



A **Mandatory** Lecture by **Dr. C. J. Abraham**

Technical Director

Scientific Advisory Services, Ltd., and Forcefield FF Protective Sweatbands

Topics discussed include:

- ./ Engineering Designs - Responsibilities of an engineer involved in the design of products for consumer use and applications
- ./ Legal Aspects - Responsibilities of an engineer designing machinery for the processing of products.

Question: Can simple design changes make products safer and less likely to be the cause of a lawsuit?

Real-life examples of products that resulted in traumatic injuries and/or death to individuals exposed to those products:

- CalTrans crash testing of monorails
- Wego Kite Tube testing
- Food processing death case
- Hawkeye Concrete Products - loss of fingers
- Wal-Mart ramp closure-traumatic brain injury
- Toys R Us-defectively designed baby stroller -loss of eye
- Bell bicycle helmet - defective design and testing of product
- Diamond-Natural Fire Starter Gel- defective design of a closure for a hazardous product

**Senior Design Students are REQUIRED to Attend
Thursday November 10 from 1:10 – 3:40 pm in Mudd 633**

Attendees can win a terrific prize – based on class participation

Dr. C.J. Abraham

**PhD, JD, PE, CPC, FRSC, DEE,
FTI, BCFE, DCEE, CChE, CChem**



Over the last 45 years, C. J. Abraham has been awarded over 50 patents and has created warnings and instructions for many products and protocols applied and used worldwide. He has consulted to major news channels, NHTSA, OSHA, State of California (CalTrans), Microsoft, New York Transit, Queensborough Bridge Authority, Department of Agriculture, the Federal Government, office of the United States Attorney, State Attorney General's Offices, and municipalities throughout the United States, Canada and Europe in a variety of technical areas. He is also the author of a number of publications and has presented technical papers internationally. His current interests are in the areas of head and brain protection in sports and recreation.

Dr. Abraham has over fifty years of experience in polymers and has extensive testing experience in the absorption and dissipation of forces of every type of polymeric material used in headgear. A more detailed description of his background may be found at www.scientificadvisory.com. He has invented and commercialized many products. One of the products essentially eliminated quadriplegics and paraplegics in young children playing football. He was the inventor of the facemask, licensed to Riddell, which changed the sport of football and made it safer for young children and teenagers.

In the past, Dr. Abraham was a United States representative to the International Standards Organization (ISO), a member of the Executive Board of the Hockey Equipment Certification Council (HECC), a member of the Safety and Protective Equipment of USA Hockey and has been an active member of the American Society of Testing and Materials (ASTM) from 1964 to the present time. He is also a Diplomat in Sports and Recreation Safety and is qualified an OSHA specialist in safety and safety engineering.

Dr. Abraham is also the inventor of the most universal headgear ever invented-the ForceField FF Protective Headgear. The use and applications of that headgear is found at www.forcefieldhandbands.com. He is also a participating basketball member of the AAU. As a result of Dr. Abraham's involvement in personal injury and litigation cases, many products, recreational activities and sports have been made safer.