

Richard M. Hansen & Associates, Inc.

265 Eisenhower Lane - South • Lombard, IL 60148

Office: 630-495-3853 • Fax: 630-495-3947



Jason Zielsdorf, EIT Curriculum Vitae

Experience

Richard M. Hansen & Associates, Inc., Lombard, Illinois (rmhansen.com)

Materials Engineer (August 2007-Present)

- Fire investigation and forensic engineering
- Emergency response and safety training class
- Investigations of commercial and residential electrical related fire and accidents
- Reconstruction of accidents
- X-Ray and Scanning Electron Microscope analysis of evidence

UTRON Inc., Manassas, Virginia

Materials Engineer (October 2004-July 2007)

Project Experience: Commercial—product development using UTRON's 300 ton CDC press

- Metallography work including sample preparation and microscopy, to characterize and document parts manufactured from such materials as Copper, Molybdenum, TZM, Tungsten, and Silicon carbide. Sample micrographs available upon request.
- Explored development of additional materials.
- Commercialization efforts include contacting companies to explore partnering on product development.
- Literature and internet research conducted for commercialization work and background information for proposals and progress reports.
- Technical writing experience includes background, procedures, and results sections for proposals and progress reports.

Project Experience: Defense—Combustion Light Gas Gun (CLGG) development

- Researched and recommended ceramic and polymer materials for testing based on specific criteria.
- Examined experimental results to determine future testing.
- Developed custom polymer composites and method of fabrication.
- Developing a method for furnace brazing Titanium and Steel.
- Internal progress report presentations using MS Power Point and Excel.

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UTRON Inc., continued

Project Experience: Defense

- Consulting and advising coworkers on materials issues and problems including materials selection and failure analysis.
- Developed standard operating procedures for various laboratory equipment including the optical microscope, 50 ton hydraulic shop press and X-Ray diffractometer and processes such as metallographic sample preparation, and general laboratory chemical safety.

American Medical Equipment, Columbus, Ohio

Service Technician (June 2003-October 2004)

- Responsibilities include delivering and setting up medical equipment and instructing hospital and nursing facility employees and patients on proper use.
- Maintained and repaired equipment to insure safe and effective operation.
- Supervised and instructed trainees during initial field experience.

The Ohio State University, Columbus, Ohio

Senior Research Project: Custom Tailored Ceramic Body Armor (September 2002-June 2003)

- Investigated the feasibility of using the displacive compensation of porosity method to produce near-net-shaped silicon carbide/boron carbide composites.

EDUCATION AND PROFESSIONAL DEVELOPMENT

- International Association of Arson Investigators (IAAI) - Illinois Chapter Conference, September 2008, Champaign, Illinois
- Central Illinois Fire Investigators Association (CIFTA) – 18th Annual Fire Investigation Training Conference, March 2009, Peoria, Illinois
- ASM International - Cleveland Chapter, Failure Analysis Symposium, April 2009, Cleveland, Ohio

CERTIFICATIONS AND LICENCES

- Ohio Professional Engineer License
Engineer in training (EIT), 2003

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PROFESSIONAL AFFILIATIONS

- ASM International – American Society for Materials
- IAAI – International Association of Arson Investigators Illinois Chapter