Engineer 1973-2001 Idaho National Environmental and Engineering Laboratory

Consulting, Patents, etc.

- 1 "Method and Apparatus for In-Situ Characterization of Energy Storage and Energy Conversion Devices" by J. P. Christophersen, C. G. Motloch, W. Albrecht and J. L. Morrison; United States Patent 7675293B2 March 2010 by Battelle Energy Alliance, LLC, Idaho Falls, ID (US)
- 2 "Method of Detecting System Function by Measuring Frequency Response Continuation"; by John L. Morrison et al; United States Patent pending filed July 2008 by Montana Tech
- 3 "High Gradient Field Generator"; by John Richardson, Eric Yarger, and John Morrison; United States Patent Pending to be filed Spring 2006 by The Idaho National Laboratory.
- 4 "Method of Detecting System Function by Measuring Frequency Response"; by John L. Morrison and William H. Morrison; United States Patent 7395163B1 granted 1 July 2008 by Montana Tech
- 5 "Induction Heating Apparatus and Methods of Operation Thereof, and Method for Indication of a Temperature of a Material to be Heated Therewith", John Richardson, John Morrison, Grant Hawkes; U. S. Patent 7072378 granted July 4, 2006.
- 6 "Differential Capacitance Probe for Process Control Involving Aqueous Dielectric Fluids"; by John Svoboda and John Morrison; United States Patent 6,462,562; 8 October, 2002.
- 7 "Method for Non-Intrusively Identifying a Contained Material Utilizing Uncollided Nuclear Transmission Measurements"; by John L. Morrison, Alan G. Stephens, Blain S. Grover; United States Patent 6,320,193; 20 November, 2001.
- 8 "Method and Apparatus for Monitoring the Integrity of a Geomembrane Liner Using Time Domain Reflectometry"; by John Morrison; United States Patent 6,222,373; 24 April, 2001.
- 9 "Method and Apparatus for Measuring Butterfat and Protein Content Using Microwave Absorption Techniques" By Michael O. Fryer, Andrea J. Hills, John L. Morrison; United States Patent 6,147,502; 14 November 2000.

10 "Magnetic Latching Solenoid"; by Donna J. Marts, John G. Richardson, Richard K. Albano, John L. Morrison; United States Patent 5,470,043; 28 November 1995.

States in which registered

Montana

Principal Publications

- "Designing Sample Data Systems to Meet Specified Aliasing Error Criteria" by Matt Egolff and J. L. Morrison; ISA 55th International Instrumentation Symposium, June 1-5, 2009, League City Texas; (Refereed).
- 2. "Fast Summation Transformation for Battery Impedance Identification" by J. L. Morrison, et al; IEEE Aerospace 2008 Conference, March 7-14, 2008, Big Sky Montana; (Refereed).
- "Impedance Noise Identification for State-of-Health Prognostics" by Jon P. Christophersen, et al, 43rd Power Sources Conference, July 7-10, 2008, Philadelphia, PA.
- "Implementation and Validation of Uncertainty Analysis of Available Energy and Available Power" by: Jon P. Christophersen, John L. Morrison, B. J. Schubert, and Shawn Allred; ISA 53rd IIS 2007, (Refereed)
- "Uncertainty Evaluation of Available Energy and Power"; by Jon P. Christophersen and John L. Morrison; 52nd International Instrumentation Symposium, May, 2006, Cleveland, Ohio; (Refereed).
- 6. "Real Time Estimation of Battery Impedance"; by J. L. Morrison and W. H. Morrison; IEEE Aerospace 2006 Conference, March 5-11, 2006, Big Sky Montana; (Refereed).
- "Development and Test of a Real Time Battery Impedance Estimation System"; by: R. G. Hoffmann, J. E. Slade and J. L. Morrison; IEEE Aerospace 2006 Conference, March 5-11, 2006, Big Sky Montana; (Refereed).
- "Cold Crucible Induction Melter Model Parameter Estimation"; by: John Morrison and John Richardson; ISA 51st International Instrumentation Symposium. May 8-12, Knoxville, TN.; (Refereed).
- 9. "Cold Crucible Induction Melter Modeling and Simulation"; by: John Richardson, Grant Hawkes, Dirk Gombert and John Morrison; INEEL year end report Fall 03
- "Lumped Parameter Modeling as a Predictive Tool for a Battery Status Monitor"; by J. P. Christophersen, C.G. Motloch, C.D. Ho, J.L. Morrison, R.C. Fenton, V.S. Battaglia, and T.Q. Duong; Proceedings from 2003 IEEE Vehicular Technology Conference October 2003.

Scientific and Professional Societies

Institute of Electrical and Electronic Engineers The Instrumentation, Systems, and Automation Society