

SUMMARY

J. GEORGE SOTTER, P.E., Ph.D.

Engineering Consultant and Expert Witness — Slip, Trip and Fall

SOTTER ENGINEERING CORPORATION dba Safety Direct America

26705 Loma Verde, Mission Viejo, CA 92691-6055

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<i>Academic background</i>	Ph.D., University of Sheffield, England B.S., Pennsylvania State University
<i>Recent experience</i>	Consultant/expert witness in slip/trip and fall litigation at locations ranging from Hawaii to Bermuda. Project Manager and Principal Investigator of OSHA-driven one-man-year project to minimize slipping incidents on construction-site steel products. Laboratory and field testing of pedestrian surfaces for slip resistance
<i>Professional affiliations</i>	Member of nine national organizations, in three nations, relevant to slip resistance of pedestrian surfaces. Chair, Ceramic Tile Institute of America's Slip Resistance Committee Member of American Society for Testing and Materials (ASTM)
<i>Publications</i>	Book, <i>STOP Slip and Fall Accidents!</i> 203 pp., Sotter Engineering Corporation, 2000, www.amazon.com , ISBN 0-9676030-0-5 "The New Slip Resistance Requirements in <i>IBC</i> ", <i>The Construction Specifier</i> , July 2016, http://www.kenilworth.com/publications/cs/de/201607/files/72.html [Click on the article to enlarge it.] "The Slip and Fall Revolution," International Society for Fall Protection, October 2000 Author of over 45 papers, articles and other publications in technical trade magazines, international symposia, and archive journals. Includes many addressing pedestrian falling accidents
<i>Registrations, Certifications</i>	Licensed as a Professional Engineer (Chemical) by State of California Board for Professional Engineers and Land Surveyors, and (on as-needed basis) five other states. Certified by City of Los Angeles for Slip Resistance Testing of Floors One of four United States slip and fall consultants recommended by A.M. Best in 2016 <i>Best's Directory of Recommended Insurance Attorneys and Adjusters</i> , Volume II, p.160.
<i>Experience</i>	More than 50 years in consulting and engineering. Slip-and-fall forensic consulting for both plaintiff and defense, in roughly equal proportions.

Curriculum Vitae

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<i>Expertise</i>	Floor slip resistance assessment; slip and fall accident consultant and expert witness
<i>Academic background</i>	Ph.D. (1964) in Fuel Science, University of Sheffield, England B.S. (1961) in Fuel Science, Pennsylvania State University
<i>Professional affiliations</i>	Chairman, Ceramic Tile Institute of America's Slip Resistance Committee Member, American Society for Testing and Materials (ASTM), serving on Committee on Footwear, Committee on Resilient Floor Coverings, Committee on Ceramic Whitewares and Related Products, and Committee on Polishes Member, United Kingdom Slip Resistance Group (Great Britain) Member, Standards Australia Committee on Slip Resistance of Pedestrian Surfaces Member of Executive Committee, Slip and Fall Prevention Institute of America Former Director, Los Angeles Power Committee, American Society of Mechanical Engineers (ASME)
<i>Registration</i>	Licensed Chemical Engineer: State of California Board for Professional Engineers and Land Surveyors (current, since 1971), and on as-needed basis in States of Colorado, Kansas, Nebraska, New Mexico and Utah
<i>Certifications</i>	One of four United States slip and fall experts recommended by A.M. Best in 2016 <i>Best's Directory of Recommended Insurance Attorneys and Adjusters</i> , Volume II, p. 160.
<i>Publications</i>	Book, <i>STOP Slip and Fall Accidents!</i> 203 pp., Sotter Engineering Corporation, 2000, www.amazon.com , ISBN 0-9676030-0-5 "The New Slip Resistance Requirements in <i>IBC</i> ", <i>The Construction Specifier</i> , July 2016, http://www.kenilworth.com/publications/cs/de/201607/files/72.html [Click on the article to enlarge it.] "The Slip and Fall Revolution," presented at International Society for Fall Protection International Symposium, October 2000 Author of over 35 papers, articles and other publications in technical trade magazines, international symposia, and archive journals. Topics include pedestrian safety,

instrumentation, air pollution control, combustion, jet and rocket propulsion, and effects of fuel quality. Some examples:

"Research toward the Rapid Minimization of Slipping Incidents on Construction-Site Steel Products," prepared for OSHA/SENAC Steel Coalition, American Iron and Steel Institute, June 7, 1998, 174 pp.

"Friction Underfoot," *Occupational Health and Safety*, March 1995

"Slip Resistance Standards, Test Methods Drag on toward Finalization," *Tile Industry News*, September 1994

"Slip Resistance Standards, Test Methods," CTIOA/COF Report, Ceramic Tile Institute of America, Culver City, CA

"Focus On: The Americans with Disabilities Act - Slip Resistance Standards, Test Methods", *Tile & Decorative Surfaces*, May 1995

"Resonant Combustion in Rockets," *Scientific American*, December 1968.

