

## MICROSCOPIC INVESTIGATION OF AEROBIC GRANULAR SLUDGE

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### **Abstract**

Aerobic granular sludge is well known for its regular, dense and strong microbial structure, high biomass retention, a really good settling ability, and the ability to withstand shock loadings. Experiments focused on the structure and development of aerobic granules. Aerobic granules were obtained in a pilot scale sequencing batch reactor (SBR) treating dairy industry wastewater characterized by a high organic and nutrient load. Scanning electron microscopy (SEM), light microscopy, and confocal scanning microscopy revealed insights into the structure, size and dimensions of the analysed aerobic granular sludge.

**Keywords:** *aerobic granular sludge, SBR, SEM*