



Microbiology Webinar Description

Wastewater operators need to know how to identify and troubleshoot common activated sludge problems. This course will cover activated sludge biology and how to troubleshoot and fix problems to improve treatment.

Operators will learn how to identify healthy and unhealthy activated sludge floc through microscopic examination. The gross morphology of the floc colony from the different sizes, colors, shapes, and patterns will be shown and explained as to what they indicate. We will also discuss India ink stains and how to interpret the results. We will take a journey through the microorganisms from the normal to the exotic. Whether our sludge is full of ciliates and rotifers or bustling with bristle worms, there is a story to tell and a lesson to learn. We will also look at different types of filaments, their causes & cures, and how to identify them. Finally we will look at the biochemical mechanisms that bacteria use to remove organic matter, nitrates, phosphorus, and ammonia. This class will empower operators to listen to their plant microbiology and make a healthier, happier, and more sustainable floc.