Biological activated carbon

developed on the basis of activated carbon technology, which uses the synergistic effect of adsorption on activated carbon and biodegradation to purify raw water.

During this process, activated carbon (mostly granular form) acts as a carrier and involves the interaction of granular activated carbon particles, microorganisms, contaminants and the dissolved oxygen in solution.

Application

Previous studies have demonstrated biological activated carbon ability to remove hazardous substances such as pesticides (e.g., atrazine and triclosan), beta blockers (e.g., atendol) and pharmaceuticals (e.g., analgesics, antibiotics, lipid regulator and anti-depressant) when ozonation process has been carried out first. Thus, ozonation following biological activated carbon process might be very effective in further removing hazardous substances even at trace levels (μg/L and below).

Sources:

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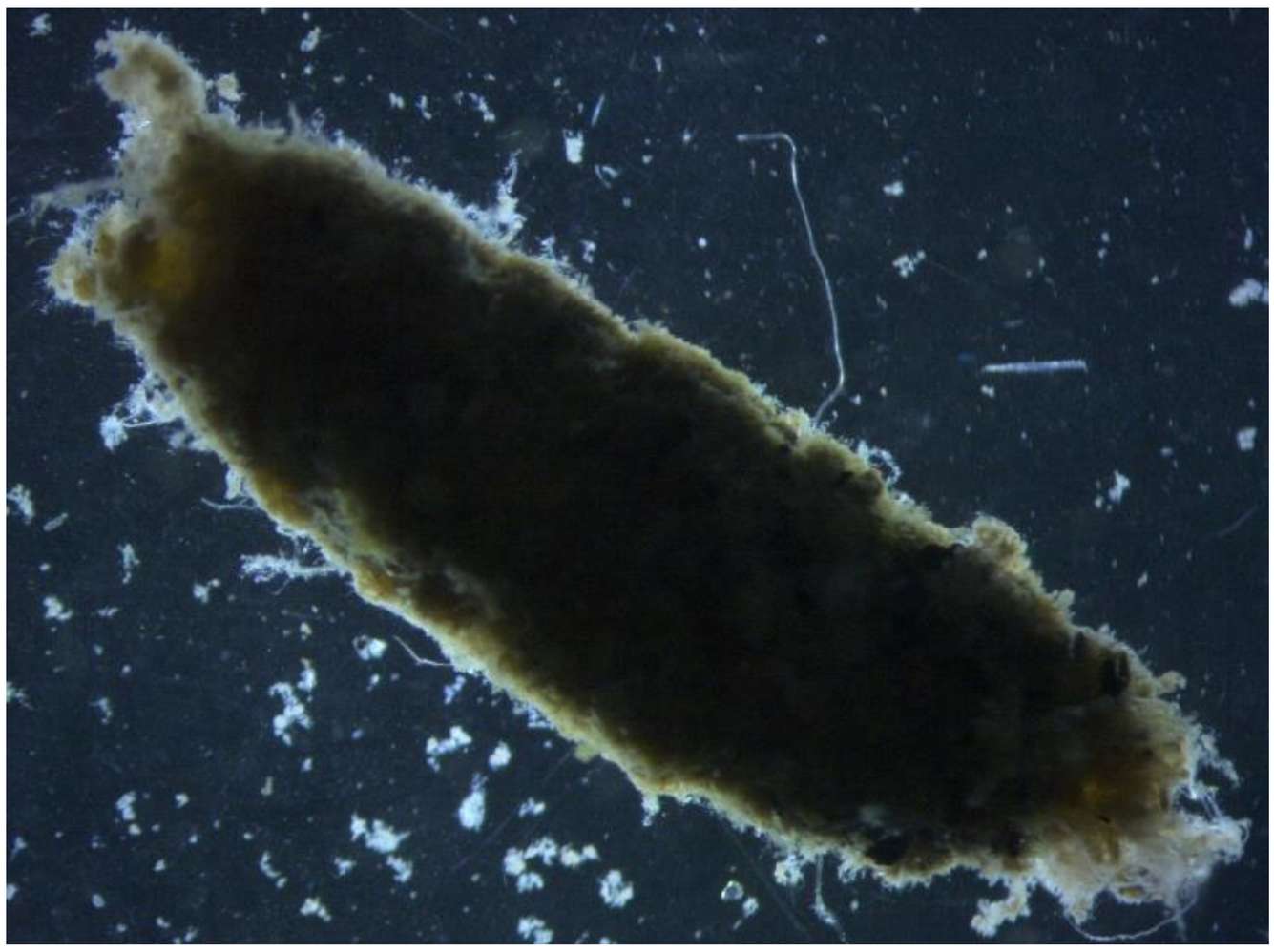

Source: RTU Water Research Laboratory, Latvia

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