

ZDENEK (ZED) HEJZLAR, Ph.D., CSP SENIOR MANAGING CONSULTANT

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Dr. Hejzlar is a Senior Managing Consultant with ESi, with over 33 years of experience in premises/occupational safety and various aspects of the environmental and toxic health fields. He directs multidisciplinary projects in human factors' systems safety and accident reconstruction related to a broad range of environmental and industrial issues, chemical and hazardous materials exposure, risk assessment, fire/explosion, slip, trip, and fall, premises and occupational health and safety. He also has extensive experience in textile and other polymeric material failure analysis and design applications. In addition to the litigation related projects, Dr. Hejzlar is involved in accident prevention consulting research in slip resistant shoe design, walking surfaces and risk mitigation consulting with major cruise lines and resorts.

Areas of Specialization

Industrial and Premises Safety
Environmental and System Safety Consulting
Textile and Polymeric Material Failures
Chemical and Physical Hazard Investigations
Fire/Explosion
Chemical Risk Analysis

Education

Ph.D., Occupational Safety and Health Engineering. Columbia Southern University, 1999 M.S., Business Administration. University of South Florida, 1990 B.S., Textile Chemistry. Philadelphia College of Textiles and Science, 1980

Certifications

Certified Safety Professional (CSP) #13230, Board of Certified Safety Professionals
X-ray Florescence Registration, Florida JR 44809000
Certified Walkway Auditor Safety Specialist WACH (Walkway Auditor Certificate Holder), ANSI/NFSI
Certified Mold Assessor, Florida Department of Business Regulation MRSA 329

Appointments and Professional Affiliations

Dr. Hejzlar taught technical professional courses in environmental and safety risk management, property condition assessments and occupational safety and health. Projects include health and safety, risk evaluations, training and standards development for the U.S. Department of Defense, property evaluations for the U.S. Department of Agriculture, Technical Professional Training for ASTM, Risk Investigation Feasibility Study process and HAZWOPER training for clients in Asia, and environmental risk training for World Bank Group members in Europe. Dr. Hejzlar has also been appointed and served as panel expert for the Transportation Research Safety Board. In addition to numerous technical papers on accident investigation, ASTM has published his three editions of technical manual on the Phase I and

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Phase II assessment process and CD-ROM computer-based assessment training. He served for over 10 years including chairmanship on the Committee for Publications for ASTM International overseeing publications of ASTM's industry technical journals. Dr. Hejzlar is involved in standards development related to safety of walkways surfaces and in tribometry research. He is an NFSI Certified Walkway Auditor Safety Specialist and ANSI/NFSI Walkway Auditor Certificate Holder. He chaired the ANSI/NFSI B101.9 Subcommittee that developed NFSI B101.9-2020 Standard Guide for Identification and Elimination of Interior and Exterior Pedestrian Trip Hazards on Walking Surfaces, Stairs, Steps and Ramps.

American Chemical Society (ACS)

Member, 1993 – 2015

The American Institute of Chemists (AIC)

Certified Chemical Engineer (CChE), National Certification Commission in Chemistry and Chemical Engineering, 1993 – 2005

Certified Professional Chemist (CPC), National Certification Commission in Chemistry and Chemical Engineering, 1993 – 2005

American National Standards Institute (ANSI)

ANSI/NFSI Standards Committee B101 on Safety Requirements for Slip, Trip and Fall Prevention, Member, 2013 – present

NFSI B101.4 Test Method for Measuring the Wet Barefoot Condition of Flooring Materials or Products, Member, 2014 – 2020

NFSI B101.7 Standard Test Method for Lab Measurement of Footwear Outsole Material Slip Resistance, Member, 2014 – present

NFSI B101.9 Identification and Elimination of Interior and Exterior Trip Hazards on Level and Un-Level Walking Surfaces, Stairs, Steps and Ramps, Chairman, 2014 – 2020

NFSI B101.10 Standard for Preparing, Maintaining, Conditioning and Storing Tribometer Sensor Material, Member 2019-present

NFSI B101.11 Standard for the Prevention of Climate Related Slips, Trips and Falls Member 2019 - present

American Railway Engineering and Maintenance-of-Way Association

Member Committee 13 – Environmental, 2007 – 2012

American Society of Safety Professionals (ASSP)

Professional Member

American Society for Testing and Materials (ASTM)

Committee C11 on Gypsum and Related Building Materials and Systems
Subcommittee C11.01 on Specifications and Test Methods for Gypsum Products
Committee F13 on Pedestrian / Walkway Safety and Footwear
Committee E30 on Forensic Sciences

