



Understanding biodegradability – The science, the misuse and true value proposition

Design for product biodegradability in conjunction with controlled, managed disposal systems like composting or anaerobic digestion can offer an environmentally responsible end-of-life value proposition. However, much confusion, misuse and misleading claims abound in the market place. This lecture will discuss the science and issues surrounding biodegradability – what does the claim “biodegradable” mean? What value does biodegradability as an end-of-life solution offer? Should an unqualified claim of “biodegradable” without any reference to time element, rate and disposal environment be permitted? Are such statements truthful or misleading? Is “marine biodegradability” a solution or exacerbate the problem of plastics waste in the ocean. We will discuss these issues on a science basis and review the International Standards and regulations in this space as well as learn accurate reporting and communication of “biodegradable” value attribute.

Biography

Ramani Narayan is University Distinguished Professor, the highest honor that can be bestowed on a faculty member at Michigan State University. He is Fellow of the US National Academy of Inventors; Fellow of ASTM & received ASTM award of merit, the highest award given by the society to an individual member. He is Scientific Chair of the Biodegradable Products Institute (BPI) USA; and Convener/Technical Expert on several ISO Standards committees. He has 200 refereed publications, 30 issued patents and supervised 20 PhD and 25 Master's students. He is a successful Entrepreneur, having commercialized several bioplastics technologies.

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