Cooperation with EU Project Innowatech

In the same call of Neptune the project Innowatech (Innovative and integrated technologies for the treatment of industrial wastewater) has been approved. The two projects are complementary: Innowatech focuses on industrial wastewater, Neptune on municipal wastewater.

Since dissemination and public access of the gained knowledge is one of the main goals of both Innowatech and Neptune projects, the following activities will be jointly coordinated between the two projects:

• knowledge transfer and activity coordination during joint project meetings
• links of the project websites for improved dissemination
• knowledge transfer during the midterm workshop
• coordinated end-user conference at the end of the projects
• life cycle assessment (LCA) of technology options

The website www.innowatech.org provides additional information about the project Innowatech.

Web-support

The website www.eu-neptune.org provides actual information about the status of the project with links to all involved institutions. A webpage area with access restricted to the partners will serve as internal communication platform (e.g. ftp-server for file exchange, news group for information exchange).

From the project website, links to other EU Projects are also available.

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Neptune

Project objectives

The scope of sewage treatment is shifting from an "end-of-pipe" treatment before discharge to a "facility for resource management".

Existing focus:
- nutrient removal
- pathogens removal
- energy optimization
- sludge disposal
- water treatment

New focus:
- nutrient recycling
- micropollutants and ecotoxicity removal
- energy production
- reuse of sludge and its resources
- water reuse

Neptune focuses on technology solutions allowing to meet present and future standards via upgrading of existing municipal infrastructure (new control strategies with online sensors; effluent upgrading with oxidation, activated carbon or wetland treatment; safe sludge processing and reuse) as well as developing new techniques (fuel cell application; new oxidation processes; production of polymer and phosphate from sludge) and best practice evaluation based on micro-pollutants ecotoxicity and life cycle assessment.

List of Partners

- Eawag, Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz, Switzerland
- BfG, Bundesanstalt für Gütterschäden, Germany
- LabMET, Laboratory of Microbial Ecology and Technology, University of Gent, Belgium
- IRSA, Consiglio Nazionale delle Richerche (CNR), Italy
- UniFra, University of Frankfurt, Germany
- DTU, Technical University of Denmark, Denmark
- INCDTIM, National Institute of Research and Development for Isotopic and Molecular Technology, Romania
- Aquafin, Aquafin NV, Belgium
- DPU, Deutsche Projekt Union, Germany
- IPU, Institute for Product Development, Denmark
- SILUET B, Bulgaria
- Pyromex, Pyromex PLC, Great Britain
- Hunziker, Gebrüder Hunziker AG, Switzerland
- S::can, SCAN Messtechnik GmbH, Austria
- CAMBI, CAMBI A/S, Norway
- Anox, AnoxKaldnes, Sweden
- modelEUAU, Université Laval, Canada
- AWMC, Advanced Wastewater Management Center, The University of Queensland, Australia

Facts

Proposal/Contract no.: 036845
Total budget: € 4.28 mio
Duration: 1 November 2006 – 31 October 2009
Co-ordination: Eawag, The Swiss Federal Institute of Aquatic Science and Technology, Switzerland

Work Packages (WP)

WP 1: Technologies for WWTP upgrading to decrease effluent (eco-)toxicity, to optimise nutrient removal and energy consumption and to improve sludge handling and reuse.

WP 2: Novel Technologies for energy production from wastewater, sludge inertisation, recycling of nutrients and sludge organics, and novel oxidation processes for (eco-)toxicity and pollutant removal.

WP 3: Contaminant and Toxicity Assessment to evaluate the investigated treatment processes.

WP 4: Assessment of environmental sustainability and best practices of the technologies investigated in WP 1 and 2, including cost/efficiency considerations.

WP 5: Dissemination Activities with broad involvement and information of stakeholders, regulators, policy makers and Advisory Board members.

WP 6: Coordination and Management Activities.