

Welcome to the INOVEST Project

Prof. Rainer Stiefelhagen

Karlsruhe Institute of Technology (KIT)

Study Centre for the Visually Impaired Students (SZS)

INOVEST

- Eastern Partnership in Pedagogical Innovations in Inclusive Education (INOVEST)
- EU Tempus IV Programme
 - TEMPUS: Trans European Cooperation Scheme for Higher Education
- Project Number
 - 530417-TEMPUS-1-2012-1-DE-TEMPUS_SMHES
- Project Duration
 - 15.10.2012 – 14.10.2015



Tempus

INOVEST

- Objective:
 - To contribute to the development and implementation of Pedagogical Innovations in Inclusive Education policies in Belarus, Moldova and Ukraine
 - A better coordination of lifelong learning professional formation in education
 - Enhancement of the quality and relevance of the service provided by the universities in the Eastern Partner countries in the provision of professional teachers' training in Pedagogical Innovations in Inclusive Education

INOVEST Partners

Karlsruhe Institute of Technology (Germany) – Applicant
Study Centre for the Visually Impaired Students (SZS)
Project Management and Quality Assurance (PMQ)

University of Alicante (Spain)

Royal Institute of Technology (Sweden)

“Ion Creanga” State Pedagogical University (Moldova)

Balti State University “A.Russo” (Moldova)

State Institute of Continuing Education, Chisinau (Moldova)

Belarusian State Pedagogical University (Belarus)

Gomel State University (Belarus)

Minsk Institute for Education Development (Belarus)

South Ukrainian Pedagogical Institute “K.D.Ushynsky” (Ukraine)

National Pedagogical Dragomanov University (Ukraine)

Odesa Regional In-Service Teacher Training Institute (Ukraine)

Ministry of Education of Moldova

Ministry of Education Belarus

Ministry of Education and Science, Youth and Sport of Ukraine

INOVEST Responsibilities

- Project applicant:
Prof. Rainer Stiefelhagen (KIT-SZS, Germany)
- Scientific coordinator:
Mr. Simion Caisin (IIC, Moldova)
- Administrative and financial coordinator and contact person:
Mrs. Ute Huber (KIT-PMQ, Germany)
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Karlsruhe Institute of Technology

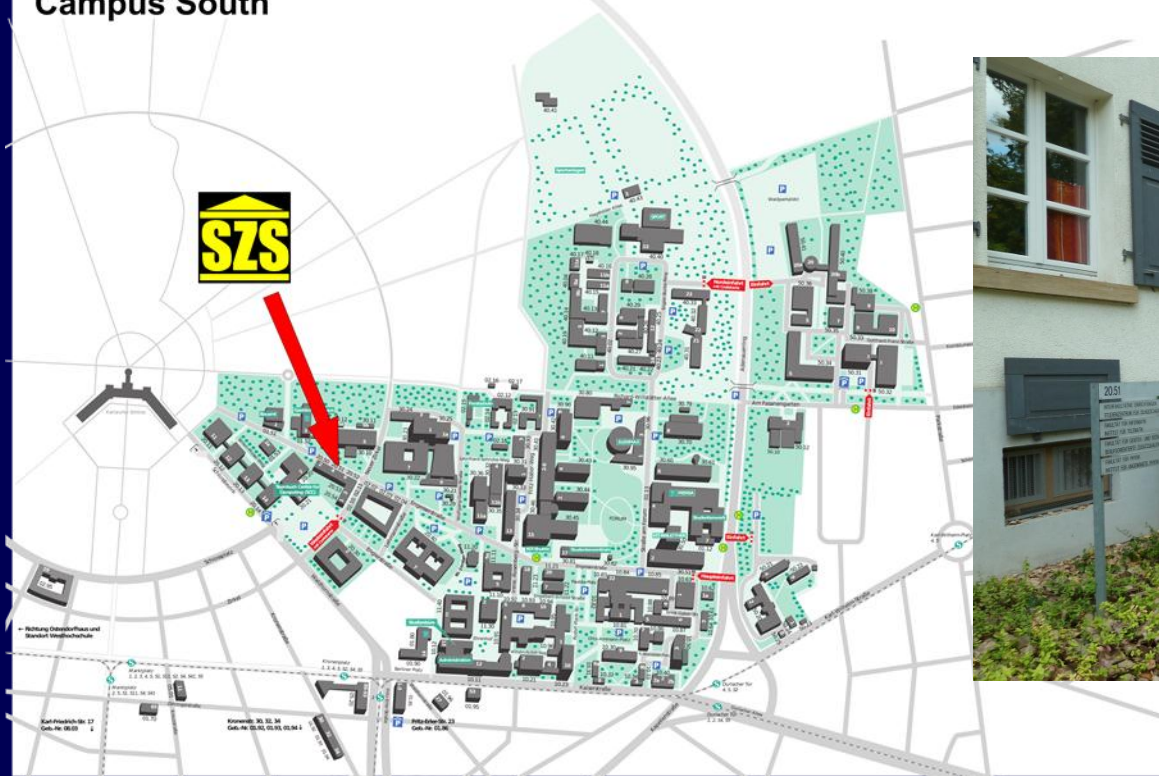
KIT offers more than 80 modern degree programs (bachelor & master degrees) in:

