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Engineering of Ultrafiltration Equipment in Alkaline Cleaner Applications

The use of ultrafiltration (UF) applications with alkaline cleaners was a common practice as of 2001, but at the time UF was still susceptible to fouling and stripping out active agents from the cleaners. ISTC's Kishore Rajagopalan and other scientists developed a modeling program to use in conjunction with pilot testing of UF technology to reduce time and money spent on solving the unique issues at each facility. The article provides several scenarios to show how the model works. The group found that as much as 10 to 15% of capital costs could be saved with their modeling technique.

Contaminants

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Metalworking Fluids

[A Turbidimetric Method for the Rapid Evaluation of Metalworking Fluids Emulsion Stability](#)

[An Evaluation of the Colloidal Stability of Metalworking Fluid](#)

[Development of a Novel Metalworking Fluid Engineered for Use with Microfiltration Recycling](#)

[Engineering of Ultrafiltration Equipment in Alkaline Cleaner Applications](#)

[Formulation and Testing of a Microfiltration Compatible Synthetic Metalworking Fluid](#)

[Impact of Environmental Contaminants on Machining Properties of Metalworking Fluids](#)

[Ingredient-Wise Study of Flux Characteristics in the Ceramic Membrane Filtration of Uncontaminated Synthetic Metalworking Fluids](#)

[Modeling the Effect of Tramp Oil Contamination on Selective Component Depletion in Metalworking Fluid Systems](#)

[Partial Pore Blocking in Microfiltration Recycling of a Semisynthetic Metalworking Fluid](#)

[Purification of SemiSynthetic Metalworking Fluids by Microfiltration](#)

[The Effect of Chip Adsorption on Selective Depletion from a MultiComponent Synthetic Metalworking Fluid](#)

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Meet the Scientists

[Kishore Rajagopalan](#)