New perspectives on the arsenic biogeochemical cycle from commonly unknown arsenic species

Anaerobic phototrophic arsenite oxidation in biofilms has received a lot of media attention last year in its meaning for the development of Archean life. We show, however, that these biofilms do not even contain arsenite, but thioarsenates. These are arsenic-sulfur species mostly overlooked due to inapt preservation and analytical techniques. They differ in redox chemistry, mobility and toxicity largely from their inorganic counter parts and are one example for how commonly unknown metal(loid) species change the perspectives on biogeochemical cycles.

The science lecture (ca. 1 hour) is followed by a Question & Answer period on issues specific to career development of women in academia (e.g., options, barriers, how to overcome them, good practices and strategies).

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