Experience

Fifty years in consulting and engineering:

Consulting Engineer and CEO, Sotter Engineering Corporation (1991 - present).

- Established TorTestSM floor friction testing service to help prevent or reconstruct slip and fall accidents. Project Manager of one-man-year research project to minimize slipping incidents on construction-site steel products, sponsored by OSHA/SENAC Steel Coalition. Conducts floor friction tests for attorneys, builders, floor treatment or maintenance companies, flooring manufacturers and vendors, forensic consultants, insurance companies, property owners/managers. Locations have ranged from the Hawaiian Islands and Guam to Bermuda.
- Assisted attorneys for electric utility group to make industry inputs to influence U.S. acid rain legislation and rulemaking. Assisted Canadian electric utility with acid rain reduction program. Reduced gas turbine emissions of NO_x, CO and hydrocarbons for a California cogenerator. Co-authored *Air Quality Permitting Handbook*, distributed by Southern California Gas Company. Initiated, and assisted in completion of, merger of two multimillion-dollar environmental consulting companies.

Manager, Air Quality, Dames & Moore, Irvine, CA.

- Project manager for safety and environmental assessment for a large printing plant. Project Manager for an air solid waste assessment test (SWAT) and border zone health risk study assessment for a hazardous waste site in Corona, CA. Emissions reduction consultant to a cogeneration plant drying agricultural products. For the U.S. Navy, principal consultant in AB2588 emission inventory.

Manager, Air Quality, Fred C. Hart Associates, Inc., Irvine, CA.

- Project Manager of a contract for the South Coast Air Quality Management District (SCAQMD) to design a Compliance Reporting Program for SCAQMD and write guidebooks to explain the program to industry.
- Project Manager of a NO_x emissions reduction program for municipal power plants owned by the City of Burbank, California.

Manager, Performance Engineering, Energy and Environmental Research Corporation, Irvine, CA

- Project Manager for 140 emissions tests conducted under contract to southern California's South Coast Air Quality Management District. Sources tested included

refinery heaters, boilers, asphalt batch plants, glass furnaces, gas turbines, and other industrial devices.

- As consultant to an Indonesian coal producer, conducted and extensively documented a successful test burn of an ultra-high-grade coal at China Light and Power's largest power plant, Hong Kong. Also consulted on NOx emissions control for Steinmüller, a major German boiler manufacturer.
- Project Manager and principal author of Electric Power Research Institute's *Guidelines for Fireside Testing of Coal-Fired Boilers* (EPRI CS-3350), a key reference used worldwide in problem-solving and coal switching both for economic advantages and to mitigate acid rain.

Principal Engineer, Energy Technology Consultants, Irvine, CA

- Consulted for Utah Power and Light Company and Intermountain Power Project in successful efforts to obtain permits to construct major power generating facilities without installing costly selective catalytic reduction units as Best Available Control Technology (BACT).
- Conducted economic and marketing study for TRW, Inc. regarding a slagging coal-fired combustor for utility and industrial boilers.
- Consulted for Westinghouse Canada on the use of large gas turbines in the United States.

Manager of Utility Services, Western U.S., KVB, Inc., Irvine, CA

- Inventor of a chemical method of NOx destruction by urea injection that is widely used in Europe and the United States. Also invented the first successful method for automatically washing the linings of large chimneys to prevent chimney corrosion and emission of acids.
- Consulted on particulate emission reduction for Public Service Company of New Mexico. Presented testimony to propose and provide technical support for a revised particulate control regulation, which was then adopted unanimously by the combined boards of the New Mexico Environmental Improvement Board and the Albuquerque-Bernalillo County Air Pollution Control District.
- Project Manager on pioneering project that eliminated acid fallout from twenty-three utility boilers operated by Los Angeles Department of Water and Power and Southern California Edison Company. Testified before Hearing Board of the South Coast Air Quality Management District, gaining acceptance of the mitigation method as the method of compliance with an abatement order against the two utilities.
- Introduced to the U.S. market European state-of-the-art technologies for (1) hot-water district heating (installed in a \$100,000,000 project by the City of St. Paul, Minnesota), (2) sampling pulverized coal in a primary air stream and (3) sampling flyash in a flue gas stream.

<i>Citizenship</i>	United States
<i>Countries worked in</i>	United States, Bermuda, Canada, Hong Kong, Netherlands, United Kingdom, Guam, Germany
<i>Patents</i>	"Urea Reduction of NOx in Combustion Effluents," U.S. 4,208,386, (1980). "Footwear Apparatus and Method of Use," U.S. 6385866 B1 (2002).
<i>Award</i>	Achievers Hall of Fame, Springfield (PA) High School, Class of 2016
<i>Seminars, Symposia attended</i>	International Symposium on Slip Resistance, Washington, DC, October, 1995. "Slips, Trips and Falls," American Insurance Services Group, Los Angeles, September, 1995. International Fall Protection Symposium, Wuppertal, Germany, September, 1998 International Ergonomics Association XIVth Triennial Congress, slip and fall sessions, San Diego, CA, August, 2000