The problem with plastics (and why microplastics might be toxic)

Plastic pollution is a well-known problem, gaining attention in mass media, international organizations, and amongst policymakers. Plastic, however, is not one thing but rather many different materials. The life cycles of plastics are complex—stretching from extraction to production, product development and use, to waste production—involving many actors worldwide. Microplastics, small plastic particles now identified in virtually every niche on the planet, comprise a complex mixture of multiple materials, sizes, shapes, and potentially 1000s of chemicals. What do we know about the hazards associated with microplastics? Do they pose risks in the environment? And importantly, what can we do about this? Bethanie, an ecotoxicologist, will discuss how researchers are working to address these questions. She will also place these issues in a larger context, introducing ideas of using large-scale collective action frameworks to push sustainable development.