Technical Chair for E 30.11 for revision of ASTM E860, 2019-2022 Committee E34 on Occupational Health and Safety 2011- present Committee E35 on Pesticides and Alternative Control Agents 2013-present Sub Committee E35.26 Safety to Man, Chair 2007 – 2009



Committee C15 on Manufactured Masonry Units, 2015-present

Committee F15 on Consumer Products, 2015 -2022

Committee F25 on Ships and Marine Technology

Committee E50 on Environmental Assessment, Risk Management and Corrective Action

Data Collection Requirements for Military Deployments

Task Force Chairman, 2004 - 2009

Environmental Health Site Assessment for Military Developments Standard

Development Task Force Chairman, 2001 – 2003

Environmental Assessment Phase II Training Development

Task Group Chair, 1998 – 1999

Environmental Assessment Phase I Training Development

Task Group Member, 1993 – 2020

Committee on Publications - Appointed Member, 2005 – 2010

Vice Chair, 2010 - 2013

Chairman, 2014 – 2017

City of Fort Myers Brownfields Advisory Board

Vice Chairman / Member, appointment by the Mayor and the City Council, 2001 – 2005

Florida Department of Financial Services

Education Section CE - 2-20, General Lines Property Casualty Approved Instructor, 2007 - 2009

The National Academies

Advisers to the Nation on Science, Engineering and Medicine, Transportation Research Safety Board, Cooperative Research Programs Advisory Expert on Project Panel HM-06, 2007 – 2010

National Association of Fire Investigators

Member, Certified Fire and Explosion Investigator (CFEI), 2009-2019

National Floor Safety Institute (NFSI)

Certified Walkway Auditor Safety Specialist Member, 2013 – present

Texas Region IV

Region IV Texas Mold Licensing Training Development, Task Group for Assessors and Remediation Professionals Contributing Member, 2003 – 2004

Texas House Bill 329 / Texas Department of Health / Texas Mold Rules and Regulations Task Group Contributing Member on behalf of Texas Region IV School District, 2003

U.S. DOD/ASTM

Task Group Leader on Military Deployment Assessment Standards, ASTM/DOD, 2002 – 2009



Positions Held

Engineering Systems Inc., Fort Myers, Florida

Senior Managing Consultant, 2010 – present Senior Consultant, 2005 – 2009 Director of Environmental Programs, 2001 – 2005

K.C. Breen & Associates, Inc., Fort Myers, Florida

Director of Environmental Management, 1993 – 2001 Director of Research, 1990 – 2001

Parker Seal/Parker Hannifin, Naples, Florida

Quality Assurance and Engineering Manager, 1986 – 1990 Quality Assurance Manager, 1984 – 1986

Madison Bay Marina Campground & Restaurant, Madison, Maryland

Owner Operator / Consultant, 1982 - 1984

Polymer Corporation, Reading, Pennsylvania

Engineering Specialist, 1980 - 1982

Scholler Brothers, Inc., Philadelphia, Pennsylvania

Research Laboratory Chemist, 1979 – 1980

Scottish College of Textiles, Galashiels, Scotland

Laboratory Chemist Trainee, 1976 -- 1977

BASF, Ludwigshafen, West Germany

Laboratory Technician, 1976

S.A. Fine Worsteds Co., Capetown, South Africa

Finishing Foreman, 1974 – 1975

Continued Education

Walkway Auditor Certificate Holder (WACH) Course Assessment, National Floor Safety Institute (NFSI)
Hurst, Texas, September 2023

Walkway Auditor Certificate Holder (WACH) Course Assessment, National Floor Safety Institute (NFSI) Southlake, Texas, July 2020

AAA Construction School Inc. Mold Assessment and Remediation Course for FL Mold License Requirements

Florida June 2020



AAA Construction School Inc. Mold Assessment and Remediation Course for FL Mold License Requirements

Florida June 2018

CMA - NORMI® Certified Mold Assessor for FL Mold License Requirements Estero, Florida, July 2016

Walkway Auditor Certificate Holder (WACH) Course Assessment, National Floor Safety Institute (NFSI) Southlake, Texas, February 2015

Premises Safety Training - Slip, Trip, and Fall, Engineering Systems, Inc. Ft. Myers, Florida, June 2014

Computer Fire Modeling, National Association of Fire Investigators Sarasota, Florida, August 2013

Walkway Auditor Safety Specialist Certification Training, National Floor Safety Institute Southlake, Texas, February 2013