Engineering and Economics, Natural Sciences and Informatics,
Mathematics and Humanities

Approx 23.000 full-time students (2011)

Study Centre for the Visually Impaired Students (SZS)

Karlsruhe Institute of Technology (KIT)
Campus South



SZS History

- 1987** **Begin of the pilot project Informatics for the Blind – Study for visually impaired people in IT and Industrial Engineering**
- 1988 First Orientation Unit for VI prospective students lasting several days
- 1992** **Establishment of the Study Centre for the Visually Impaired Students as part of the Faculty of Informatics**
- 1993 First „International Camp on Communication and Computers“
- 2002 Begin of the MoDe presentation series on the subject of sight
- 2003 EU-Project for the inclusion of people with disabilities in the job market with partners in D, A, BG, GB, IRE, ES
- 2007 BMAS Project for the development of a screenreader for Linux (SUE)
- 2010 First „ICCHP Summer University on Math, Science and Statistics for Visually Impaired Students“
- 2010 Begin of the BMAS Project Gateway: Study and Career without Barriers
- 2011** **Establishment of the Professorship „IT systems for visually impaired students“, Prof. Rainer Stiefelhagen**
Further research group "Computer Vision for Human-Computer Interaction"

SZS

Blind and Partially Sighted Students

Preparing for Higher Education

- Orientation unit
- Mobility training
- Working place equipment
- Learning and working technology
- Course planning

Support during the study

- Preparing course material
- Support at lectures and in examinations
- Assistance in studying abroad
- Regular meetings and lectures

Preparing for a profession

- Support concerning practical training
- Applicants' training
- Contacts to employers
- Disability Mentoring Days

Research, Development and Transfer Projects ⑩ National and International Programmes
Counselling ⑩ Tactile Text and Graphic Print ⑩ Media Library ⑩ Working Stations

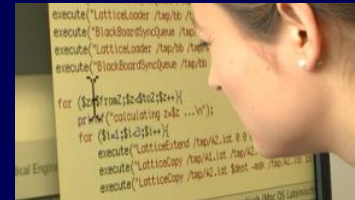
O-Phase: Orientation Event for Visually Impaired Prospective Students

- Yearly event, lasting 3 days
- Target audience: blind and partially sighted prospective students
- Topics
 - Course previews
 - Mobility training
 - Technical equipment
 - Accommodation
 - The service provided by the SZS



Literature Conversion Service at SZS

- KIT service for visually impaired students in Karlsruhe
 - Lecture notes, books, student notes, tests
- For partially sighted students:
 - Individual support and adjustment of the conversion to the particular visual impairment
 - Font size, typeface, colors, paper size, etc.
- For blind students
 - Digitized texts in accessible formats (doc, HTML, XML tags)
 - Tactile graphics and Braille text



Trainings in the STEM field

- STEM: science, technology, engineering and mathematics
- Target group: KIT students with visual impairment
- Trainings:
 - Dealing with tactile graphics
 - Higher mathematics with the Braille display
 - Creation of scholar texts with LaTeX
 - Presentation techniques for blind people
 - Accessible programming text editors
 - Accessible STEM software



