

## PRESENTATIONS AND PAPERS

### Dr. Carl J. Abraham, P.E.

Peer reviewer of manuscripts for the American Society for Testing & Materials (ASTM) 1991-Present

Peer reviewer of manuscripts for the Journal of Forensic Examiners, 1994-Present

Numerous papers written and/or presented during 1961-1965 under confidential and/or secret clearance in areas of ablation, insulation, material evaluation, fiber analysis in hyperthermal environments.

1. "A Survey of Insulation Materials", by C. J. Abraham, R. L. Keller and A. A. Stenersen, Report No. 339, Aerojet Corporation, August, 1961.
2. "Evaluation of specific DuPont Research Fiber Reinforcing Agents", C. J. Abraham and A. A. Stenersen, Report No.MF-525; Aerojet General Corporation, November, 1963.
3. "The Treatment & Analysis of Power Plant Operations", by C. J. Abraham, Engineering Society of Power Plant Engineers, Suffolk County, 1967.
4. "Chemical Defense of Drugs and Narcotics", by C. J. Abraham, Suffolk County Criminal Bar Assoc., Sept. '74.
5. "Forensic Evaluation and Defense", by C. J. Abraham, Suffolk County Criminal Bar Assoc., 1975.
6. "Used of Experts in Forensic Sciences", C. J. Abraham, Queens County Criminal Bar Assoc., Jan. 1976.
7. "Adaptation of Testing Standards to Practical Requirements", C. J. Abraham & F.L. Ryder, Nat'l Symposium on Technical Standards in Products Liability Litigation, American Society for Testing & Materials, Toronto, Canada, May 5, 1977.
8. "Hazards Relating to Hospital Procedures and Standards of Care", by C. J. Abraham & F.L. Ryder, *ibid.*
9. "Safety Design in Plastic Sports Equipment", by C. J. Abraham & F.L. Ryder, Nat'l Technical Conference on Safety and Health with Plastics, Denver, CO., November 8, 1977.
10. "Product Liability and Negligence Within the Hospital Environment", by C. J. Abraham, Nassau Bar Assoc. June, 1978.
11. "The Law and Use of Videotaping Depositions", by C. J. Abraham, NY State Trial Lawyers Assoc., NYC, October 1978.
12. "An Analysis of a Defective Product from the Manufacturer to the Consumer", by C. J. Abraham, NY State Trial Lawyers Assoc., *ibid.*
13. "Product Liability & the Expert's Role", C. J. Abraham & F. L. Ryder, NY State Trial Lawyers Assoc.
14. "The Importance of Discovery in Handling Cases Prior to the Deposition", by C. J. Abraham, John Jay College ofCriminal Justice, NYC, March 27, 1979.
15. "An Overview of Ford Transmissions from 1971-1979", by C. J. Abraham presented at the DOT's public proceeding, Aug. 21, 1980, on "Initial Determination of a Safety Related Defect in Ford Vehicles with C-3, C-4, C-6, FMX and Jatco Transmissions", (NHTSA Proceedings).
16. "Products Liability Aspects of Asbestos", presented to the Toxic Tort Section of the American Trial Lawyer's Association, Hilton Head, SC, October 1981.
17. "Flammable Fabrics - A Critique", presented to NY State Trial Lawyers Association., October 23, 1982.
18. "Explosion Accidents", by C. J. Abraham, *ibid.*
19. "Labeling Liability in the Toxic Tort Case", by C. J. Abraham, et al., 1983 Annual Convention, Assoc. of Trial Lawyers of America, July 15-22, 1983, Washington, DC; Trial Lawyers Quart., Vol. 15, No. 4, 1983, NY State Trial Lawyers Assoc., pp.19-35; presented 5th Int'l Conf. on Toxic Products, San Francisco, CA, June 4, 1984.
20. "Foreseeable Fire Hazards in Mobile Home Construction", C. J. Abraham, et al., Proc. 5th California Conf. on Product Toxicity, Vol. 5, 1984, pp. 68-72; presented to the 9th Int'l Conf. on Fire Safety, San Francisco, CA, January 17, 1984.
21. "Systems Safety Approach Relating to Fire Hazards in Mobile Homes", C. J. Abraham, Joint Meeting - Systems Safety Society and American Society of Safety Engineers, East Meadow, NY February 9, 1984.
22. "Labeling Liability Standards and Household Products", C. J. Abraham, Joint Meeting-Systems Safety Society and American Society of Safety Engineers, East Meadow, NY, 2/9/84.
23. "Warnings with Respect to Swimming Pools and Sports Equipment: Are They Effective?", C. J. Abraham, et al, NYS Trial Lawyers Assoc., NY, March 10, 1984.
24. "Household Products - Drain Cleaners", C. J. Abraham, Product Defect Handbook, Lawyers Cooperative Publishing Company, Rochester, NY 1984.
25. "Controlling Fires in Buildings and Products", C. J. Abraham,et al., 10th Int'l Conf. on Fire Safety, San Francisco, CA, 1985. (Paper presented by C. J. Abraham)

