Michael A. Sapienza

Consulting scientist in flooring claims, installation and maintenance; walkway surface evaluations; slip resistance; asbestos; material science; industrial safety; plant engineering, product research and development, and fireworks display operations and safety.

EDUCATION: Bachelor of Arts in Chemistry with a minor in Mathematics and Physics - City University of New York - Hunter College 1967. Graduate courses:
Instrumental Analysis - University of North Carolina
Process Dynamics and Control - Clemson University
Polymer Chemistry - NC State University
Statistics - Furman University

PROFESSIONAL BACKGROUND

2008–Present – Fleisher Forensics – Ambler, PA:
Consulting scientist responsible for evaluation of flooring failure analysis, installation and maintenance procedures. Consulting in analysis of pedestrian safety concerning slips, trips, and falls on floors, walkway surfaces, stairs, parking lots, bathrooms, shower and bath facilities. Consulting in analysis of plant and industrial safety practices, maintenance procedures, production processes, product testing, material science and selection, and job safety. Consulting in evaluation of compliance to codes and standards including: BOCA, ADA, ICC, OSHA, ANSI, and ASTM.

1983 – 2008 – Congoleum Corporation – Mercerville, NJ. – Director of Research and Vice President of Purchasing:
Supervised engineers and chemists; responsible for failure analysis, flooring claims, resilient flooring slip resistance and developing practice for removal of existing asbestos-containing flooring. Responsible for plant engineering, maintenance, quality control, and processes, safety training, job safety analysis and installation safety. Responsible for research and development, quality testing and assurance and installation and maintenance procedures for resilient flooring. Responsible for developing flooring, installation and maintenance products.
Awarded U. S. Patent 4,958,399 Trowel Assembly.

1967 – 1983 – E. I. DuPont de Nemours & Company, Inc. - Brevard, NC, Florence SC. Technical Area Superintendent, Process Chemist:
Supervised engineers and chemists in process and product engineering. Responsible for multidiscipline team that designed, built, started-up and ran a $70 million manufacturing facility for polyester film. Responsible for process control, statistical management, accident investigation, job safety analysis, plant design, equipment design, and safety training.
Received "A" Bonus award for outstanding technical achievement.
Awarded U. S. Patent 3,597,471 Process for Making Bis(hydroxyalkyl) Terephthalates.

1983 – 1991 – Fireworks Unlimited of New Jersey, Inc.
Vice President of Operations responsible for safety, construction, handling, transportation and use of fireworks and equipment intended for outdoor displays. Supervised and trained technicians, assured compliance with safety standards, ATF regulations, NFPA codes, coordinated with authorities having jurisdiction for the display sites. Responsible for the operation and safety of fireworks displays.

PROFESSIONAL ORGANIZATIONS

American Society for Testing and Materials
- Board of Directors Task Group on Slip Resistance
- Committee F-06 on Resilient Flooring
  - Main Committee Chairman
  - Second Vice-Chairman
  - Sub-Committee chairman F-06.60 Slip Resistance
  - Sub-Committee chairman F-06.10 Terminology
  - Co-chair F-06.92 US TAG to ISO TC 219 on Floor Coverings
- Committee F-13 on Pedestrian/Walkway Safety and Footwear
  - Secretary
  - Second Vice Chairman
  - Sub-Committee chairman – F-13.91 Terminology
- Committee C-18 on Dimension Stone
- Committee C-21 on Ceramic Whitewares and Related Products
- Committee D-13 on Textiles
- Committee D-21 on Polishes
- Committee D-37 on Cannabis
- Committee E-30 on Forensic Sciences
- Committee E-58 on Forensic Engineering
- Committee F-15 on Consumer Products
  - Sub-committee chairman F15.03 Safety Standards for Bathtub and Shower Structures

National Floor Safety Institute
- Technical Advisory Committee

North American Laminate Flooring Association (NALFA)
- Technical Committee responsible for development of specifications and test methods for laminate flooring.

Resilient Floor Covering Institute 1987 – 2008
- RFCI Technical Committee Chair 1988 – 1992, 1996 – 1998
- Upgraded RFCI and Federal specifications and test methods to ASTM standards.
- Responsible for RFCI Work Practices for Flooring.
- Slip resistance research for OSHA.

PUBLICATIONS

On the Uniformity of Neolite® and Subsequent Impact on Slip Resistance Measurements, *Proceedings of the American Academy of Forensic Sciences Annual Meeting*, Orlando Florida, 1999

On the Effect of Surface Tension on the Ability of a Selection of Tribometers to Rank and Differentiate Standard Reference Surfaces, *Proceedings of the American Academy of Forensic Sciences Annual Meeting,* Atlanta Georgia, 2012

On the Effect of Polyethylene Shoe Covers on the Available Friction of Reference Surfaces, *Proceedings of the American Academy of Forensic Sciences Annual Meeting,* Washington, DC, 2013

PRESENTATIONS

American Academy of Forensic Sciences 2013 – On the Effect of Polyethylene Shoe Covers on the Available Friction of Reference Surfaces,
American Academy of Forensic Sciences 2012 – On the Effect of Surface Tension on the Ability of a Selection of Tribometers to Rank and Differentiate Standard Reference Surfaces;
1999 - On the Uniformity of Neolite® and Subsequent Impact on Slip Resistance Measurements
Resilient Floor Covering Institute Industry Forum 2002 - The State of Slip Resistance Measurement
ASTM Committee F-13
- Ruggedness Testing Results for Mark I and Mark II Tribometers
- Ruggedness Testing Results for VIT Tribometer
- Ruggedness Testing Results for the James Machine
- On the Uniformity of Neolite® and Subsequent Impact on Slip Resistance Measurements
- The Effect of Sensor Types on the Validation of the Mark I Tribometer

ASTM Committee F-06
- Ruggedness Testing Results for the James Machine
- Ruggedness Testing Results for Mark I and Mark II Tribometers
- Ruggedness Testing Results for VIT Tribometer
- On the Uniformity of Neolite® and Subsequent Impact on Slip Resistance Measurements
- The Effect of Sensor Types on the Validation of the Mark I Tribometer
- James Machine Test Methods for Resilient Flooring

Mercer County Bar Association 2011 – CLE: The Ups and Downs of Premises Matters: New Direction in Slip Resistance Testing; Slip-Factors and Mechanics of Slips and Falls
Slips, Trips, and Falls International Conference- The Effect of Sensor Types on the Validation of the Mark I Tribometer

CONTINUING EDUCATIONS

American Academy of Forensic Sciences: 1999; 2012, 2013
University of Southern California, Division of Biokinesiology and Physical Therapy 2012; Understanding Slip & Fall Events: A Biomechanical Perspective 2015
Slips, Trips, and Falls International Conference 2017

PROFESSIONAL CERTIFICATIONS

Certified XL Tribometrist
Polarizing Light Microscopy/Asbestos Identification, Advanced Asbestos Identification – McCrone Institute – Chicago, IL

INSTRUCTOR FOR INDUSTRIAL TRAINING

Installation of Resilient Floor Covering
Identification of Asbestos Containing Materials
Work Practices for the Removal of Resilient Floor Covering Containing Asbestos
Quality Improvement Process
Quality Improvement Tools
Zenger-Miller Front Line Leadership
Quality Management
Statistically Aided Management
Computer Assisted Statistical Process Control
Analytical Problem Solving
Strategy of Experimentation
Focus on Data