



Foreword

The past years brought, for the Romanian higher education and research, major changes, linked with the EU integration and with the need to competitiveness in the European Area of Higher Education and Research.

A detailed analysis of the resources and competencies in our academic area, of the national and European trends, allowed the formulation of our Research Strategy for 2008/2012, aiming to *the development of Transilvania University of Brasov as a source of scientific, technical and formative competences of reference, in priority fields, for the complete integration in the European research Area and for active contribution in the knowledge based society.*

One major action, supporting this aim was started in 2004. Following an internal evaluation process, in the university there were defined 21 research departments having own leading structures, own personnel and infrastructure, and well defined, complementary research topics. A special attention is given to orienting the research of excellence for high-tech, new/innovative products development and to insuring the frame able to promote and apply the research results to the beneficiaries in the extra-academic area.

The research infrastructure was developed, mainly by attracting funds in research competitive programs, including the EU Framework Programmes, six infrastructure projects of CNCSIS – Platforms, two CEEX M4 and one PNII Capacities project, that allow the development of performant experimental lines, most of them unique at national level.

The efficient and synergic use of the existent and developing research represents an important part of the university strategy, identified in the major university development project *The RT&D Institute High-Tech Products for Sustainable Development, PRO-DD*. The project, financed based on Structural Funds POS-CCE develops, up to 2011 the institute consisting of 11 specialised laboratories,



with high performance equipment, opened to all 21 research departments and to collaborative activities with national and European research entities and with the research divisions in companies.

Insuring and developing the human resources necessary in our research activities is supported by the development of integrated education lines for all the three Bologna education cycles. A special focus is on the master and doctoral programmes that are now formulated, run and evaluated inside the research departments.

A constant preoccupation targets the increase in the research visibility, run in the department. Yearly, the publications in ISI and main stream journals increased so that their number in 2008 is more than triple comparing with 2004.

Mirroring these processes, the Bulletin of the Transilvania University of Brasov has also restructured. Starting with 2008, the annual edited publication is developed on six series, focusing on the major research directions developed in our university. Each Bulletin series has now a Scientific Committee, personalities of the international and Romanian research which, by peer review processes selects the papers and insures the quality of the volumes. The Bulletin hosts the results of the doctoral programmes, of the grants and of advanced research, preparing the next research proposals. There are many papers developed in joint groups of authors from our university and from abroad or from Romanian universities and research centres, proving the national/international dimension of our work.

We invite you to join us; the next editions will continue to struggle for enhancing visibility and international recognition, based on quality and results of excellence.

Editor in Chief,

Prof. Dr. Eng. Ion Vişa