

Mr. Joseph Grzetic is a Senior Staff Consultant with experience in physical, mechanical, and chemical testing of pipe and fitting materials. He performs site investigations and failure analysis of plastic products. He specializes in machine shop practices, test set-ups, court exhibits, optical microscopy, and photography.

Due to his expertise, Mr. Grzetic has also been given the responsibility of Facilities Manager. In this capacity, he oversees the operations of the Aurora location.

Prior to joining Engineering Systems Inc. (ESI), Mr. Grzetic was employed by Bodycote Broutman/L.J. Broutman & Associates for over 18 years as a manager of a piping products laboratory on a variety of new piping projects and used piping products, which included failure analysis.

Prior to that, he had over eight additional years of experience in research and development, which included closed cell polyimide insulation, non-asbestos clutch plates and brake pads, and plastic food containers.

Education

College of DuPage. 1979

Positions Held

Engineering Systems Inc., Aurora, Illinois

- Senior Staff Consultant, Mechanical Engineering, 2015 – Present
- Senior Technologist, Mechanical Engineering, 2003–2015

Bodycote Broutman Inc., Melrose Park, Illinois

- Manager, Piping Products Laboratory, 1999–2003

L.J. Broutman and Associates, Chicago, Illinois

- Manager, Piping Products Laboratory, 1995–1999
- Senior Experimentalist, 1990–1995
- Experimentalist, 1984–1990

Contact Information

jfgrzetic@engsys.com

(630) 851-4406

ESi Aurora

4215 Campus Drive
Aurora, IL 60504

Areas of Specialization

- Plastic Piping Product Testing
- Failure Analysis of Gas, Water & Sewer Pipes
- Failure Analysis of Water Inlet Valves on Appliances
- Materials Research & Development

Imi-Tech Corporation, Elk Grove Village, Illinois

- Foreman, 1983–1984

International Harvester, Hinsdale, Illinois

- Technical Support Engineer, 1980–1983

Resinoid Engineering, Skokie, Illinois

- Manufacturing Engineer Trainee, 1979–1980

Continental Plastics Industries, Lombard, Illinois

- Technician, 1976–1979

Publications

“Preventing Failures in Elastomeric Resistance Bands,” A.R. Shah, D.B. Brickman, **J.F. Grzetic**, and J.T. Eganhouse, Proceedings of the Society of Plastics Engineers Annual Technical Conference, pp. 1–11, May 2017.

“Crib Tent Safety Analysis,” D.B. Brickman and **J.F. Grzetic**, Proceedings of the ASME International Mechanical Engineering Congress & Exposition, IMECE2010-38593, pp. 1–6, November 2010.

“Safety Analysis and Child Testing of Residential Windows,” D.B. Brickman and **J.F. Grzetic**, Proceedings of the ASME International Mechanical Engineering Congress & Exposition, IMECE2009-10127, pp. 1–7, November 2009.

Presentations

“Analysis and Testing of Freezing Phenomena in Plastic Piping Systems,” D.B. Edwards, K.M. Smith, D.E. Duvall, and **J.F. Grzetic**, ASME International Mechanical Engineering Congress and Exposition, Lake Buena Vista, FL, 2009.

“Analysis and Testing of Freezing Phenomena in Piping Systems,” K.M. Smith, Jr., M.P. Van Bree, and **J.F. Grzetic**, ASME International Mechanical Engineering Congress and Exposition, Boston, MA, November 2008.