curriculum vitae
Paul Eason, Ph.D., P.E., CFEI

Dr. Eason combines experience from academia, industry, and consulting to address a variety of engineering and forensic subjects. His broad based materials engineering education allows him to examine product defect and safety issues of metals, plastics, glass, and ceramics, including corrosion, fatigue, overload, and material selection. Paul has also actively participated in risk assessment for project management and failure modes and effects analysis in process and product design. As a forensic consultant, he has combined his knowledge of materials behavior with traditional techniques of fire investigation to tackle complex cause and origin issues and product liability concerns. Paul is also a nationally certified fire and explosion investigator and a licensed professional engineer in the state of Florida. He is versed in multiple forms of materials analysis, teaches undergraduate courses in materials engineering and mechanical design, and has worked on projects involving product design and manufacturing, product defects, failure analysis, corrosion, fire and explosion origin and cause, and industrial accidents.

Education

Formal Education

Doctor of Philosophy in Material Science and Engineering with an emphasis in metallurgy, environmental attack and alloy development, University of Florida, 1998
Bachelor of Science in Materials Science and Engineering with a dual specialization in Metallurgy and Ceramic Engineering, University of Florida, 1995 Minor in Business Administration

Professional Development

Principles of Failure Analysis, ASM – International
Techniques of Risk Management, Risk and Insurance Management Society (RIMS)
Determining the Cause and Origin of Fires and Explosions, National Association of Fire Investigators
Traffic Accident Reconstruction, Northwestern University Traffic Institute
Advanced Commercial Vehicle Inspection and Collision Investigation, Texas A&M University
Annual Truck Inspection, Florida Trucking Association (FTA)
Corrosion in Concrete Reinforcements Seminar, National Association of Corrosion Engineers (NACE)

Licensure and Certification

Professional Engineer in Florida, FBPE #0000060836
Certified Fire and Explosion Investigator, NAFI #7024-2717

Professional Affiliations and Awards

ASM - International
The Minerals, Metals, Materials Society (TMS)
American Ceramic Society (ACerS)
American College of Forensic Examiners (ACFE)
National Society of Professional Engineers
National Association of Fire Investigators
National Association of Professional Accident Reconstructionists
Epsilon Lambda Chi
Keramos
2002 Appointed to University of Florida, Department of Materials Science and Engineering Distinguished Alumni Board
1995 University of Florida Presidential Recognition Award

Professional Experience

2003 – present Engineering Consultant / President, e4 Consulting , Jacksonville, FL
2006 – present Assistant Professor, Mechanical Engineering, University of North Florida, Jacksonville, FL
2007 – present Graduate Faculty Member, Materials Science and Engineering, University of Florida, Gainesville, FL
2001 – 2003 Forensic Professional, KHA/ZMA, Jacksonville, FL
1998 - 2001 Engineering Consultant, Benedict Engineering Company, Tallahassee, FL
1998 - Electron Microscopist/Alloy Metallurgist, Major Analytical Instrumentation Center, University of Florida, Gainesville, FL
1995 – 1998 Graduate Research Assistant, UF Department of Materials Science and Engineering, University of Florida, Gainesville, FL
1998 Teaching Assistant, UF Department of Material Science and Engineering, University of Florida, Gainesville, FL
1993 – 1996 Lab Consultant/Teaching Assistant, UF Department of Computer Science and Engineering, University of Florida, Gainesville, FL
1989 – 1993 Engineering Assistant II, Jacksonville Electric Authority, Jacksonville, FL

Presentations

"Reassessment of the Mo-Si-Al Ternary Isotherm at 1400ºC," American Ceramic Society Annual Cocoa Beach Conference 1998, January 22, 1998, Cocoa Beach, FL.

"Processing of Low-Silica MoSI2-Based Compounds II: Aluminum Additions," 1196 TMS Fall Meeting, October 17, 1998, Cincinnati, OH.

Presentations continued

"The Power of Using an Electronic Presentation to Reach the Jury," Academy of Florida Trial Lawyers Advanced Trial Skills Seminar, November 18, 1999, Orlando, FL.

"Project Management for Engineering Cases," Alabama Trial Lawyers Association Special Seminar, August 11, 2000, Birmingham, AL.

"How to Manage Engineering Intensive Cases" Georgia Defense Lawyers Association Summer Meeting June 23, 2001, Destin, Florida.

"The Use of Spectroscopy and Electron Beam Analysis Techniques in Forensic Science" ANS/FSM Annual Joint Symposium, March 11, 2002.

"What in the World Does a Forensic Metallurgist / CFEI Do?" Physical Sciences Outreach Program, July 8, 2000, Gainesville, FL.

"The Role of the Materials Scientist in Forensic Engineering" University of Florida, MSE Department Graduate and Faculty Seminar, October 1, 2002.

"The Role of the Forensic Engineer" Florida Association of Criminal Defense Lawyers, December 10, 2002, Jacksonville, FL.

"Engineering Risk: A Matter of Life and Death" University of Florida, MSE Department Graduate and Faculty Seminar, October 25, 2005

Publications

P.D. Eason, M.J. Kaufman, "Impurity Effects on the Environmental Stability of Powder Processed Intermetallic Alumino-Silicide Compounds," Journal of the Materials Research Society, Vol. 20, No.10, October 2005

P.D. Eason, "The role of Engineering Risk Assessment in Public Safety, " IDS Emergency Management 2004, Online Conference, June 2004.

Dissertation: "Processing, Phase Equilibria and Environmental Degradation of the $Mo(Si, Al)_2$ Intermetallic Compound," – University of Florida, December 1998.

P.D. Eason, E.N. Ross, L.A. Dempere and M.J. Kaufman, "Processing, Microstructure and Mechanical Properties of Mo Silicates and their Composites," Transactions of the Nonferrous Metals Society of China – Special Issue, Vol. 9, Supplement 1, June 1999, page 1-12 and Proceedings from the 3rd . International Workshop of Ordered Intermetallic Alloys and Composites

P.D. Eason, K.L. Jolly and M.J. Kaufman, "Reassessment of the Mo-Si-Al Ternary Isotherm at 1400ºC," Ceramic Engineering and Science Proceedings, Vol. 19, No. 4, June 1998.

J.S. Jayashankar, E.N. Ross, P.D. Eason and M.J. Kaufman, "Processing of $MoSi_2$ Based Intermetallics," Materials Science and Engineering, A239-240 (1997), pp. 485-492.

E.N. Ross, P.D. Eason and M.J. Kaufman, "Processing of Low Silica $MoSi_2$ – Based Compounds Using Carbon and Aluminum Additions," Proceedings of TMS Fifth Annual conference on Processing of Advanced Materials, Fall 1996.