Preface

The introduction to the 1st International Conference on Computers for Handicapped Persons (Vienna, 1989) by A Min Tjoa (University of Vienna) and Roland Wagner (University of Linz) finished with the following mission statement on the “Future Direction on Computers for Handicapped Persons”:

“The different themes show that a lot of problems are solved by the usage of computer technology for helping handicapped persons, for instance for the blind and visually handicapped. A consequence of the discussed themes there are two directions which should be done in the next years. One direction is obvious. The tools must be improved and research and development work should be extended to all groups of handicapped (even if they are numerically not so large as for instance the blind or visually handicapped persons). On the other side in the area of social implications there is an increasing demand on social science studies on overall computer use among disabled persons. Because sources are in principle missing today about disabled persons work tasks, research in this field must begin by trying to survey this aspect. Particular attention should be paid to the extent and character of computer use among the handicapped in work life. There are a lot of questions, which should be answered during the next years for reaching the aim of rehabilitation.”

Fifteen years later the 9th International Conference on Computers Helping People with Special Needs (Paris, 2004) offered a comprehensive and deepened view on general awareness, special research and individual applications concerning disabled people and their participation in our society.

Remarkable changes are to be registered:

- Besides blindness and visual impairment, deafness and hearing impairment, mobility impairment, cognitive, speed and learning impairment will be focused on.
- Increased research and special training should be dedicated to elderly people and their disabilities.
- The early years’ mission towards assistive technology for disabled individuals has changed over to a holistic approach towards accessibility in the whole environment. Smart houses, designs for all, and the transition from human interfaces to humane interfaces characterize accessibility and the new generation of Web development tools.

Does this summary mean success, fulfillness and the realization of those topics evoked by the pioneers from 1989? Concerning people with disabilities – and their right to equal education and adequate jobs – are the above topics being realized?

- Has their daily discrimination finished?
- Are adapted living conditions and partnerships via democratic society solved?

Surely not. Looking around, we have to confess that, despite a lot of progress, the new challenges demand continuity, consequent action and persistence.
The European Union declared 2003 to be the “European Year of People with Disabilities” in order to raise awareness about the situation of its millions of disabled citizens. The feedback from this initiative – gathered in a EU barometer – was the following:

- 38 million citizens of the EU (10%) suffer from a disability;
- 97% of Europeans express their opinion that it is still very difficult for people with disabilities to participate in social life and that further activities are necessary to improve their integration;
- 93% demand more money to overcome barriers in public buildings;
- 76% register that physical access to public buildings and institutions (for example public service buildings, universities, schools) is far from being acceptable, although 57% confess a remarkable improvement in the last decade.

Continuing the biannual conferences, ICCHP 2004 took over this comprehensive responsibility and brought together a community from around the world to share their thoughts at the various presentation and communication opportunities. ICCHP 2004 took place under the high patronage of Mr. Jacques Chirac, President of the French Republic, and was sponsored by the European Union as well as by private and public companies and institutions. Our thanks go to:

- The General ICCHP 2004 Chair, H.J. Murphy (Founder and Former Director of the Centre on Disabilities, California State University, Northridge, USA and International Ambassador, Pulsedata International)
- The Programme Chairs:
  - A. Karshmer (University of South Florida at Tampa, USA)
  - A.M. Tjoa (Technical University of Vienna, Austria)
  - R. Vollmar (Universitaet Karlsruhe (TH), Germany)
  - R. Wagner (University of Linz, Austria)
- The Programme Committee:

