

Neomicrothrix parvicella gen. nov. sp. nov.

Submitted by Nielsen, Per H.

Table 1: Complete list of names proposed in the current register list.

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Genus <i>Neomicrothrix</i>	[Ne.o.mi.cro'thrix] Gr. masc. adj. <i>neos</i> , new; Gr. masc. adj. <i>mikros</i> , small; Gr. fem. n. <i>thrix</i> , a hair; N.L. fem. n. <i>Neomicrothrix</i> , a new small hair	Filamentous bacterium frequently encountered in wastewater treatment processes, known for its significance in the bulking phenomenon of sludge.	<i>Neomicrotrichaceae</i>	<i>Neomicrothrix parvicella</i> ^{Ts}	seqco.de/i:16
Species <i>Neomicrothrix parvicella</i> ^{Ts}	[par.vi.ce'lla] L. masc. adj. <i>parvus</i> , small; L. fem. n. <i>cella</i> , a store-room and, in biology, a cell; N.L. fem. n. <i>parvicella</i> , a small cell	Blackall et al., 1995: "... Gram-positive, straight filamentous bacterium [...] a deep branching member of the actinomycetes subphylum. It is most closely related to the iron-oxidising strain TH3, members of the order <i>Actinomycetales</i> and to the genus <i>Atopobium</i> " Blackall et al., 1996: "... a filamentous bacterium that grows with great difficulty in cultures from the mixed liquor of activated sludge sewage treatment plants. It is gram positive, and the ultrastructure of its cell walls has been determined to be of the gram-positive type by electron microscopical examination. Phylogenetically, it is a deep-branching member of the subphylum actinomycetes within the gram-positive phylum of the domain Bacteria. As for phenotypic features, it is known that the organism contains polyphosphate inclusions and that it is catalase positive. In mixed cultures in activated sludge plants and in pure culture in the laboratory, it has a characteristic and distinctive winding filamentous morphology, with filaments hundreds of micrometers long." Oren, 2017: Suggested renaming <i>Microthrix parvicella</i> to <i>Neomicrothrix parvicella</i> .	<i>Neomicrothrix</i>	NCBI Assembly: GCF_000299415.1 ^{Ts}	seqco.de/i:60