

## PhD positions



<b>Application deadline</b>	Continuous
<b>Scholarships</b>	External funding
<b>PhD Programs(full/joint)</b>	Full, possibility for joint

<b>Topics offered</b>	<b>Admission Criteria</b>	<b>Application contact</b>
Field-realistic predictions of how existing chemicals (e.g. pesticides, metals) and emerging chemicals (e.g. microplastics and nanoparticles) have interaction with other anthropogenic stressors (e.g. climate change, excess of nutrients) in affecting our natural environment	Environmental sciences, physiology and or (eco-) toxicology, English proficiency	Dr.ing. M.G. Vijver <a href="mailto:vijver@cml.leidenuniv.nl">vijver@cml.leidenuniv.nl</a>
mechanistic ecotoxicology, considering effects and responses at different levels of biological organization, from genes to populations and including aspects of engineered nanomaterials toxicokinetics and toxicodynamics in aquatic and benthic communities.	Environmental sciences, physiology and or (eco-) toxicology, English proficiency	Dr.ing. M.G. Vijver <a href="mailto:vijver@cml.leidenuniv.nl">vijver@cml.leidenuniv.nl</a>
Laying a biological and ecological foundation to the quantification of ecosystem services requires knowledge of ecosystem functioning, biodiversity impacts and societal demands. Models based on relevant indicators and process-based knowledge will be developed.	Ecology, environmental sciences or biogeography background, quantitative or modelling experience, English proficiency	Prof.ir. P.M. van Bodegom <a href="mailto:p.m.van.bodegom@cml.leidenuniv.nl">p.m.van.bodegom@cml.leidenuniv.nl</a>
molecular tools are increasingly used to understand biodiversity. Environmental DNA is determined at high precision with state-of-the-art tools to determine species abundances (and not presence/absence only), abundance of prey, disease vectors and other applications.	Molecular ecology, molecular (micro-)biology or bioinformatics background, English proficiency	Prof.ir. P.M. van Bodegom <a href="mailto:p.m.van.bodegom@cml.leidenuniv.nl">p.m.van.bodegom@cml.leidenuniv.nl</a>
Topics related to environmental Input Output analysis/ EXIOBASE: assessment of environmental footprints, benefits of the circular economy, specifying Chinese regions in EXIOBASE, making hybrid IO-city metabolism tables, forecasting with IO & dynamic models.	environmental sciences, industrial ecology, economics, input output economics, economic modelling linear algebra, programming, database management, English proficiency	Prof. A. Tukker <a href="mailto:tukker@cml.leidenuniv.nl">tukker@cml.leidenuniv.nl</a>
Topics in the field of anticipatory Life cycle (sustainability) assessment and hybrid LCA-input output analysis: recycling of building materials, novel energy systems, biobased materials, mining of (critical) metals, related to ongoing EU H2020 projects	environmental sciences, industrial ecology, life cycle assessment, linear algebra, programming, database management, English proficiency	Prof. A. Tukker <a href="mailto:tukker@cml.leidenuniv.nl">tukker@cml.leidenuniv.nl</a>
Various topics in material flow analysis and materials intelligence: material flow analysis and system dynamics of major metals and critical materials, supporting a global materials intelligence and forecasting , related to CML work in the EIT Raw materials.	environmental sciences, industrial ecology, material flow analysis, engineering, linear algebra, programming, database management, English proficiency	Prof. A. Tukker <a href="mailto:tukker@cml.leidenuniv.nl">tukker@cml.leidenuniv.nl</a>



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