

New & Emerging Wastewater Technology

Session 7

FREE Zoom—Training Session

Illustrates how to upgrade existing reactors with biological selectors and the use of emerging technology to reduce power & save space.

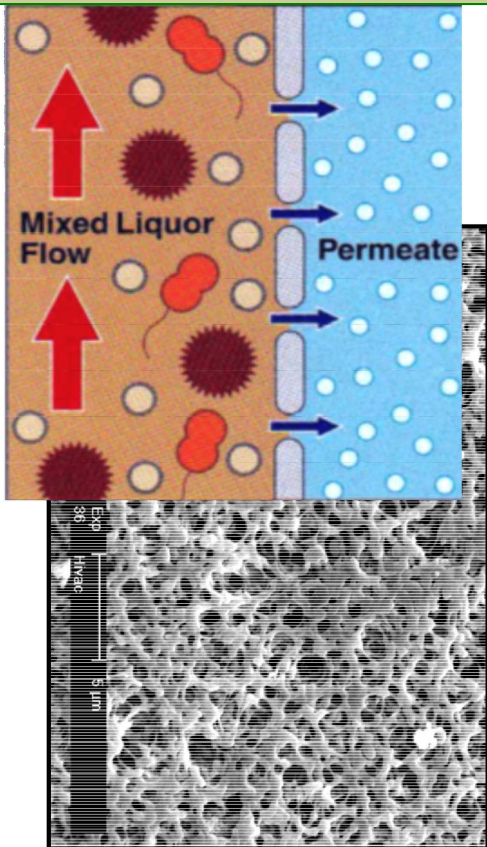
Includes: Membrane biological reactors (MBRs) and moving bed bioreactors (MBBRs) are explained. Experiences with aerobic granular sludge (AGS) are given.

Many plants need to modernize or upgrade because of capacity issues or the need to meet new treatment standards. New technologies are finding accepted use in order to upgrade/modernize and save space or energy. Participants in this session will learn about membrane bioreactors (MBRs) that produce high-quality effluent without the use of clarifiers. Given will be descriptions, design criteria and performance when converting activated sludge to moving bed bioreactors (MBBR) or integrated fixed film activated sludge (IFAS). Experiences from case histories will allow participants to judge the advantages and disadvantages of the emerging technologies.

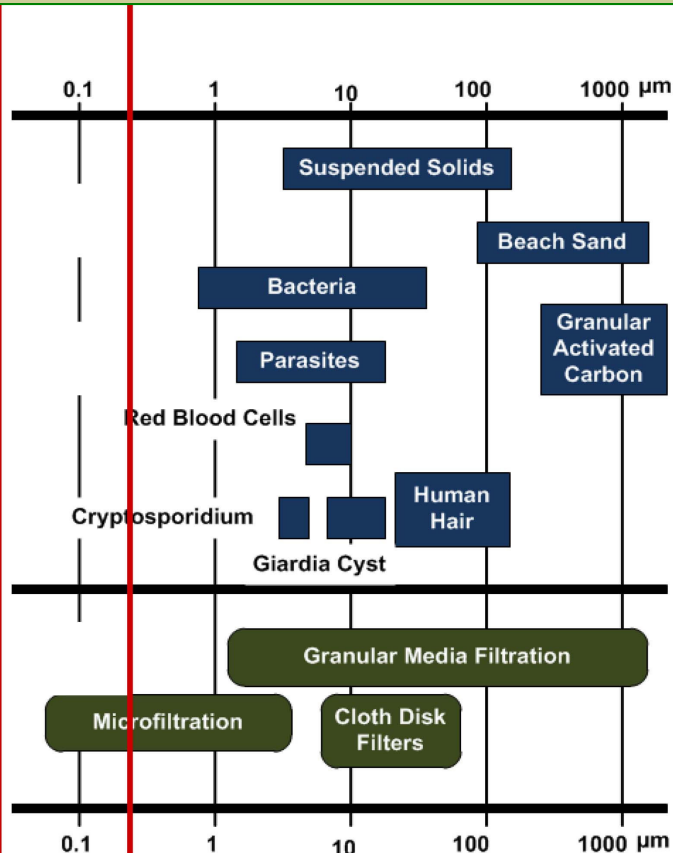
Answer these Example Questions:

1. Describe membranes types and application using membrane bioreactors (MBRs).
2. How can moving bed bioreactors (MBBRs) be used to upgrade an existing activated sludge basin and what are the pros/cons?
3. What are the space-saving and energy aspects of new and innovative processes?
4. Are there added risks and a steep learning curve with innovative technologies?

Example Slide: MBR Pore Size Comparison



GE - Zenon



Ovivo - Enviroquip