## Ministry of Education, Youth and Sports



MINISTRY OF EDUCATION, YOUTH AND SPORTS

CZ - 118 15 Praha 1, Karmelitská 7 Phone: +420 257 193 717 Fax: +420 257 193 713 www.msmt.cz

The Ministry of Education, Youth and Sports of the Czech Republic (MEYS) has to the relation to research and development a specific position among other departments supporting research and development. This specific position is due to the Act No 21/1993 of Col. (so called competition law) and makes the Ministry responsible for:

- Formulation of conception of research and development in CR and the conduct of National Research programme II
- Support of broad area of research and development at international level, including formulation of conception of international co-operation in research and development
- Conduct of research and development programmes at universities and other specific research programmes

The Ministry of Education, Youth and Sports is responsible for the conclusion of relevant contracting documents. International co-operation in science and technology is framed as a longterm conception leading to the higher prosperity of the country via the effect of added value brought by international co-operation. The main part of the international co-operation in research and development is represented by joint science and technology projects and participation in international multilateral activities. MIRIS

**MiRiS** 

## miris@miris.cz www.setur.cz

The bladeless turbine (BT) / turbine SETUR is on principlequite new rotocure. Working medium are liquid and gas. BT is patent in a row land. Valid are for example 3 European patents. Mark extremely simple construction (pile from rotary body), good effeciency. Works at very small flow and hydraulic gradient. Thanks simplicity is price low and reliability high. BT have row application. To the production are ready: small water power station in prices 1 000 - 8 000,- €, car-brush, vaccum cleaner in swiming pool, sprinkler, air humidifier, tooth-brush. Research proceeds near gas and steam turbines, turbo blower and flow filter power station to the sea flows. We are looking for partners for research, production and business.

Association of Innovative Entrepreneurship CR Novotného lávka 5 CZ - 116 68 Praha 1 www.aipcr.cz schmidt@aipcr.cz Association of Innovative Entrepreneurship CR

579

**HANNOVER MESSE 2006** 

24. - 28. 4. 2006

Hall 2, Stand No. C57/1

Association of Innovative Entrepreneurship of the Czech Republic

# Association of Innovative Entrepreneurship CR

CZ - 116 68 Praha 1, Novotného lávka 5 Phone: +420 221 082 275 Fax: +420 221 082 276 www.aipcr.cz

Non-government organization for the sphere of innovative entrepreneurship in the CR.

Since Juni 23, 1993 AIE CR has started creation and further development of System of Innovative Entrepreneurship in the CR. Its goal is to ensure bilateral cooperation between inland government and non-government organizations and their cooperation with foreign partners in implementation of goals of innovative entrepreneurship in the CR.

It provides AIE CR on cooperation with MEYS within the framework of the **KONTACT** programme in implementing of accredited bilateral projects.

Support of Czech **EUREKA** Chairmanship and providing of EUREKA management

The objective of EUREKA iniciative to motivate industry and research institutions all over Europe to reinforce cross-border co-operation in the field research and development. 36 European countries and the European Union are now members. Each EUREKA project involves at least two Membres Countries and aims to develop advanced civilian products, processes or services.

The **Technology Profile of the Czech Republic** is a data bank of innovative entrepreneurial organizations. This data bank has resulted from the MEYS ME 231 project within the framework of the KONTACT programme in cooperation with the Fraunhofer Management Gesellschaft mbH from the German Federal Republic.

## CZECH TECHNICAL UNIVERSITY IN PRAGUE (CTU)



CZ - 166 36 Praha 6, Zikova 4 Phone: +420 224 351 111 Fax: +420 233 337 361 www.cvut.cz/en

The Czech Technical University in Prague offers its students a university education in a wide range of mainly engineering fields of study. It carries out basic and applied research and scholarly activities with emphasis on industrial applications. It educates modern specialists, scientists and managers with a knowledge of foreign languages, who are dynamic, flexible and well able to adapt rapidly to the requirements of the market. The CTU has seven faculties and two university institutes: Faculties of Civil Engineering, Mechanical Engineering, Electrical Engineering, Nuclear Sciences and Physical Engineering, Architecture, Trasportation Science, Biomedical Engineering, Klokner Institute and Masaryk Institute of Advanced Studies.

## PROJECTS

#### Plantograph V05

Plantograph V05 is used for the biomechanical investigation of the pressure distribution between the foot sole and the miniature pressure's sensors in matrix arrangement. This one is mentioned for the men's gate analyses, the great joints identification statement, stability, etc. Being mentioned, as portable device to be in co-operation the PC, with - to be processed the variable time pressure signals in real time, either in the static- and either in the dynamic-loading mode, too.

The instrument has concentrated 7500 sensors (3  $\times$  3 mm each) on the active area, as large as 300  $\times$  400 mm; being possible to receive and to be processed 300 the full snaps in 1 second, what is one of the world top parameters. The pressure distribution snap is realised in 256 colour's levels in 2D or 3D mode-view. Any time, having been read - the

all recent data to the SW, these ones can be processed as just measured, ones.

**The I4Control**<sup>®</sup> device developed in Gerstner laboratory of CTU FEE is a new type of computer periphery for contact-less control of a PC through eye (and/or head) movements. The solution emulates the computer mouse and it ensures all functions of current manually controlled PC peripheries (e.g. mouse or keyboard). Its main target users are challenged persons with serious physical handicap who cannot rely on their hands to operate a standard PC. Further development of the system is partially supported by an EU project COGAIN (IST-2003-511598).

## Modular mobile biotelemetric system Advanced PDA

Faculty of Biomedical Engineering (FBME) of Czech Technical University in Prague www.fbmi.cvut.cz/pda Clever Technologies, spin-off company of FBME CTU in Prague www.clevertech.cz

APDA - the basic function of Advanced PDA system is the scanning of biological and technical signals. Measured signals are digitalized and processed by the central control unit, then passed on by selectable communication interface (metallic connection (RS232, USB), wireless interface (BlueTooth, WiFi, GSM, GPRS-ethernet) for displaying, archiving and further evaluation in given imaging unit (classical PC, notebook, PDA platform (Windows Mobile 5.0). The most advantageous feature of the systém is its modularity. The whole chain is composed from preassembled modules via internal interfaces which represents very fast, effective and inexpensive solution. By simple software or hardware adjustments we can measure other quantities than those included by default modules. Modular measuring chain Advanced PDA is ready to be strong and affordable tool for all potential partners in research and industrial area. Its author's collective was granted with honorable mention on the Innovation 2004 Prize by the Association of Innovative Entrepreneurship of Czech Republic.