26. "Product Toxicity - Warnings and Instructions", by C. J. Abraham, et al., Proc. 5th California Conf. on Product Toxicity, Vol. 5, 1985, pp. 25-48.
27. "Fire Safety Aspects of Battery Explosions", C. J. Abraham, et al., 11th Int'l Conf. on Fire Safety, 1986 (San Francisco, CA).
28. "Drain Cleaners - Warnings", C. J. Abraham, et al., Product Defect Handbook, Lawyers Cooperative Publishing Company, Rochester, NY, May, 1986.
29. "Methylene Chloride: Toxicology, Detection and Tort Experience", C. J. Abraham, et al., 2nd Conference on Current Concerns on Toxicology, October 6-7, 1986 (San Francisco, CA).
30. "Analysis of Standards and Testing of Fireman's Protective Clothing", C. J. Abraham, et al., 2nd Int'l Symposium on Performance of Protective Clothing sponsored by ASTM Committee F-23, American Industrial Hygiene Assoc., and the Royal Institute of Technology, Stockholm, Sweden. Jan. 1987, Tampa, FL.
31. "State-of-the-Art Technology of Firemen's Protective Clothing", C. J. Abraham, et al., 12th International Conference on Fire Safety, January, 1987 (San Francisco, CA).
32. "Liabilities in Sports and Recreational Accidents", C. J. Abraham, et al., Trial Lawyers Association of Metropolitan Washington, DC, April 7, 1987.
33. "Assumption of Risk - Hockey Injuries", C. J. Abraham, et al., ASTM Symposium on SAFETY IN ICE HOCKEY, October 27, 1987 (Montreal, Canada); published in Safety in Ice Hockey, pp. 44-51, ASTM Publication Code Number (PCN) 04-01050-47, September, 1989.
34. "The Forensic Implications of a Gasoline Spill Caused by a Leaking Underground Storage Tank", C. J. Abraham, et al., Int'l Assoc. of Forensic Sciences, 11th Meeting, Aug. 2-7, 1987, (Vancouver, BC, Canada).
35. "Mannequin Simulation Studies in the Flammability Evaluation of Garments", C. J. Abraham, et al. 13th Int'l Conference on Fire Safety, January 11-15, 1988 (San Francisco, CA).
36. "A Protective Shield for Prevention of Battery Explosion Injuries", C. J. Abraham, et al., 13th International Conference on Fire Safety, January 11-15, 1988 (San Francisco, CA).
37. "Battery Explosions - Cause and a Solution", C. J. Abraham, Presented to U.S. DOT National Highway Traffic Safety Administration, Washington, DC, February 19, 1988.
38. "Automotive Battery Explosions-A Solution", C. J. Abraham, et al., SAFE Symposium, Las Vegas, December, 1988.
39. "Design Criteria for Footwear and Functional Testing on Artificial and Natural Surfaces", C. J. Abraham, et al., ASTM Symposium on The Characteristics and Safety of Playing Surfaces (Artificial & Natural) for Field Sports, Phoenix, AZ, Dec. 6, 1988. ASTM STP1073 Publication, 1990.
40. "Analysis of Standards and Testing for Firemen's Protective Clothing", C. J. Abraham, et al., Performance of Protective Clothing-Second Symposium, ASTM Publ. Code 04-989000-55, p. 422-439.
41. "Standards and Flammability Characteristics of Blankets and Sheets", C. J. Abraham, et al., 14th International Conference on Fire Safety, Jan. 9-11, 1989, San Francisco, CA.
42. "Automobile Battery Explosions: A New Standard of Care", C. J. Abraham, et al., 46th Annual Belli Seminar, July 15, 1989, Boston, MA (The Melvin Belli Society).
43. "Development of the International Standard for Aircraft Batteries", C. J. Abraham, et al., 1989 SAFE Symposium, New Orleans, LA, December 5-8, 1989.
44. "A New Standard of Care for Wearing Apparel, Blankets and Sheets", C. J. Abraham, et al., 15th International Conference on Fire Safety, January 8-10, 1990, San Francisco, CA.
45. "Tracking the Source of a Gasoline Storage Tank Leak", C. J. Abraham, et al., The Society of Forensic Toxicologists, Huntington, NY, September 11-15, 1990.
46. "Automotive Battery Explosions: A Solution", C. J. Abraham, Adelphi University Chemistry Faculty, Garden City, New York, October 1, 1990.
47. "Flammable Fabrics: Populations at Risk - A Solution", C. J. Abraham, et al., Conference on Fire Safety and Thermal Insulation, Nov. 5-6, 1990, St. Petersburg, FL.
48. "Flammable Fabrics: New Standards of Care for Populations at Risk", C. J. Abraham, et al., Textile Institute World Conference, Dundee, Scotland, November 19-22, 1990.
49. "Flammable Fabrics: New Standards for Populations at Risk", C. J. Abraham, et al., Trial Lawyers Quarterly, Fall 1990, Vol. 21, No. 1.
50. "Toxic Exposures in Industry: A Case Study", C. J. Abraham. American Chemical Society, Hofstra University, Hempstead, NY, December 6, 1990.
51. "Flame Retardancy Technology and Standards for Wearing Apparel - A Time for Upgrading", C. J. Abraham, Conference on Recent Advances in Flame Retardancy of Polymeric Materials, Stanford, CT, May 14-16, 1991.
52. "Technical Investigations for the Claims Adjustor", C. J. Abraham, Akron Claims Assoc, Akron, OH, February 12, 1992.
53. "A Critique of Ice Hockey Equipment and Facilities", C. J. Abraham and J. P. Doolan, 2nd International Symposium on Safety in Ice Hockey sponsored by ASTM Committee FO8 on Sports Equipment & Facilities, F.08.15 on Ice Hockey and The Hockey Equipment Certification Council, Pittsburgh, PA, May 20-21, 1992.

