

Educational Committee Presenters January 2021

Ethics for Forensic Engineers - Samuel G. Sudler III P.E., IntPE, CFEI, CVFI

Mr. Sudler earned his Bachelor of Science degree in Electrical Engineering from the University of Pittsburgh. He specializes in analyzing the failure of electrical components and systems, electrical faults and malfunctions, as well as possible failure modes. Mr. Sudler has more than 10 years of experience relating to industrial and manufacturing facilities installing, commissioning, programming, troubleshooting, and repairing low-voltage to high-voltage electrical equipment. This combined experience gives Mr. Sudler the unique ability to conduct a Failure Mode Effect Analysis (FMEA) as it relates to equipment failures, electric shock/electrocution, electrical fires or industrial accidents. Furthermore, his distinctive background and “real world” experience has allowed him to successfully conduct investigations concerning numerous consumer and vehicle products produced by leading manufacturers in product liability litigation.

Remote Forensic Inspections in the Age of COVID-19 - Hernan Sanchez Ph.d

A chemist by training, Dr. Sanchez’s background encompasses both materials synthesis and characterization, specializing in the analysis of lithium-ion batteries and renewable energy catalytic processes. During his time at Exponent, Dr. Sanchez has worked on evaluating current and next-generation battery and energy storage technologies via quality analysis, performance and accelerated lifetime testing, cell design/materials evaluation and failure analysis. Dr. Sanchez is also skilled in a variety of both destructive and non-destructive characterization techniques, which he has applied to a variety of industries, including consumer electronics, chemicals, medical devices, transportation and aerospace. Besides his primary foci in high-resolution computed tomography X-ray (CT) scanning and Fourier-Transform Infrared Spectroscopy (FTIR), Dr. Sanchez also has extensive experience in various electrochemical, microscopy, material properties and spectroscopic techniques.”

Report Writing - Collins O.Y. Ofori-Amanfo, P.E.

Mr. Collins O.Y. Ofori-Amanfo, P.E., is a Board Certified Diplomate Forensic Engineer and is the Owner and Principal Engineer of Collins Forensics LLC. Prior to establishing Collins Forensics LLC, Mr. Ofori-Amanfo previously worked for many years at Wiss, Janney, Elstner Associates, Inc. (WJE), Illinois Department of Transportation and Twin City Testing Corporation. He received his B.S. degree in Civil Engineering from the University of Science and Technology in Ghana and his M.S. degree in Structural Engineering from the University of Minnesota, Minneapolis. Mr. Ofori-Amanfo is a registered professional engineer in Minnesota, Wisconsin, Iowa, North Dakota, Nebraska and Illinois. His broad-based experience includes investigation of collapsed/failing structures, investigation of construction defects and resulting damage, investigation of condensation in building envelopes, evaluation of roof and wall leakage, field water testing of windows and waterproofing systems, and assessment of wind and hail damage to buildings. His work also involves giving expert testimony and assisting attorneys in resolving disputes over construction and materials-related problems. Aside from his consulting practice, Mr. Ofori-Amanfo leads his local church in mission work that constructs drinking water wells, sanitary latrines, food processing centers and schools in rural communities in Ghana.

Building your credentials through publication and review - Bart Kemper P.E.

Bart Kemper, P.E. is a Louisiana-based mechanical engineer with over 25 years of industrial and forensic experience and a civil background through the US Army Corps of Engineers. Kemper’s winding career path developed expertise in pressure vessels, marine and subsea engineering, plastic engineering, life-safety applications, medical devices, human factors, and numerical modeling. He is also a retired Lieutenant Colonel in the Army Reserve whose duties as an engineer officer included construction, infrastructure assessment, forensic post-blast assessments, blast effects modeling, and protective structure engineering. He has over 35 professional publications, has been a peer reviewer and associate editor for multiple publications, and is the current Editor in Chief for the Journal of National Academy of Forensic Engineers.