



Curriculum Vitae

Mark E. Weiss
Analytical & Polymer Chemist

Professional Practice

Mark is a highly skilled laboratory chemist with over 15 years of experience in materials analysis and characterization and failure analysis. He is exceptionally experienced and skilled in the investigation of issues involving the physical and chemical properties of polymers and other organic materials, and the effects of processing, contamination and lot-to-lot variation on material performance. His expertise includes materials characterization by FTIR, RV, VN, MFR, GPC, DSC, TGA, KFT and microstructural analysis by scanning electron and optical microscopy techniques. Mark has a strong analytical, mechanical and engineering aptitude with exceptional skills in test method and instrumentation selection and usage. Mark has an excellent reputation with clients as a results-focused and highly competent and knowledgeable scientific professional.

Employment History

Analytical & Polymer Chemist – Crane Engineering

Plymouth, MN • 2012 - Present

Provides consultation to clients on all matters related to chemistry and materials science. Specializes in analytical chemistry and materials characterization and identification. Reviews material specifications and usage to determine why products have failed. Provides support in resolving materials problems and unforeseen chemical interactions. Works closely with clients to understand and meet their needs. Maintains Crane's in-house chemistry laboratory.

Lab Chemist/Senior Lab Technician – Thermotech/The Polymerlab.com

Hopkins, MN • 1996 - 2012

Oversaw polymer analysis lab that supported all phases of the manufacturing process, including incoming material quality control, post molding parts analysis and instrumentation.

Lab Technician Contractor – Dow Chemical Company

Midland, MI • 1986 - 1992

Responsible for quality control and measurement of mechanical and physical properties of polymers. Composition of polymers by FT-IR, molecular weight by GPC. Coordinated the design and assembly of a lab scale induction furnace. Operated and maintained furnace for synthesis of ceramic materials. Studied the scale up potential of ceramic powders. Conducted x-ray diffraction and SEM.

Lab Technician Contractor – Dow Corning Corporation

Midland, MI • 1990

Operated and maintained a Niro spray dryer to produce flowable silicon carbide powder.

Professional Affiliations and Honors

ASM International

ASM – Minnesota Chapter, Past Chair, June 2017 – June 2018

ASM – Minnesota Chapter, Chair, June 2016 – June 2017

ASM – Minnesota Chapter, Vice Chair, June 2015 – June 2016

American Chemical Society (ACS)

Society of Plastic Engineers (SPE)

Education

Bachelor of Science Chemistry/Polymers, Michigan Technological University, Houghton, MI, 1996

