

Press information

Exhibition accompanying the informal meeting of
employment and social policy ministers in Vienna,
19-20 July 2018

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On 19 and 20 July, the informal meeting of employment and social policy ministers will take place in the Austria Center Vienna and will focus on the digitalisation of work.

To illustrate the topics of digitalisation and robotics, an exhibition will be organised in Lounge D (level -2) of the Austria Center Vienna. By way of concrete examples new developments and the benefits they can offer will be shown. Areas covered are assistive devices (in the workplace) for people with disabilities, assisted living, care and robotics.

The exhibition will be open to all delegates and media representatives during the whole duration of the informal meeting.

Six exhibitors will be demonstrating their products. Let us present them to you and tell you who they are and what they do.

4D-Joystick

Exhibitor:

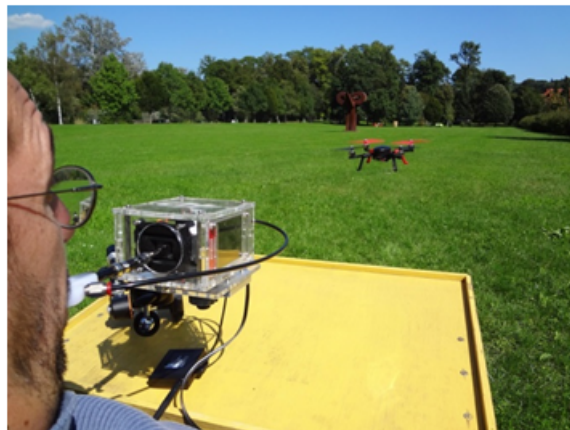
Competence Network Information Technology to Support the Integration of People with Disabilities (KI-I)
Altenberger Straße 69
4040 Linz, Austria

Winner of the 2015 Inclusion via Natural Sciences and Technology science prize (WINTEC) awarded by the Federal Ministry of Labour, Social Affairs, Health and Consumer Protection (BMASGK)

Contact:

Gerhard Nussbaum
Deputy Managing Director
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Subject: Making Life Easier for People with Disabilities



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Brief description:

The new 4D-Joystick is like no other solution in the world. Operated exclusively with the mouth, it allows people of all ages with severe disabilities to control complex devices such as RC model planes, helicopters, multicopters, cars and boats reliably and with precision. The 4D-Joystick can be used to control four analogue and four digital channels at the same time. It has a series of features that make it highly adaptable to users' needs. The 4D-Joystick opens up a completely new world for the target group, as it is unlike any other product previously available in this segment. Additional applications of the 4D-Joystick have also been successfully demonstrated: it can be used as a musical instrument, as an input device for controlling complex computer games, or for computers.

FLipMouse – Interactive Assistance for People with Reduced Mobility

Exhibitor:

University of Applied Sciences (UAS) Technikum Wien

Höchstädtplatz 6

1200 Vienna, Austria

Winner of the 2016 Inclusion via Natural Sciences and Technology science prize (WINTEC) awarded by the Federal Ministry of Labour, Social Affairs, Health and Consumer Protection (BMASGK)

Contact:

Christoph Veigl

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Subject: Making Life Easier for People with Disabilities



© by FH Technikum Wien

Brief description:

The 'FLipMouse' is an affordable mouth-control solution for computers and smartphones. It works by detecting the movements of the lips or fingertips and can be adapted to the user's individual needs and capabilities with additional sensors and flexible configuration software. The FLipMouse can also be used to manage all kinds of devices (such as household appliances) via infrared remote control. The system also combines with eye trackers to allow the user to control the cursor efficiently and precisely. One potential creative application of this technology is as an accessible musical instrument, enabling the user to control electronic synthesizers. These open-source hardware and software solutions are free to use for researchers and users alike.

Lorm Hand – Wearable Communication Devices for Deaf-blind Persons

Exhibitor:

Design Research Lab (DRLab)
Berlin University of the Arts
Design Research
College of Architecture, Media and Design /IPP
Einsteinufer 43-53
10587 Berlin, Germany

Winner of the 2016 Inclusion via Natural Sciences and Technology science prize (WINTEC) awarded by the Federal Ministry of Labour, Social Affairs, Health and Consumer Protection (BMASGK)

Contact:

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Head of Social Innovation Research Cluster
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Subject: Making Life Easier for People With Disabilities



Source: Design Research Lab, Berlin

Brief description:

Deaf-blind people often lead very isolated lives due to their visual and hearing impairments. One of the ways in which deaf-blind persons can communicate with the world around them is by using the Lorm Alphabet, tapping and stroking the palm of the other person's hand, in order to convey information. However, they can only communicate with people who have themselves mastered the Lorm Alphabet and who are close enough to touch. Tom Bieling has joined forces with deaf-blind people and a young, international team of designers to develop a mobile communication device to change this. In the shape of a glove, the device enables

the Lorm Alphabet to be translated into digital text and vice versa. The solution uses small sensors to relay Lorm Alphabet text via SMS or email, as a voice message or as posts in social media networks like Facebook and Twitter. Conversely, voice or text messages can be received and played back in Lorm Alphabet signs through small vibration motors on the back of the glove serving as tactile actuators. The Lorm Hand therefore enables deaf-blind persons to communicate with other people even if they are in a completely different place.