54. "Battery Explosions - Status and Solutions", C. J. Abraham, International Electronics Council, 56th IEC General Meeting, September 29, 1992, World Trade Center, Rotterdam, The Netherlands.
55. "Protection Of The Manufacturer, Or Protection Of The Consumer", C. J. Abraham, 5th Fire Safety Conference, Clarion Plaza Hotel, Orlando, FL, Feb. 15-17, 1993 (Session Chairman: Fire Risk Assessment/Training).
56. "The Flammable Fabrics Act: An Unreasonably Dangerous Act", C. J. Abraham, Standards Engineering, May/June, 1993, pp. 1 & 3-7 (Presented at the Belli Seminar, July 31, 1993, San Francisco, CA).
57. "Death In The Campgrounds", A Forensic Investigation, C. J. Abraham, et al., Canadian Society of Forensic Science and the Association of Official Analytical Chemists (Mid-Canada Regional Section), Winnipeg, Manitoba, September 8-11, 1993.
58. "The Forensic Investigations of "Death In The Campgrounds", C. J. Abraham, S.O.F.T./C.A.T 1993 Joint Meeting, Phoenix, Arizona, October 10-16, 1993.
59. "The Flammable Fabrics Act: An Unreasonably Dangerous Act", C. J. Abraham, Trial Lawyers Quarterly, Vol. 23, No. 4, Summer 1993.
60. "Tent Design-The Hidden Dangers", C. J. Abraham, et al., 6th Fire Safety Conf./Exhibition, Orlando, FL, Feb 14-16, 1994. (Session III Chairman, Fire Risk Assessment/Training).
61. "Tent Design- The Hidden Dangers", C. J. Abraham, et al., 1994 Annual BCC Conference, Recent Advances in Flame Retardancy of Polymeric Materials, Stamford, Connecticut, May 24-26, 1994.
62. "Linseed Oil - A Hazardous But Necessary Ingredient?", C. J. Abraham, et al, 1994 Annual BCC Conference, Stamford, Connecticut, May 24-26, 1994.
63. "Chemical Safety and the Law", C. J. Abraham, American Chemical Society (Long Island Subsection), Hofstra University, Hempstead, New York, March 9, 1995.
64. "Recommended Design Factors For The Ideal Sports Sneaker", C. J. Abraham, et al., Conference on Textiles in Sports and Sportswear, The University of Huddersfield, Queensgate, Huddersfield, Great Britain, April 10-11, 1995.
65. "Tent Fabric - Design Defects and Recommended Solutions", C. J. Abraham, et al., Conference on Textiles in Sports and Sportswear, The University of Huddersfield, Queensgate, Huddersfield, Great Britain, April 10-11, 1995.
66. "A Solution To Spontaneous Combustion in Linseed Oil Formulations", C. J. Abraham, International Conference on Fire Retardant Polymers, 5th European Conference, University of Salford, Salford, England, Sept. 4-7, 1995.
67. "A Solution to Spontaneous Combustion In Linseed Oil Formulations,": C. J. Abraham, Adelphi University, Department of Chemistry, Garden City, New York, October 19, 1995.
