

FILAMENTOUS MICROORGANISMS OCCURRING IN FOAM OF BIOLOGICAL  
WASTEWATER TREATMENT PLANTS AND POSSIBILITIES OF THEIR  
IDENTIFICATION

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Keywords: biological wastewater treatment plants, activated sludge, foam, filamentous microorganisms, methods of identification of microorganisms from foam.

Summary

In many wastewater treatment plants (WWTPs) inconveniences resulting from foam formation on the surface of activated sludge wastewater treatment devices appear. Foaming phenomenon is related to the characteristics of raw sewage and applied technological parameters of activated sludge process which promote the development of specific foam-forming filamentous microorganisms. In bulking activated sludges there are about 30 species of filamentous microorganisms and in the foam not more than about 10 species. Basic method of identification of filamentous microorganisms present in foam are microscopic investigations which can be performed both in vivo by direct observation of non-stained, so called living smears, with contrast – phase device and in stained smears after different stain methods in direct light or dark field. In domestic WWTPs the following species commonly occur: *nocardioform actinomycetes*, *Microthrix parvicella*, *Nostocoida limicola*, Type 021N/*Thiothrix* sp.