

Project Information



Subject **Zentrum für BrennstoffzellenTechnik**

Applicant ZBT GmbH
Carl-Benz-Str. 201
D-47058 Duisburg

Project Duration: 19.11.2001 – 31.12.2006

Contact: Prof. Angelika Heinzl
Tel.: 0203-7598-0
a.heinzl@zbt-duisburg.de



Project description:

Goal of the project is the establishment of the center for fuel cell technology (Zentrum für BrennstoffzellenTechnik) ZBT GmbH in Duisburg. ZBT's focus of work is being a service provider in the field of fuel cell research and development in the region Ruhr district. It is to work as intermediaries between basic research and industry and to make available the appropriate fuel cell know-how for enterprises in North-Rhine/Westphalia. The project divides thereby into the two prime areas creation of the infrastructural conditions on the one hand and enterprise and fundamental research work on the other hand.

The installation of the modern laboratories and office spaces is the first task, in order to make the ZBT able to work. The equipment of the laboratories meets the fastidious safety requirements in the H₂-technology and ensures a highest possible flexibility to be competitive for upcoming scientific adjustments in the range of fuel cells. Within the range of measuring and automation technology a high equipment standard is being reached with investments for sensitive analyzers like for example special spectrometers or gas chromatographs. In addition, special measuring and control equipments for the setting up of reactor and fuel cell test rigs have to be made available. In addition to the laboratory technology the ZBT building also offers most modern infrastructure concerning to office and meeting areas.

The scientific activities extend to the following topics:

- Development of materials and components for fuel cell stacks;
- Development of a stack technology;
- Investigation of catalyst materials for fuel processors
- Development of new fuel processors for hydrogen production and purification
- Adjustment of gas process technology to different fuel cell systems
- Test of system parts and peripheral components
- Automation and control of fuel cell systems
- Construction and optimization of fuel cell systems
- System simulation and studies
- Training courses



Funded by
the State of Nordrhein-Westfalen and the EU

