

Asbestos and Other Elongate Mineral Particles: How Toxicology Makes Risk Assessment Possible

Presenter: Andrey Korchevskiy, PhD, DABT, CIH (Chemistry & Industrial Hygiene, Inc., Lakewood, CO, USA)

Asbestos has been studied by toxicologists for many decades. Amazingly, there are still more questions than answers. Why does asbestiform fibers cause mesothelioma in humans, but non-fibrous dust does not? Are various mineral types and sizes of elongate particles identical from toxicological standpoints? Is there a threshold for asbestos exposure for producing cancer in humans? How applicable is historical epidemiological evidence for current risk assessment purposes? Andrey Korchevskiy, the leading editor of the recently published book “Health Risk Assessment for Asbestos and Other Fibrous Minerals”, will address the most recent advances in several research areas related to health effects of elongate mineral particles. The presentation will attempt to guide the audience through the content of relevant ongoing studies on these topics, demonstrating the progress achieved and outlining future needs in research and actions. The time for discussion will be allocated.

Biography. Dr. Andrey Korchevskiy is a certified toxicologist (DABT), certified industrial hygienist (CIH), and is the Vice President and Director of Research and Development at C&IH, Inc. (Lakewood, CO). He holds a Ph.D. in applied mathematics, a doctorate in biology, and is a Full Member of the Society of Toxicology. He has published numerous peer-reviewed papers and book chapters in the fields of risk assessment and risk management, toxicology and exposure assessment of fibrous minerals and nanoparticles, cancer epidemiology, mathematical modeling, and theory of numbers. He is a Distinguished Lecturer and Risk Committee chair of the AIHA, and he organized and taught classes on asbestos risk assessment for numerous conferences of AIHA, BOHS, and other organizations.