Biocatalytic routes to monomers and polymers

This workshop will discuss the rapid evolution of biotechnological methods that are enabling commercially important new routes to biobased monomers and polymers. Topics will include fundamental concepts involved in both cell free and whole cell biocatalysis, successful new product development as well as challenges that must be overcome. Furthermore, relative merits will be given for biocatalysis, chemical catalysis and how these methods can be successfully integrated.

Biography

Richard A Gross is currently a Full Professor and a Constellation Chaired Professor at Rensselaer Polytechnic Institute (RPI). His research is focused on developing biocatalytic routes to biobased materials including monomers, macromers, prepolymer, polymers, surfactants and other biochemicals. He has over 500 publications in peer reviewed journals, been cited about 18,000 times (h-index 71), edited 7 books and has 26 patents (granted or filed). He was the recipient of the 2003 Presidential Green Chemistry Award in the academic category. In 2010, he was selected as the Turner Alfrey Visiting Professor, and in 2015 he became a Fellow of the ACS Polymer Division. He founded SyntheZyme LLC in 2009 and serves as CTO.

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