



Conference Abstract

A new approach for microbiological characterization of activated sludge: from the sample to the biomolecular analysis

Angelantonio Calabrese[‡], Erika Loi[‡], Laura Mandrelli[‡], Massimo Blonda[‡]

[‡] CNR-IRSA, Bari, Italy

Corresponding author: Angelantonio Calabrese (angelantonio.calabrese@ba.irsa.cnr.it)

Received: 25 Feb 2021 | Published: 04 Mar 2021

Citation: Calabrese A, Loi E, Mandrelli L, Blonda M (2021) A new approach for microbiological characterization of activated sludge: from the sample to the biomolecular analysis. ARPHA Conference Abstracts 4: e65069. <https://doi.org/10.3897/aca.4.e65069>

Abstract

The growing biomass in the wastewater treatment plant is called "activated sludge"; usually it is mainly composed by bacteria (95%) and by Protozoa and Metazoans (5%). The sludge biological composition is a good indicator of the wastewater treatment plant state of health. In this study, an initial characterization of the microorganisms present in the activated sludge is carried out through DNA analysis. The aim of this activity is the development of the procedures for the characterization of the sludge of the biological oxidation lines, to identify microorganism through a new approach using biomolecular analysis and the definition of new standard protocols.

Keywords

activated sludge, biomolecular analysis, new protocoll

Presenting author

Erika Loi, Laura Mandrelli, Angelantonio Calabrese, Massimo Blonda

Presented at

1st DNAQUA International Conference (March 9-11, 2021)