

**BEYOND THE NANOMATERIAL**

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**Abstract:** Environmental health and safety considerations of engineered nanomaterials for concurrently monitoring and improving the environment and health encompass more than the material itself. As we design the next generation nanotechnologies, we must consider impacts up- and down-stream of their use. As we transition from a linear economy to one that is circular, we must consider the nanomaterial system in its entirety. These are not simple challenges, but they are also not insurmountable. Through this renewed lens, we can leverage the vast existing knowledge of nano EHS to ensure nanotechnologies accelerate rather than inhibit a healthier, more resilient society and environment.

**Bio** Dr. Gilbertson is an Associate Professor of Environmental Engineering and Fulton C. Noss Faculty Fellow at the University of Pittsburgh. Before joining the faculty at Pitt, Dr. Gilbertson was a postdoctoral associate in the Center for Green Chemistry and Green Engineering at Yale University. Her research focused on bridging length scales – from the molecular to systems-level – to build sustainable design guidelines for engineered nanomaterials. Dr. Gilbertson received her MS and PhD degrees from Yale University in the Department of Chemical and Environmental Engineering, supported through an NSF Graduate Research and EPA STAR Fellowships. She received her bachelor’s degree in chemistry with a minor in education from Hamilton College, after which she spent several years as a secondary school teacher before returning to graduate school. Her research group at the University of Pittsburgh is currently engaged in projects aimed at informing sustainable design of emerging materials and technologies proposed for use in areas at the nexus of the environment and public health. Dr. Gilbertson’s research has been recognized and is supported by the National Science Foundation, including the CAREER award, 3M non-tenured faculty award, and the Ralph E. Powe Junior Faculty Enhancement Award. To find out more about her research group, please visit [www.leannegilbertson.com](http://www.leannegilbertson.com) and follow her on Twitter @lmgLab.