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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www.eu-neptune.org

Improving today's and tomorrow's municipal wastewater treatment

Neptune

New Sustainable Concepts and Processes for Optimization and Upgrading Municipal Wastewater and sludge Treatment

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Sponsored by the European Commission Sixth Framework Programme Priority

Neptune

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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

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 micropolutants ecotoxicity and life cycle assessment.

List of Partners

- Eawag, Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz, Switzerland
- BfG, Bundesanstalt für Gewässerkunde, Germany
- LabMET, Laboratory of Microbial Ecology and Technolgy, 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
- model*EAU*, Université Laval, Canada
- AWMC, Advanced Wastewater Management Center, The University of Queenland, Australia

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.