



DR. SANDRA METZLER

Technical Consultant, SEA

Dr. Sandra Metzler has always broken barriers. At age 11, she was among the first group of girls permitted to play Little League. She's always enjoyed sports, competition, and discovery.

A natural problem solver, Sandra was always the one to fix the broken toasters and to assemble her brothers' toys. She missed the cue that girls were not supposed to like Math and Science.

Sandra was the first high school student to intern at the Delco Moraine automotive plant in Dayton. She worked in the Engineering Garage taking apart transmissions and engines. She also participated in the first "mini-engineer" summer camp for women held at Purdue University, where she would later earn her degree. She was one of twelve women engineers in a class of 250.

Sandra was the first doctoral level female technical consultant for SEA, a corporate team of engineering and investigative authorities specializing in Fire Investigation, Vehicular Accident Reconstruction and Failure Evaluation. Sandra does "engineering detective work," conducting design and failure analysis of biomedical and mechanical devices and products. Sandra was the first person in the U.S. to apply motion capture technology to forensic analysis. Imagine the TV show *CSI*; that's what she does.

Her recommendation to young women pursuing careers in Math and Science is not to be intimidated, not to back down, and not to be afraid to ask questions.

It's obvious that Sandra is passionate about Science and Physics. She mentors the Grandview Heights Middle School Lego Robotics Team, and works with the Science Olympiad, encouraging them to see the value behind critical thinking. She's also one of the conference chairs for the Society of Automotive Engineering and will attend the Digital Human Modeling Conference in Sweden in 2009.

What new barriers will Sandra break? Only time will tell for this talented woman.