Interview with William (Bill) Kojola
Industrial Hygienist for the AFL-CIO Department of Occupational Safety and Health

ICON: How should we protect workers in the face of limited biological and exposure data on engineered nanomaterials?

Bill Kojola: When the science is just developing – as it is for nanotechnology and its human health effects - it is a difficult call to know when to take action to protect or at least monitor workers. I think we learned from the impacts of asbestos exposure that if there is a technical uncertainty then precaution is well advised. We need to ensure that we make efforts to protect worker health and make sure all employers do so.

ICON: What does it mean in a workplace environment to ‘take precaution’?

BK: Well, it can mean several things depending on the possible consequences. For routine hazardous materials, it could mean that we apply stringent engineering controls to minimize exposure in some cases. It also might mean that companies seek safe substitutes for engineered nanomaterials – perhaps by choosing formulations or nanomaterials with different features. For some cases it could be prudent to simply stop using those engineered nanomaterials which may have severe and latent health impact on workers.

ICON: Is there a safe way for workers to handle a material like asbestos?

BK: In theory, yes, but in practice, no. There are workplace standards from OSHA and EPA and guidelines from NIOSH on the appropriate precautions to take when handling asbestos. However, the realities for the workplace environment make perfect implementation challenging. The only safe exposure for asbestos is no exposure. Typically, workers are provided with various types of personal protective equipment that are not completely effective in eliminating exposure. Gloves might not seal the skin at the edges for example; respirators may have gaps with the face that leak fibers into the lungs of workers for example. Janitors may be sweeping or vacuuming dusts that were not perfectly contained.

ICON: What responsibilities do labor and management bear, respectively, in protecting workers from hazards on the job?

BK: By statute, management bears the burden – legally they must protect their workers by following legal standards and best practices. In situations with no standards, however, this responsibility on the employer still holds. However, trade unions – and workers – must engage and work with employers to make them aware of the latest information and make sure that mandatory standards and recommended practices are followed.

ICON: Are you and others at the AFL-CIO aware of the study of multi-walled carbon nanotubes and their interactions with genetically engineered rodents?

BK: Yes, we are very concerned that the findings indicate that these nanotubes are capable of causing the same adverse consequences as asbestos. Hundreds of thousands of workers have died and been made sick from exposure to asbestos. We need to make certain that this public health disaster does not repeat itself with engineered nanomaterials. That’s why we believe precautionary approaches and mandatory standards to protect workers are essential.
Bio
Bill Kojola is the Industrial Hygienist for the AFL-CIO Department of Occupational Safety and Health. With the AFL-CIO, Kojola is responsible for developing strategies for securing new safety and health protections through federal and state regulations; coordinating with affiliates on and leading a unified labor response to proposed OSHA regulations; representing the AFL-CIO before government regulatory agencies, on federal advisory committees, and consensus standard setting efforts; and working with affiliate unions to address emerging workplace hazards and issues. He also provides technical and strategic support to organizing campaigns on safety and health issues. He holds a B.S. degree in Biology and an M.S. degree in Genetics from the University of Minnesota, and studied toxicology and industrial hygiene at the University of Illinois School of Public Health.