

## **Society For Risk Analysis Annual Meeting 2010**

### ***Risk Analysis in Action***

M3-A: Monday, December 6, 2010

Symposium: Thirty Years After the Benzene Decision: When Will Risk Assessment Benefit Workers? Part 1

**M3-A.4 14:30 Reflections on the role of risk assessment at OSHA over the 40 year journey: Has it been a big disappointment?** *Paustenbach DJ\**; ChemRisk LLC [dpaustenbach@chemrisk.com](mailto:dpaustenbach@chemrisk.com)

**Abstract:** Low-dose models for cancer were popularized in the mid-1970s and the field of chemical risk assessment was formalized as a federally endorsed approach in the early 1980s. At the time, there were hopes and expectations that these two skill sets would be brought into the daily practice and regulatory environment within OSHA; that didn't occur. Some insisted that all the occupational carcinogens should initially be regulated to a model estimated risk of 1 in 1,000 while other believed that that was not appropriate due to the clear differences between genotoxic and non-genotoxic carcinogens. Debates also routinely occurred between the modelers/theoreticians and the "old school" toxicologists who believed that a clear "threshold" existed for every chemical. Shortly thereafter, the physiologically-based pharmacokinetic modelers argued that animal data were nearly useless unless converted to the biologically-effective dose in humans. Without a clear understanding of the legitimate scientific differences among scientists, it is difficult to pass judgment on their success. This paper will quickly review the history but focus on five suggestions for how OSHA can move forward expeditiously in revamping the occupational health landscape; all for the betterment of the worker and, ultimately, consumers of commercial products.