



## **International Scientific Conference Assistive technology to support human development**

**23 September 2015, Cracow**

**under auspices  
of  
Pedagogical University Rector**

**Conference venue - Pedagogical University Main Building, Krakow,  
2 Podchorążych Street, Professor Danek Hall**

### Scientific Committee:

- Prof. Ingrida Baranaskienė – Šiauliai University, Lithuania  
Prof. David Brown – Nottingham Trent University, United Kingdom  
Prof. Tadeusz Gałkowski – SWPS University of Social Science and Humanities, Poland  
Prof. Kazimierz Jaracz – Pedagogical University of Cracow, Poland  
*Prof. Kas Mazurek – University of Lethbridge, Canada*  
*Prof. Miloš Potmáčil – Palacký University of Olomouc, Czech Republic*  
Prof. Władysława Pilecka – Jagiellonian University, Poland  
Prof. Penny Standen – University of Nottingham, United Kingdom  
Prof. Renata Stefańska-Klar – University of Silesia, Poland  
Prof. Ryszard Tadeusiewicz – AGH University of Science and Technology, Poland  
Prof. Vladimir Trajkovski – University "Ss. Cyril and Methodius", Skopje, Republic of Macedonia  
*Prof. Margret Winzer – University of Lethbridge, Canada*  
Prof. Jolanta Zielińska – Pedagogical University of Cracow, Poland

### Organizing Departments:

Department of Psychology  
Institute of Technology  
Institute of Special Education

### Organizing Committee:

Joanna Kossewska – General Chair  
Wiktor Hudy  
Wojciech Kulinowski  
Urszula Tokarska

## Conference programme

9.00 -9.20	Opening Ceremony Conference Welcome on behalf of Pedagogical University authorities and conference organising committee Conference address – Ryszard Tadeusiewicz
<b>9.20-12.00</b>	<b>Session I</b> <b>Educational robotics as a tool of supporting human development</b>  <i>Chair persons: Margret Winzer, Kazimierz Jaracz</i>
9.20 - 9.40	Dominik Pettke, Sebastian Marcinkowski (PL) Why humanoid robot is the optimal form of the interaction between man and machine? Based on NAO robot capabilities
9.40 – 10.00	Penny J. Standen, David Brown, Takayuki Mashimo, Jose Rodriguez (UK) Using a Humanoid Robot to Enhance Learning in Students with Profound and Multiple Disabilities
10.00 – 10.20	Lorenzo Desideri, Massimiliano Malavasi, Evert Jan Hoogerwerf (IT) Robots in the wild: applying robotics to educational and clinical settings
10.20 – 10.40	Igor Zubrzycki, Jarosław Turajczyk, Anna Gawryszewska - Therapists as a programmers. Technology as a tool to lessen the burnout of therapists of children with severe mental disabilities
10.40 – 11.00	Karolina Zawieska (PL) Creativity in educational robotics: From construction of robots to creation of meanings
11.00 – 11.20	Fiorella Operto (IT) Roboethical Aspects of Educational Robotics in Special Needs education
11.20 – 11.40	Discussion
<b>11.40 – 12.00</b>	<b>Coffee break</b>
<b>12.00 – 14.00</b>	<b>session II – Assistive technology to support ASD person development</b>  <i>Chair persons: Penny J. Standen, Kac Mazurek</i>
12.00 – 12.20	Renata Stefańska-Klar (PL) Using Digital Technologies and Media-Based Tools and Strategies to Support the Development and Education of Individuals with Autism Spectrum Disorder
12.20 – 12.40	Jolanta Zielińska (PL) Scratch programming language application for therapy of children with Asperger Syndrom or autism
12.40 – 13.00	Vladimir Trajkovski (MKD) Implementation of assistive technology in children with autism spectrum disorders
13.00 – 13.20	Joanna Kossewska (PL) Training persons with ASD competences implementing multimedia programmes support
13.20 – 13.40	Ingrida Baranauskienė, Ilona Dobrovolskytė (LT) Evaluation of vocational school student's physical abilities by ERGO II work simulator device
13.40 – 14.00	Discussion
14.00 – 15.00	Lunch

<b>15.00 – 16.40</b>	<b>Session III – Assistive technology to support child development</b>  <i>Chair persons: Renata Stefańska-Klar, David Brown</i>
15.00 – 15.20	Urszula Tokarska (PL) <Beyond edutainment>. Psychological pros & cons of auto/biographical board games
15.20 – 15.40	Karolina Czernecka (PL) Kids at play: a review of current studies on the influence of computer games on child and adolescent development
15.40 – 16.00	Wiktor Hudy, Kazimierz Jaracz, Wojciech Kulinowski, Dominik Rzepka (PL) Discovering mechatronics with children
16.00 – 16.20	Laima Tomėnienė, Ingrida Baranauskienė (IT) Technology of the development of mathematical literacy of students with special educational needs in mainstream school
16.20 – 16.40	Discussion
16.40– 17.00	Coffee break
<b>17.00 – 18.20</b>	<b>Session IV - Assistive technology to support communication disorders</b>  <i>Chair persons: Ingrida Baranauskiene, Jolanta Zielińska</i>
17.00 – 17.20	Magdalena Zdrodowska (PL) Legally cyborgized: Cochlear implants and the Deaf perspective
17.20 – 17.40	Tamara Cierpiałowska, Ewa Brzdęk, Ewa Przebinda (PL) The implementation of alternative and augmentative communication methods in the process of developing communication skills of people with special needs. Presentation of the "Mówik" program tool.
17.40 – 18.00	<b>Adela Adéla Hanáková, Miloň Potměšil (CZ)</b>  To evaluation of needed conditions for AAC users
18.00 – 18.20	Discussion Closing ceremony