Improving the life cycle performance of chemical products and materials through data exchange along the value chain

Chair: Prof. Guido Sonnemann, Sustainable Chemistry, Science and Technology Department, University of Bordeaux, France
Co-chair: Carmen Alvarado Ascencio, Sustainability at AkzoNobel, Netherlands

Most companies are part of long and sometimes complex supply chains. Often the control over the environmental impact along the value chain is limited for one single company. The purpose of the session is to demonstrate how to assess and manage the global sustainability of chemical products and materials, taking into account their whole life cycle, to achieve real improvements. This includes the identification of hot spots and work towards sustainable innovation. Radical improvement along the value chain is only possible with close collaboration with suppliers; for example, through sharing supplier specific data on environmental impact of raw materials. There are many obstacles which need to be overcome before sharing data along the value chain: trust, data formats, methodology harmonization, etc. Together for Sustainability and the WBCSD life cycle metrics for chemical products are good examples of platforms that can help companies share information in a safe, fair and efficient way to steer to real improvements towards sustainable development. The proposed presentations are invited to cover the topics mentioned above and to address also the complementarity of LCA and risk assessment, the application of the green chemistry principles, and the challenges of establishing circular economy and bio-economy models in the chemicals sector. This session aims at gathering company experiences.