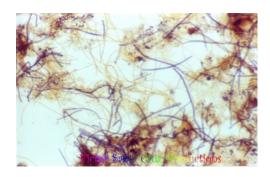


## "Microscopic Examination of Wastewater – Filamentous Bacteria" Live Online Workshop



Microscopic examination of wastewater is an excellent tool for identifying a wastewater treatment process' "health and condition". Frequent microscopic examinations can provide valuable information about the condition of the microorganisms in the various phases of the treatment process and allow the operator to identify changes that may cause a plant upset or permit violations. Often changes to the microbial conditions can be observed much earlier than physiochemical changes can be detected in the laboratory or visually in the field.

## During this workshop we will discuss:

- identification of Norcadioforms, Mircrothrix Parvicella, and other filamentous organisms
- the impact of filamentous bacteria on wastewater operations
- control measures for the mitigation of filamentous bacteria
- floc structure of filamentous bacteria
- the overall effect of filamentous bacteria on solids separation problems and foaming

This 3 hour "Microscopic Examination of Wastewater – Filamentous Bacteria" online workshop is part of a series of workshops focusing on microscopy as a tool in wastewater treatment.

Where: Live online

Date: November 17, 2021

**Time:** 12:00 pm to 3:15 pm PST

**Instructor:** Victor Santa Cruz

**Fee:** \$100

**CEUs:** Wastewater & Drinking Water CEUs (WA & NM)

WA Dept. of Ecology Course ID: Meets Criteria for WA Wastewater Treatment Plant

Operators CEU requirements, 0.3 CEUs requested

**NMED UOCP:** 3.0 Training Credits approved

OR OESAC ID: Meets Criteria for WA Wastewater Treatment Plant Operators CEU

requirements, 0.3 CEUs requested

Registration: online: www.pro-train.org; phone: (360) 490-2426; email: erika@pro-train.org

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