



Who We Are

We, at BlazeTech Corp., are a cadre of full-time PhDs from MIT, Stanford University, University of Kentucky and Worcester Polytechnic Institute with [degrees-expertise](#) in Mechanical, Aerospace, Chemical and Fire Protection Engineering, with over 100 years of combined experience. In addition, we have supporting staff with MS and BS degrees, and can perform testing, accident reconstruction and modeling. When needed we draw upon experts from academia and industry with whom we have collaborated over the years. Thus, we offer our clients the [agile](#) responsiveness of a small company as well as the [comprehensive](#) resources of a large company.

Our Specialties

Over the years we have developed a track record in:

- Fire, explosion and toxic release involving transport, handling and storage of hazardous chemicals such as oil and gas, liquefied natural gas (LNG), liquefied petroleum gas, explosives and reactive materials
- Fire and explosion involving aircrafts, vehicles, fuel tanks, high-rise buildings (September 11 and a major casino), leaks of natural gas and propane, warehouses, plastics, aerosols, furnaces, incinerators and coal mines
- Smoldering and self-heating involving explosives, coal, wood or other dust heaps and dust filtration systems
- Failure analysis involving impact dynamics, hydrodynamic ram and structural mechanics
- Safety assessment and risk analysis of aerospace systems and oil and gas operations
- Energy systems involving power plants, boilers, furnaces, burners, fluidized beds and solar systems, and contaminants in water distribution systems

Our Uniqueness

We conduct scientific and engineering analyses on the [above-mentioned](#) systems as well as forensic engineering when they fail. Our forte is developing quantitative analyses of what happened in an accident and to present the results in a clear fashion to a court audience. We have unique in-house developed models on fire and explosion, toxic dispersion and water systems contamination as well as commercial simulation programs (Computer Aided Design, Computational Fluid Dynamics and Finite Element Methods) that we can quickly apply to new problems. Also, we perform accident re-construction through testing in our labs, at the accident site or in large national facilities. Typically, we are called for complex assignments where typical consultants either have failed or were not engaged from the get-go. We bring clarity to the issues that prompts quick settlements. In safety assessments, our quantitative analyses enabled us to forewarn about potential accidents before they happened (such as the TWA 800 and Air France Concord disasters). We have worked significantly in the aerospace, oil and gas, chemical and power industries, heating and air conditioning in residential and commercial buildings, and consumer product liability. We have written one book [\(co-authored by Dr. Moussa\)](#) and hundreds of reports and publications in these areas.