Video:

[Lorm Hand on YouTube](#) (three minutes)

Qwiek.up – Support for Those in Care

Exhibitor:

Qwiek BV
Smedestraat 2
6411CR Heerlen, Netherlands

Contact:

Steven Ann de Kruijff
Austrian Representative
Tel: +43 660 8672731
Email: steven.dekruijff@qwiek.eu

Subject: Assisted Living



Source: <https://qwiek.eu/de/up>



Brief description:

Qwiek.up is an outstanding product which supports both carers and nursing staff. It is excellently suited to enhance the client's well-being while also reducing the amount of time pressure on nursing staff.

The Qwiek.up solution creates an audiovisual experience that taps into the client's own individual world. Qwiek.up is a mobile device that allows images to be projected onto the ceiling or the wall, accompanying these images with a calming soundscape. Qwiek.up offers all sorts of possibilities for patient intervention tailored to the specific situation by providing either mental stimulation or relaxation.

Staff, volunteers and relatives can use the Qwiek.up solution for intervention in different situations, as and when needed. For instance, they can use it to distract residents during stressful care situations.

The Qwiek.up solution can also be used to promote interaction and support biographical work. With carefully coordinated multi-sensorial stimuli, the system

can create a sense of well-being and trigger self-regulating processes in the patient in any chosen space.

Healthcare institutions are currently investigating the extent to which Qwiek.up can be used as an alternative to sedatives during the day and at night time.

Collaborative Robotics

Exhibitor:

JOANNEUM RESEARCH Forschungsgesellschaft mbH
ROBOTICS – Institute of Robotics and Mechatronics
Lakeside B08a, EG
9020 Klagenfurt am Wörthersee

Contact:

Horst Pichler
Head of the Cognitive Robotics Research Group
Tel.: +43 316 876-2030
Email: horst.pichler@joanneum.at

Subject: Robotics



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Brief description:

JOANNEUM RESEARCH ROBOTICS researches innovations and application scenarios for collaborative robotics, specifically safety-related mobile manipulation. The 'Panda' is one of the latest generation of Industry 4.0 robots and was designed specifically for human-robot collaboration. These robots react sensitively to touch. They can be used flexibly and be adapted quickly to new conditions through guided learning.

In particular, ROBOTICS sees the use of this novel robot in the ability to offer new ICT-based services to end users and system integrators, and to develop innovative concepts for physical and cyber-physical robotic safety.

Mutual Care Robot: Hobbit

Exhibitor:

Vienna University of Technology (TU Wien)
Automation and Control Institute (ACIN)
Gußhausstraße 27-29
1040 Vienna, Austria

Contact:

Markus Vincze
Tel.: +43 (1) 58801 376 610
Email: vincze@acin.tuwien.ac.at

Subject: Care



© by TU Wien

Brief description:

The aim of the EU-funded HOBBIT project is to prevent and detect people falling at home, thus allowing them to lead independent lives outside of care facilities. In order to achieve this objective, the Hobbit robot is equipped with a robotic arm and two cameras which not only receive colour information but can also judge distances. Additionally, the robot has features for the entertainment of the users. These include, first and foremost, the ability to learn about objects, and then to search for and find them in the home. Moreover, objects can be placed on the robot and sent to other rooms, thereby making the Hobbit a handy transport aid.

Inclusion via Natural Sciences and Technology science prize (WINTEC) of the Federal Ministry of Labour, Social Affairs, Health and Consumer Protection

This prize is awarded to projects which help **remove barriers** and **strengthen the concept of inclusion**. We are looking for **innovative scientific projects that are pioneering when it comes to including people with disabilities** in society. Special importance is not only given to **accessibility** for persons with reduced mobility, but also – in the age of the virtual information society – **accessibility of information**.

In this context the terms “**natural sciences**” and “**technology**” have to be interpreted in a broader sense. The project seeks primarily to promote social interaction between persons with and without disabilities and thereby advance inclusion.

Criteria

We welcome all projects that propose **innovative solutions for the inclusion of people with disabilities**. The award is **not limited** to specific fields. Any natural science or technology proposals can be submitted. We also accept proposals relating to architecture, computer sciences, engineering or other technical fields as well as groundbreaking pharmaceutical solutions and trailblazing medical or rehabilitation technology solutions.

Only Austrian scientific works will be accepted. This means that they have to have been **published at an Austrian university or university of life sciences or deposited** at such a university and already examined. Works that have been published in an Austrian scientific journal or works of Austrian nationals that have been published in an international scientific journal will also be accepted.

All content that has been drafted specifically for the competition is foreseen for publication in the framework of WINTEC and should be given due attention in the preparation phase. Proposals from previous competitions can be found at WINTEC.