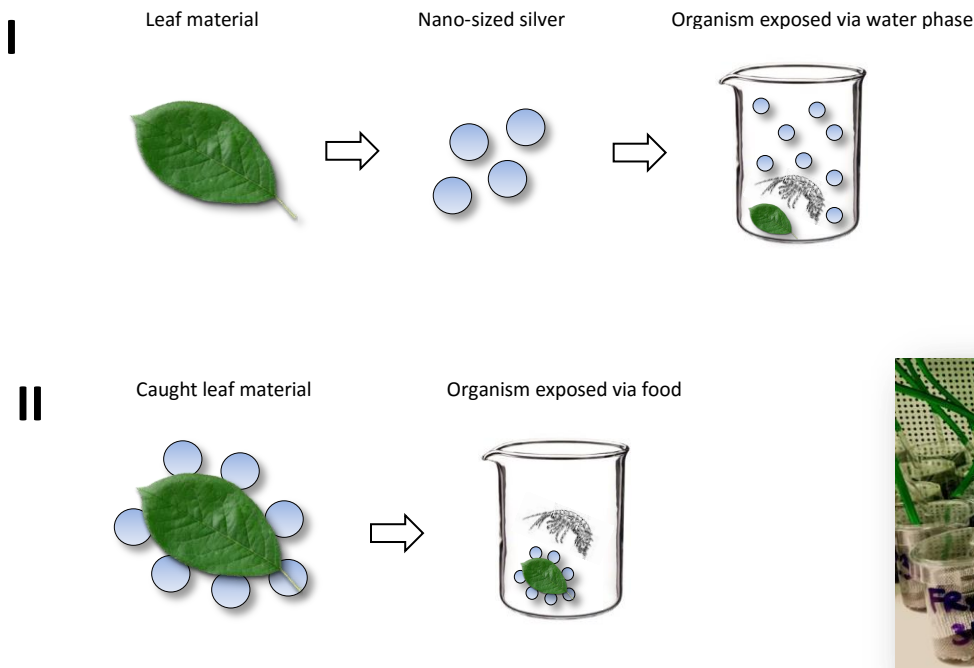


Master Thesis:

Effects of nanoparticles on benthic invertebrates – the importance of exposure pathways

Nanoparticles enter aquatic ecosystems via waste water treatment plant effluents. Once released into the aquatic environment, organisms may be exposed towards these nanoparticles either *via* the water phase (I) or associated via their food (II). To investigate the importance of both exposure pathways for the overall effect caused by silver nanoparticles on benthic invertebrates the suggested thesis will involve a well-controllable laboratory based sublethal test system: The benthic organism *Gammarus fossarum* will be exposed to silver nanoparticles in a 30-d bioassay, while the characterization of the endpoints mortality, leaf consumption, feces production and assimilation as well as parameters of the physiological fitness requires several analytical methods. Additionally, before the final experiment takes place a pre-experiment will be conducted to identify sensible test concentrations. This thesis provides the opportunity to work in a young and motivated research team engaged in the cutting edge of effect related nanoparticle research.



If you are interested in this particular topic or have further questions please feel free to contact:

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