

### ***S1.5.1 High-flux Membrane Filtration for Oil Water Separation***

Jim Peters

PPG Industries

Environmental regulations and water scarcity have created a need for economical water treatments that allow for reuse. This paper will review a novel membrane with a unique composite single layer microstructure providing high flux, excellent separation capabilities and durability. The presentation will describe the intrinsic membrane properties, compare performance versus competitive membranes and then review a number of case studies from lab scale to commercial size filters on a variety of industrial wastewaters. The high flux of the membrane and spiral wound filter cartridges fabricated with it create opportunities for expanding the use of spiral wound filters in difficult-to-treat applications such as produce water, flow back water and bilge water filtration.