Inherent Problems in Commercializing Membrane-Based Separations in the Petroleum and Petrochemical Industries

Robert C. Schucker
SABIC

While membranes have the potential to carry out unique separations, as demonstrated in the laboratory and in large scale water treatment applications, scale up and commercialization of membrane technology in the petroleum and petrochemical industries, particularly for liquid separations, is frought with challenges and few membrane processes have actually been commercialized on a large scale in these industries. This talk will explore some of the underlying reasons for this lack of commercialization while discussing a number of examples of processes that were scaled up to pre-commercial level but not commercialized.