68. "A Solution To Spontaneous Combustion in Linseed Oil Formulations", C. J. Abraham, Polymer Degradation and Stability, Elsevier Applied Science, Vol. 54, 1996.
69. "The Flammable Fabrics Act: Legal and Technical Analysis", C. J. Abraham, Hispanic National Bar Association 1996 Convention, Miami, Florida, October 3-5, 1996.
70. "A Viable Product vs. The Legal System", C. J. Abraham, Safety In Ice Hockey, Third International Symposium, Sponsored by ASTM and supported by HECC and USA Hockey, May 4-5, 1997, St. Louis, Missouri, Session Chairman of Session VII, May 5, 1997.
71. "A Viable Product vs. The Legal System", C. J. Abraham, Connecticut Bar Association, New Haven, Connecticut, May 15, 1997. (presentation)
72. "Enhancing the Flame Retardancy of Natural and Natural-Polymer Fibers", C. J. Abraham, World Textile Congress on Natural and Natural Polymer Fibers, The University of Huddersfield, Huddersfield, England, July 9-11, 1997.
73. "A Solution to Prevent Spontaneous Combustion in Linseed Oil Formulations", C. J. Abraham, 6th European Meeting on Fire Retardancy of Polymeric Material, Lille, France, Sept. 24-26, 1997.
74. "Reduced Flammability Fibers", C. J. Abraham, World Textile Congress on Industrial, Technical & High Performance Textiles, The University of Huddersfield, Huddersfield, England, July 15 & 16, 1998.
75. "Reduced Flammability Fibers", C. J. Abraham, Seventh International Symposium on Performance of Protective Clothing Issues and Priorities for the 21st Century, June 28-30, 1999, Seattle, WA.
76. "A Viable Product vs. The Legal System", C. J. Abraham, Trial Lawyer's Quarterly, 2001
77. "Site Monitoring", C. J. Abraham, Emergency Preparedness and Response, Educational Program Innovations Center, Toronto, Canada, February 6, 2001 (presentation).
78. "Hazard Communication-Manufacturer, Importer, Distributor, Employer and Employee", C. J. Abraham, Emergency Preparedness and Response, Educational Program Innovations Center, Toronto, Canada, February 6, 2001 (presentation).
79. "Characteristics of Hazardous Materials", C. J. Abraham, Storage and Handling of Hazardous Materials, Educational Program Innovations Center, Toronto, Canada, March 20, 2001.
80. "Fire Protection", C. J. Abraham, Storage and Handling of Hazardous Materials, Educational Program Innovations Center, Toronto, Canada, March 21, 2001
81. "A New Standard Of Care In Absorbing And Dissipating Forces", C. J. Abraham, Fourth International Symposium On Safety In Ice Hockey, May 5-6, 2002, Pittsburgh, Pennsylvania.