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution/University</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alquie, G.</td>
<td>Université Pierre et Marie Curie</td>
<td>France</td>
</tr>
<tr>
<td>Andrich, R.</td>
<td>SIVA Fondazione Don Carlo Gnocchi Onlus</td>
<td>Italy</td>
</tr>
<tr>
<td>Arató, A.</td>
<td>Hungarian Academy of Science</td>
<td>Hungary</td>
</tr>
<tr>
<td>Arató P.</td>
<td>TU Budapest</td>
<td>Hungary</td>
</tr>
<tr>
<td>Archambault, D.</td>
<td>Université Pierre et Marie Curie</td>
<td>France</td>
</tr>
<tr>
<td>Azevedo, L.</td>
<td>Instituto Superior Tecnico</td>
<td>Portugal</td>
</tr>
<tr>
<td>Batusic, M.</td>
<td>University of Linz</td>
<td>Austria</td>
</tr>
<tr>
<td>Bidaud, P.</td>
<td>Université Pierre et Marie Curie</td>
<td>France</td>
</tr>
<tr>
<td>Blenkhorn, P.</td>
<td>University of Manchester</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Bothe, H.-H.</td>
<td>Technical University of Denmark</td>
<td>Denmark</td>
</tr>
<tr>
<td>Bühler, C.</td>
<td>Forschungsinstitut Technologie-Behindertenhilfe</td>
<td>Germany</td>
</tr>
</tbody>
</table>
Burnod, Y. Institut National de la Santé et de la Recherche Médicale France
Busby, G. EASAMS Ltd. United Kingdom
Charlier, J. Metrovision France
Dotter, F. University of Klagenfurt Austria
Edwards, A. University of York United Kingdom
Ekberg, J. Stakes Finland
Emiliani, P.L. Istituto di Fisica Applicata “Nello CARRARA” Italy
Engelen, J. Katholieke Universiteit Leuven Belgium
Freitas, D. University of Porto Portugal
Gardner, J. Oregon State University USA
Gupta, G. University of Texas at Dallas USA
Hara, S. Tsukuba College of Technology Japan
Helle, K.M. Work Research Institute Norway
Holzinger, A. Graz University Hospital Austria
Horlait, E. Université Pierre et Marie Curie France
Kowalik, R. Technical University of Gdansk Poland
Kremser, W. Austrian Computer Society Austria
Lauruska, V. Siauliai University Lithuania
Lindström, J.-I. Telia AB Sweden
Mariani, J. Université Pierre et Marie Curie (Paris VI) France
Mendelova, E. Comenius University of Bratislava Slovak Republic
Mokhtari, M. INST France
Neveryd, H. Lund University Sweden
Nussbaum, G. KI-I Austria
Ortner, D. University of Linz Austria
Oussik, V. Logos Russia
Panek, P. Technical University of Vienna Austria
Penaz, P. University of Brno Czech Republic
Petrie, H. University of Hertfordshire United Kingdom
Ponteli, E. New Mexico State University USA
Pühretmair, F. KI-I Austria
Quirchmayr, G. University of Vienna Austria
Soede, T. iRv The Netherlands
Stephanidis, C. ICS-Forth Greece
Stöger, B. University of Linz Austria
Strauss, Ch. University of Vienna Austria
Svensson, H. National Institute for Special Needs Education Sweden
Tabeling, P. CNRS France
Traunmüller, R. University of Linz Austria
Trehin, P. World Autism Organisation Belgium
Vasppori, T. Hungarian Academy of Science Hungary
Velasco, C. Fraunhofer Institute for Applied Information Technology (FIT) Germany
Wagner, I. Technical University of Vienna Austria
Wünschmann, W. TU Dresden Germany
– The Organizing Committee:

<table>
<thead>
<tr>
<th>University of Linz</th>
<th>Université Pierre et Marie Curie</th>
<th>INSERM/BrailleNet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrer, B.</td>
<td>Békefi, B.</td>
<td>Burger, D.</td>
</tr>
<tr>
<td>Batusic, M.</td>
<td>Bigot, R.</td>
<td>Pinto, S.</td>
</tr>
<tr>
<td>Feichtenschlager, P.</td>
<td>Lafont, R.</td>
<td></td>
</tr>
<tr>
<td>Herramhof, S.</td>
<td>Merle, D.</td>
<td></td>
</tr>
<tr>
<td>Köttstorfer, M.</td>
<td>Poutier, C.</td>
<td></td>
</tr>
<tr>
<td>Miesenberger, K.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ortner, D.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petz, A.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schüler, C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stöger, B.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We thank the Austrian Computer Society for announcing and sponsoring the *Roland Wagner Award on Computers Helping People with Special Needs.*

The Austrian Computer Society decided in September 2001 to endow this award in honour of Prof. Dr. Roland Wagner, the founder of ICCHP. He is the founder and head of the Institute of the Austrian-wide institute of “integrated study”, offering services for print-disabled students at Austrian universities. He is the founder of the working group “ICT for/with People with Disabilities” of the Austrian Computer Society, the group that established the ICCHP conference as an outstanding international event.

Prof. Wagner is one of the pioneers in ICT for people with disabilities in Austria and has been pushing the field forward for years. His early visionary understanding of the role of ICT to change the perspectives of people with special needs and his dedication to fighting for equal rights for this target group has had important impacts on awareness and on beginning changes in society. This award should give further incentives and should support the important work which has been the passion of Prof. Wagner over decades.

The Roland Wagner Award is a biannual award and will be in the range of 3000 Euros. It will be handed over at the ICCHP conferences.

Award winners:

– Award 0 was handed over to Prof. Dr. Roland Wagner on the occasion of his 50th birthday.
– Award 1 was won by WAI-W3C. It was handed over to Judy Brewer at ICCHP 2002.
– Special Award 2003; A special award was handed over to Prof. Dr. A Min Tjoa, one of the founders of ICCHP, on the occasion of his 50th birthday in 2003.

Altogether we feel a common responsibility to advance a global understanding of human partnership and the inclusion of all human beings and providing for their personal fulfillment and welfare.

July 2004

Joachim Klaus, Klaus Miesenberger, Dominique Burger, and Wolfgang Zagler *(Publishing Chairs)*
Computers Helping People with Special Needs
9th International Conference, ICCHP 2004, Paris,
France, July 7-9, 2004, Proceedings
Klaus, J.; Miesenberger, K.; Burger, D.; Zagler, W. (Eds.)
2004, XLVI, 1195 p., Softcover
ISBN: 978-3-540-22334-4