

Electronema gen. nov.

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

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Genus <i>Electronema</i>	[E.lec.tro.ne'ma] Gr. neut. n. <i>ēlektron</i> , amber; Gr. neut. n. <i>nêma</i> , a thread; N.L. neut. n. <i>Electronema</i> , an electric wire	Multicellular filaments, up to several centimeters in length, with 15–58 characteristic longitudinal ridges and shared periplasm across cells; electron-conducting; typically spanning the suboxic zone in surface sediments; individual cells are 0.4–3 µm × 1–3 µm in size; no sulfur inclusions; gliding motility; mostly freshwater-inhabiting.	<i>Desulfobulbaceae</i>	<i>Electronema aureum</i> ^{Ts}	seqco.de/i:23721
Species <i>Electronema aureum</i> ^{Ts}	[a.u.re'um] L. neut. adj. <i>aureum</i> , golden	Filamentous bacteria of centimeter length that inhabit the surface of freshwater sediment and conduct electrons from sulfide-oxidizing cells to oxygen- or nitrate-reducing cells. Gliding motility. Gram-negative, with 40 distinct ridges running longitudinally along the filament. Width of individual cells is 1.7 ± 0.1 µm. Can assimilate acetate but not propionate; CO ₂ fixation via the Wood-Ljungdahl pathway. Contains c-type cytochromes and type IV pili (PilA). Polyphosphate and polyglucose storage. Distinguishable by morphology and genome.	<i>Electronema</i>	NCBI Assembly: GCA_004284765.1 ^{Ts}	seqco.de/i:736