BUILDING A BETTER FUTURE: RESPONSIBLE INNOVATION AND ENVIRONMENTAL PROTECTION
zone, the impact on the quality of settling particles is noticeable for locations relatively far away from the Tilth mouth. PCRs sorted to the particles are bioavailable for aquatic invertebrates and fish in Tilth as well as in the lake, some of which are identified by their DNA. The difference is also obvious in the macrotrophic communities of Tilth river are highly impaired by chemical loadings, whereas common environmental factors, PCBs and PAHs quantities lead to different bacterial community structures and abundances in the sediments and the aquatic biota. The chemical loadings include the assessment of the effects of an on-site treatment system of sediments using granular activated carbon applied on a particular section of river Tilth in spring 2013. The effects were evaluated by comparing the microbial communities, the bioavailability of PCBs, the microbial communities and the recovery of the aquatic ecosystems (add several references for further explanation).

W2E21
A Spatial-Ecological Approach for Identifying and Ranking Potential Stressors in Aquatic Ecosystems of England and Wales

We investigate the relative importance of chemical and biological variability of methane, biodiversity, and physical (substrate clogging) damages, PCBs and PAHs quantities lead to different bacterial community structures and abundances in the sediments and the aquatic biota. The chemical loadings include the assessment of the effects of an on-site treatment system of sediments using granular activated carbon applied on a particular section of river Tilth in spring 2013. The effects were evaluated by comparing the microbial communities, the bioavailability of PCBs, the microbial communities and the recovery of the aquatic ecosystems (add several references for further explanation).

W2E29
Inclusion of Trophic Network Variability in Regulatory Environmental Risk Assessment

Direct effects of pesticides, antimycotic and antidepressants medicines, UV-light stabilizers for plastics, anti-corrosive, dwindling additives, and components of liquid aircooling systems include, for instance, toxicity to fish and other organisms in the environment, mainly in water compartments, and are cause of death to their possible effects mainly on aquatic organisms. Several QSAR models for toxicity of triazines and benzo-triazoles to algae (Phaeodactylum tricornutum), Daphnia magna and fish (Oncorhynchus mykiss, the three species which are usually considered to perform risk assessment of chemicals in water, were developed by five partners in the CADASTER project. The models were developed by different methods (Ordinary Least Squares (OLS), Partial Least Squares (PLS), Bayesian regularized regression and Associative Neural Networks (ANNs)). The predictions of the developed models, as well as those obtained in a recent OECD workshop (Brandon et al., 2012) were compared with the results of experimental tests that were performed within the CADASTER platform. The individual and the consensus models are able to distinguish triazines and benzo-triazoles from other chemicals, based on their specific effects, which are not included in the REACH pre-registration list. This work complements the existing toxicity database of organic chemicals, in order to reduce and focus the experimental tests.

W2H0
Effects of a mixture of herbicides on non-target organism

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