“Technical Fables: Stories of Materials R&D at 3M”

3M Division Scientist, Automotive Aftermarket Division Laboratory

Host: Tim Long

Bio: Elaine joined 3M in 1985 after receiving a Ph.D. in Materials Engineering Science from Virginia Tech and a B.S. in Polymer Science from Penn State. She is currently a Division Scientist in product development with the Automotive Aftermarket Division Laboratory at 3M in Saint Paul, Minnesota. She previously was a product developer in 3M’s Automotive Division and a researcher in its Adhesive Technology Center and Film Technology Center.

Her diverse research and development interests have included thermoplastic films, organic and inorganic coatings, ceramic paper, structural adhesives, and molded and thermoformed articles. She makes broad use of structure-property-processing relationships in her work and draws on a wide range of characterization methods. While she is usually focused on polymeric materials, in several of her 3M projects she has dealt with ceramic, glass, and metallic materials.

Elaine is an inventor on ten issued U. S. patents with several pending. She has presented papers at SAE, Adhesion Society, American Chemical Society, and other technical meetings and served for five years on the NSF Board on Assessment for NIST. Elaine has been very active within the 3M Tech Forum, where she currently is the Division/Corporate Scientist liaison for its Product Design & Development Chapter. Over the years she has been an active science outreach and community volunteer in the Twin Cities. In 2010, Elaine founded the 3M Virginia Tech University Relations Team.