82. "Correcting The Flaws In The Flammability Testing Of Woven And Knitted Apparels", C. J. Abraham and Sanjeev Gahndi, International Conference on Textiles, Manchester, England, October 5-6. 2002.
83. "Correcting The Flaws In The Flammability Testing Of Textiles", C. J. Abraham and Sanjeev Gahndi, The 3rd International Conference on Safety & Protective Fabrics, Charlotte Convention Center, Charlotte, N.C., Oct. 23-24, 2002.
84. "Environmental Forensic Techniques - The Investigator/Scientist - An Overview", Abraham, C. J., Conference on Environmental Litigation: Advanced Forensics And Legal Strategies, EPIC Educational Program Innovations Center, Toronto, Canada, Nov. 19-20, 2002.

## **PATENTS AND PRODUCTS**

1. High temperature carbonaceous and siliceous materials; dental and medical fields, industrial formulations for air and water pollution fields; polymers and novel adhesives; formulations for cleaning - industrial and consumer applications; glass and coating formulations.
2. Head Gear in Sports - U.S. Patent No. 4,342,122, August 3, 1982. (Licensed to Riddell - BIOLITE face masks, a new generation of protective equipment).
3. Flexible Face Mask Improvement - U.S. Patent No. 4,631,758, dated December 30, 1986.
4. Protective Shield For Battery - U.S. Patent 4,699,855 granted June 1987; issued Oct. 13, 1987
5. Canadian Patent, issued May 14, 1991, No. 1284174.
6. Japanese Patent Application No. 60888/1987
7. Protective Shield for Battery - Improvement - U.S. Patent No. 4,770,958, September 13, 1988.
8. West German Patent Application No. P38 04 447.1.
9. Great Britain Patent No. 2208032, dated May 31, 1988
10. Italian Patent Application, No. 67503-A/88
11. French Patent Application No. 88 10747
12. Storage Battery Having a Protective Shield - Deflectable Battery Shield, U.S. Patent No. 4,952,468, August 28, 1990
13. Spanish Patent No. 2,021,505, March 21, 1992
14. British Patent, issued September 7, 1989, No. 2,235,085
15. Italian Patent Application 68583-A/89.
16. French Patent Application No. 89 17442/140644.
17. West German Patent Application No. A228P102.
18. Flame Retardants for Linseed Oil: Formulations and Applications - C. J. Abraham, et al. U.S. Patent. 5,540,762, issued July 30, 1996.
19. Non-Toxic Animal Repellent: C. J. Abraham, U.S. Patent 5,554,377, September 10, 1999.
20. Apparatus For Enhancing Absorption And Dissipation Of Impact Forces For All Protective Headgear: C. J. Abraham, U.S. Patent 6,272,692, Aug. 14, 2001.
21. Fog-Free Protective Glasses, Goggles, and Non-Protective Glasses: C. J. Abraham. U. S. Patent applied for in June 2001.
22. Apparatus For Enhancing Absorption And Dissipation Of Impact Forces For All Protective Headgear, Abraham, C. J., U. S. Patent No. 6,272,692, 8/14/01.
23. Apparatus For Enhancing Absorption And Dissipation Of Forces For All Helmets And Protective Equipment, Abraham, C. J., et al., U. S. Patent No. 6,282,724, Sep. 4, 2001.
24. Impact And Energy Absorbing Product For Floors, Walls, Panels, And Other Flat Surfaces, Abraham, C. J., et al., Patent applied for in June 2001, approved 2/02.
25. Impact And Energy Absorbing Product For Helmets And Protective Gear, C. J. Abraham, et al. U. S. Patent 6,378,140, April 30, 2002.
26. Enhanced Impact And Energy Absorbing Product For Footwear, Protective Equipment, Floors, Boards, Walls, And Other Surfaces, U. S. Patent applied for in November 2001.
27. Enhanced Impact And Energy Absorbing Product For Footwear, Protective Equipment, Floors, Boards, Walls, And Other Surfaces", U. S. Patent applied for in May 2002.
28. Animal Repellent, U.S. Patent 5,554,377, September 10, 1996.
29. Self Locking Adjustable Bracelet, U.S. Patent 5,603,231, February 18, 1997.
30. Self Locking Breakaway Band, U.S. Patent 5,657,645, July 19, 1997.
31. Solid And Liquid Compositions For Dispersion Of Insect Repellent Based On DEET, U.S. Patent 2,738,862, April 14, 1998.
32. Insect Repellent Candle And Method Of Making Same, U.S. Patent 5,854,284, December 29, 1998.
33. Apparatus For Enhancing Absorption And Dissipation Of Impact Forces For Sweatbands, C. J. Abraham, US Patent applied for August 2002.