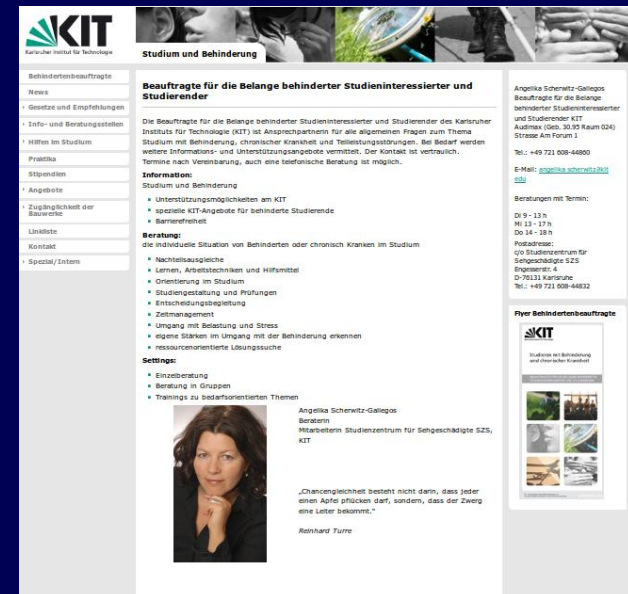
ICCHP-Summer University on Math, Science and Statistics for Visually Impaired Students

- Yearly international event
- Target group: students with visual impairment, employees of service centers, teachers
- Workshops (theory and practice):
 - Access to scientific texts
 - Mathematics with LaTeX
 - Access to tactile graphics
 - Accessible scientific software



Internships

- Cooperation with the commissioner for matters relating to disabled persons at KIT
- Mediation of company contacts (Deutsche Bahn, L'Oreal, Siemens) to KIT students



KIT
Karlsruhe Institute of Technology

Studium und Behinderung

Baufträge für die Belange behinderter Studieninteressierter und Studierender

Die Baufträge für die Belange behinderter Studieninteressierter und Studierender des Karlsruher Instituts für Technologie (KIT) ist Ansprechpartner für alle allgemeinen Fragen zum Thema Studium mit Behinderung, chronischer Krankheit und Teilleistungsstörungen. Bei Bedarf werden weitere Informations- und Unterstützungsangebote vermittelt. Der Kontakt ist vertraulich. Termine nach Vereinbarung, auch eine telefonische Beratung ist möglich.

Information:
Studium und Behinderung

- Unterstützungsmöglichkeiten am KIT
- spezielle KIT-Angebote für behinderte Studierende
- Barrierefreiheit

Beratung:
die individuelle Situation von Behinderten oder chronisch Kranken im Studium

- Nachteilsausgleich
- Lernen, Arbeitstechniken und Hilfsmittel
- Orientierung im Studium
- Studiengestaltung und Prüfungen
- Entscheidungsbegleitung
- Zeitmanagement
- Umgang mit Belastung und Stress
- eigene Stärken im Umgang mit der Behinderung erkennen
- ressourcenorientierte Lösungssuche

Settings:

- Einzelberatung
- Beratung in Gruppen
- Trainings zu bedarfsorientierten Themen

Angelika Schewitz-Gallagos
Beratlerin
Mitarbeiterin Studienzentrum für Sehgeschädigte SZS, KIT

Reinhard Turm

„Chancengleichheit besteht nicht darin, dass jeder einen Apfel pflücken darf, sondern, dass der Zwerge eine Leiter bekommt.“

Flyer Behindertenbeauftragte

KIT
Studien und Behinderung
und chronischer Krankheit

Project Gateway

Study and Career without Barriers



- Objective:
 - Setup of an information portal for students and career starters with hearing or visual impairment
 - www.gateway-online.de
- Distinctive feature:
 - Cooperation of a “diversity team”: people with and without hearing and visual disability compile the contents
- Project duration:
 - May 2010 – April 2013

Job Application Training: Fit for the Job

- Target group: students, graduates or job-seekers with visual impairment
- Involvement of representatives for people with disabilities and of human resources specialists
- Topics:
 - Job search
 - Application: online application, strategies
 - Job interview incl. video recording
 - Addressing the topic of disability



New Professorship – IT Systems for Visually Impaired Students

- Since November 2011
- Holder: Prof. Dr.-Ing. Rainer Stiefelhagen
- Head of SZS & Head of the research area Computer Vision for Human-Computer Interaction
- Goal: Strengthen the research, development of new Assistive Technologies
 - For people with visual impairment
 - For people with other disabilities

Research Topics

- Portable Computer- Vision System for Blind and Partially Sighted People (“Electronic Guide Dog”)
- Development of a tactile E-Book-Reader for blind people (microfluidic Braille Display)
- Access to mathematics
- Automation of the conversion of graphics (tactile and textual)
- Development of audio-haptic human-computer interfaces



Tactile output (CMU)

References

Image sources:

- <http://eacea.ec.europa.eu>
- <http://www.kit.edu/downloads/Campus-Sued.pdf>
- <http://www.gateway-online.de>
- <http://www.szs.kit.edu>