Field Service and Maintenance Marathon Training School on RAMJET Compactors and Vertical Bailers Vernon, Alabama, May 2011

Thermo Fisher Scientific Niton XRF Analyzer Operational Training Course, Thermo Fisher July 2009, Florida Certificate Number 11:250038000000 eXD8a

National Fire, Arson & Explosion Investigation Training Program

National Association of Fire Investigators, National Fire Protection Association

Denver, Colorado, Spring 2009

Pedestrian / Bicycle Crash Investigations, IPTM, University of North Florida Jacksonville, Florida, Summer 2006

Residential Inspection Seminar Houston, Texas, Winter 2005

MycoMeter Mold Assessment and Testing and Training Course Ft. Myers, Florida, Spring 2004

Mold: Effective Defense Strategies Seminar Houston, Texas, Spring 2003

Hazardous Substances Workshop and Bioterrorism Training Tampa, Florida, Spring 2003

40 Hour Hazardous Waste Operations and Emergency Response Course Tampa, Florida, Winter 2000



Publications / Presentations

- "Relationship between Code Requirements and Human Factors /Biomechanical Aspects of Slip and Trip Incidents"

 Speaker, presented at 2023 NFSI Slip, Trip and Fall Prevention Symposium, Hurst TX., September 2023
- "Carbon Monoxide Poisoning," Brochure for U.S. Coast Guard, © 2017 National Marine Manufacturers Association Development Peer Review
- "Reducing the Risk of Slip and Fall Accidents on Cruise Ships," Z. Hejzlar, speaker, presented at Slips, Trips, and Falls International Conference 2017, Toronto Rehabilitation Institute, June 2017
- "Manual 43 Technical Aspects of Phase I / II Environmental Site Assessments, Third Edition," Publisher ASTM, Library of Congress ISBN 978-0-8031-7043-8, April 2015
- "3rd Annual Southwest Florida Brownfield Symposium," Florida Department of Environmental Protection, Z. Hejzlar speaker, presented at Lee County Public Education Center, Ft. Myers, Florida, March 20, 2015
- "Manual 73 Safety and Occupational Footwear," Z. Hejzlar as ASTM COP representative, ASTM, April 2014
- "Evaluation of the Dynamics of Heel Contact in Flip-flop Sandals Under Dry and Wet Conditions," Z. Hejzlar, International Conference on Fall Prevention and Protection, Tokyo, Japan, October 2013
- "Risk Assessment of Walkway Surfaces Using Dynamic and Static Coefficient of Friction Tribometers and Update on Slip Resistance Measurement Standards," Z. Hejzlar speaker, presented at American Society of Safety Engineers (ASSE), Ft. Myers, Florida, August 2013
- "Evaluation of the Dynamics of Heel Contact in Flip-flop Sandals Under Dry and Wet Conditions in Heel Plant Portion of Gait Cycle Using High-Speed Video," Z. Hejzlar, ASTM International Committee of Publications Annual Meeting, September 2012
- "Analyzing the Risk of Daily Life-Revisited for Consumer and Recreational Products," K. C. Breen, W. J. Fischer, Z. Hejzlar, International Legal Guide, Global Legal Group, May 2011
- "Applications of X-Ray Fluorescence in Corrosive Drywall Investigations The Use of X-Ray Fluorescence (XRF) in Detecting and Evaluating Sulfur Impacts on Exposed Copper," Z. Hejzlar, K. Klosinski, R. Granica, meeting on Materials Science & Technology 2010, symposium proceedings on Failure Analysis and Prevention Editor(s), MS&T Publications Department, October 2010
- "Applications of X-Ray Fluorescence to Confirm Sulfur Impact of Corrosive Drywall," Z. Hejzlar, Journal of Testing and Evaluation, Vol. 39, No. 1, Paper ID JTE 103027, August 2010
- "X-Ray Fluorescence in Corrosive Drywall Investigations: Strontium Levels in Several Corrosive and Non-Corrosive Drywalls and Effects of Drywall Finish on XRF Strontium Detection," Z. Hejzlar, Journal of Testing and Evaluation, Vol. 39, No. 1, Paper ID JTE 103087, July 2010
- "Industry Update: Foreign Drywall," Z. Hejzlar speaker presentation Cape Coral Construction Industry Association Cape Coral, Florida, May 2010
- "Materials Analysis Portable X-Ray Fluorescence," Z. Hejzlar speaker presentation, Technical Symposium on Corrosive Imported Drywall, UF, USF, Hinckley Center and FL DOH, Tampa, Florida, November 2009



