



RESUME OF DALE C. MANN

SUMMARY

Certified Forensic Scientist with over 28 years of experience in analytical chemistry, general forensic evaluations, and forensic chemistry. Has performed chemical and physical analyses in thousands of investigations involving criminalistics, subrogation, industrial trouble shooting and liability claims in criminal and civil investigations. Is a certified fire and explosions origin and cause investigator. Areas of expertise include scene documentation, laboratory analyses and scenario testing. Principal researcher, author, and lecturer in several topic areas involving forensic chemistry. Over 360 trial testimonies, depositions, mediations and arbitrations.

PROFESSIONAL EXPERIENCE

MDE Inc. – Seattle, WA (1998 to Present)

Vice President and Principal – Responsible for all chemical and microscopic analysis and research, and forensic investigations requiring analytical skills and ability to critique work of others. Areas of interest and expertise include fire and bombing investigations, general criminal and civil forensic investigations, building envelope/component failures, polymer characterization, drugs/hazardous materials issues, chemical manufacturing/tampering/incompatibility, chemical failure analysis, environmental contamination, and general chemistry-related investigations.

Washington State Patrol Crime Laboratory – Seattle and Tacoma, WA (1981 – 1998)

Forensic Scientist – Responsible for performing chemical, analytical, physical, microscopic, and general forensic analyses to assist in thousands of law enforcement investigations. Qualified as an expert witness in forensic chemistry, forensic microscopy, crime scene reconstruction, chemical manufacturing, paints, glass, impression evidence, and scientific method. Over 320 court appearances. Responsible for the training, quality control, and productivity of the Chemistry and Microanalysis Sections in the Tacoma Crime Laboratory. Provided extensive training to law enforcement personnel and forensic scientists throughout the country in a variety of forensic topics.

Battelle, Pacific Northwest Laboratories – Richland, WA (1978 – 1981)

Research Scientist – Responsible for the design and implementation of the sampling and analysis protocols dealing with the qualitative and quantitative recovery of organic materials from the environment (air, water, and soil) resulting from the solvent refining of coal and the chlorination of large-scale water cooling systems.

University of Washington, Department of Oceanography – Seattle, WA (1977 – 1978)

Research Assistant – Performed basic research dealing with the characterization of plant tissues in ocean sediments as a means of tracking river plumes. Assisted in sampling, and responsible for the analysis of the recovered samples.

PROFESSIONAL REGISTRATION & CERTIFICATION

American Board of Criminalistics – Certified with specialty areas in Fire Debris and Drug Analysis (1990)
International Association of Arson Investigators, Certified Fire Investigator (2008)
National Association of Fire Investigators – Certified Fire and Explosion Investigator (1998)
Washington State Department of Ecology – Accredited for analysis of methamphetamine (2003)

EDUCATION & TRAINING

Bachelor of Science, Chemistry, University of Washington (1978)
Bachelor of Science, Oceanography, University of Washington (1978)
Have attended many continuing education courses and seminars dealing with analytical, chemical, microscopic, and general forensic examination of a variety of materials, evidence and scene investigations. Courses taught by authoritative leaders in their respective fields from the Federal Bureau of Investigation (FBI), Bureau of Alcohol, Tobacco and Firearms (BATF), The McCrone Institute, National Forensic Science Training Center (NFSTC), International Association of Arson Investigators (IAAI) and private companies

PROFESSIONAL ASSOCIATIONS

Fellow – American Academy of Forensic Sciences (AAFS), 1984 to present
Regional Scientist Award, 1986
Fellow – American Board of Criminalistics, 1991 to present
Board of Directors, 1991-1994
Member – International Association of Arson Investigators (IAAI), 1998 to present
Forensic Science Committee, 1996 to Present
Member – National Association of Fire Investigators (NAFI), 1998 to present
Member – Northwest Association of Forensic Scientists (NWAFS), 1982 to present
Board of Directors, 1987-1990; President, 1989
Technical Working Group on Fire and Explosives (TWGFEX), 2000 to present

PUBLICATIONS & PRESENTATIONS

Mann, D.C., 1987, "The comparison of automotive gasolines using capillary gas chromatography I: Comparison methodology," *Journal of Forensic Sciences*, 32:2, 606-615.
Mann, D.C., 1987, "The comparison of automotive gasolines using capillary gas chromatography II: Limitations of automotive gasoline comparisons in casework," *Journal of Forensic Sciences*, 32:2, 616-628.
Mann, D.C., & Gresham, W. R., 1989, "Bacterial degradation of gasoline in soil," *Journal of Forensic Sciences*, 35:4, 913-923.
Mann, D.C., 1995, "Considerations in the Analytical Interpretation of Gas Chromatographic Test Results of Fire Debris," Proceedings of the International Symposium on the Forensic Aspects of Arson Investigations, U.S. Department of Justice, Federal Bureau of Investigation, 163-164.
Mann, D.C., & Fitz, M.M., 1999, "Washing Machine Effluent May Provide Clues in Dryer Fire Investigations," Fire Findings, 7:4, 4.
Mann, D.C., 2000, "In Search of the Perfect Container for Fire Debris Evidence," Fire & Arson Investigator, 30:3, 21-25.
Mann, D.C. & Putaansuu, N.D., 2006, "Alternative Sampling Methods to Collect Ignitable Liquid Residues from Non-porous Areas Such as Concrete," *Fire and Arson Investigator*, 57:1, 43-46
Mann, D.C., 2007, "The Use of Rated Wall Board Primers as Vapor Barriers," *WDTL Defense News*, Spring 2007.

Over 60 presentations to local associations of investigators, attorneys and insurance adjusters regarding fire debris analysis, clandestine drug manufacturing, general forensic science, and laboratory services including the recognition and preservation of evidence and the theoretical and practical considerations regarding laboratory analysis of evidence. 1982-2007.

Numerous presentations at regional and national meetings of forensic scientists and investigators regarding original research on a variety of topics related to fire debris analysis and general forensic science. Topics include comparison of automotive gasolines to determine common source, bacterial degradation of petroleum products and its effect in fire debris analysis, contamination of commercially available packaging materials for fire debris evidence, theoretical considerations of methodology used for fire debris analysis, and distinguishing burned vs. evaporated petroleum products. 1983-2007.

Guest lecturer and instructor at the Federal Bureau of Investigation (FBI), Bureau of Alcohol, Tobacco and Firearms (BATF), the National Forensic Science Training Center (NFSTC), and the International Association of Arson Investigators (IAAI) for basic and advanced schools dealing with fire debris analysis.

