

From straw to gold? Resources in waste - a case for biology!

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The research focus of the Biotechnology Department at the Helmholtz Institute Freiberg for Resource Technology, is the development of biotechnological processes for the (re)extraction of important industrial metals from primary and secondary raw material sources. These include:

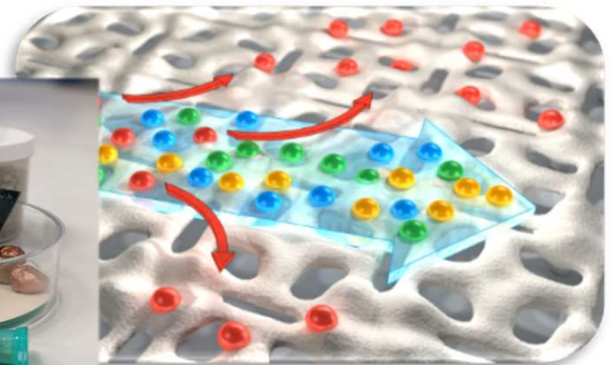
Bioleaching

Through metabolic products, microorganisms dissolve valuable and rare chemical elements from waste.



Biosorption

Biomolecules can bind dissolved valuable substances like a complexing agent. If the biomolecules are anchored on suitable surfaces, they can be used as filters to purify aqueous solutions.



Bioflotation

Biomolecules can also serve as anchors between valuable particles and air bubbles. This allows the fine particles to be separated as foam.