- "Applications of Portable X-Ray Fluorescence in Problematic Drywall Investigations," Z. Hejzlar / Engineering Systems Inc., J. Pesce / Thermo Fisher Scientific, poster presentation, Technical Symposium on Corrosive Imported Drywall UF, USF, Hinckley Center and FL DOH, Tampa, Florida, November 2009
- "Problematic Drywall Impacts in U.S. Residential Construction: Investigating Problematic Drywall Issues," Z. Hejzlar, J. McDougal, M. L. Hanks, M. Underwood, July 2009
- "Science of Drywall," Z. Hejzlar, presented at Harris Martin Chinese Drywall Conference, Orlando, Florida, June 2009
- "Technical Guide for the Collection of Environmental Sampling Data Related to Environmental Health Site
 Assessments for Military Deployments (NMCPHC TM-PM 6490.2 also USACHPPM as the TG-317),"
 Co-author FDPMU Program Science & Technology, Navy & Marine Corps Public Health Center
- "Manual 43 Technical Aspects of Phase I / II Environmental Site Assessments, Second Edition" Publisher ASTM, Library of Congress ISBN 978-0-8031-4273-2, September 2007
- "Use of ASTM Risk Based Corrective Action Standards with Innovative Management Approaches to Achieve Timely Site Closures," Railroad Environmental Conference, University of Illinois, Chicago, Illinois, October 2007
- "Documentation and Preservation of Information in Claims Investigations Using the ASTM Standards," Catmando Inc. Tampa, Florida, February 2007
- "Innovative Site Remediation Technologies Training Course," presented to Geo-Environmental Technology Research Center, Tokyo, Japan, April 2004
- "Environmental Health Site Assessment Process for Military Deployments," ASTM Standard Guide E2318-03, Co-author
- "Technical Aspects of Mold Investigations," presented to Nationwide Insurance, Plantation, Florida, March 2003
- "Environmental Assessment Train the Trainer," presented to Geo-Environmental Technology Research Center, Tokyo, Japan, January 2003
- Department of Defense Deployment Assessment Training, various Military Installations in the U.S. and abroad, 2003 2009
- 40 Hour Hazwoper Training, presented to ECO Solutions, Seoul, Korea, April 2001
- "Remedial Investigations Feasibility Study EPA Methodology Applications in Asia," presented to ECO Solutions/ KARICO Poil-dong, Seoul, Korea, March 2001
- "Training the Trainer Applications of ASTM Standards," presented to ECO Solutions, Seoul, Korea, December 2000
- "Computer Based Technical Course Developed for ASTM Environmental Site Assessments for Commercial Real Estate," ASTM, CD-ROM Format
- "Solving Environmental Management Risk Issues for Clients in European Countries," presented to Zurich Insurance Company internal technical training, Zurich, Switzerland
- "Environmental Aspects of Commercial Real Estate Transactions Management," presented to ARVIDA Realty Continuing Education, Bonita Springs, Florida, November 2000
- "Solving Environmental and Brownfields Issues for Clients," presented to Professional Business Brokers Association, Ft. Myers, Florida, October 2000



- "ASTM Standards in Products and Personal Injury Litigation," presented to Lee County Bar Association, Ft. Myers, Florida, March 2000
- "Technical Aspects of Quick Response Assessments Course," presented to DEP Hazardous Materials Response Department, New York, New York, January 2000
- "The Use of ASTM Standards in Forensic Investigations," The Chemist, 1999
- "Manual 43 Technical Aspects of Phase I / II Environmental Site Assessments," publisher ASTM, Library of Congress ISBN 0-8031-2084-2, December 1999
- "Human Factors of Slips and Falls," presented at Challenges Conference sponsored by the Florida Department of Health, Lee Memorial Health Systems and Florida Injury Prevention for Seniors, Ft. Myers, Florida, April 1998
- "Developments in Alternate Marine Transportation," SAE 951892, Society of Automotive Engineers, Costa Mesa, California, August 1995
- Phase I and Phase II Environmental Site Assessment Training Courses, ASTM Technical Professional Training system, various locations worldwide, 3-5 courses per year, 1994 present
- "Investigation and Analysis of Marine Accidents," SAE 930658, Society of Automotive Engineers, Detroit, Michigan, March 1993, Reprinted with permission by the Society of Accident Reconstructionist
- "Operator and Environmental Factors Associated with Off-Road Equipment Risk," SAE 921711, Society of Automotive Engineers, Milwaukee, Wisconsin, September 1992