

**JUBILEE SCIENTIFIC CONFERENCE**  
**Practical Applications of Innovative Solutions Resulting from Scientific Research**  
 May 15, 2015

Venue: Działownia, Politechnika Krakowska, ul. Warszawska 24, Kraków

9.00 – 9.10	<b>Welcome from the Chairman of the Jubilee Scientific Conference, Prof. B. Skoczeń</b>
9.10 –10.40	<p style="text-align: center;"><b>SESSION I: Science and Technology (Chairman: Prof. B. Skoczeń)</b></p> <p><b>Prof. Agnieszka Zalewska</b> (IFJ PAN, CERN – Polska, Szwajcaria)  <i>Science and Technology - Two Facets of CERN</i></p> <p><b>Prof. Piotr Moncarz</b> (Stanford University – USA)  <i>Sustainability and Environmental Responsibility of New Energy Systems</i></p> <p><b>Prof. Paulo Lourenço</b> (Minho University – Portugal)  <i>Preserving Our Past, Building Our Future: A Success Story from High Level Research, Professional Practice and Innovation</i></p>
10.40-11.00	Coffee break
11.00-13.00	<p style="text-align: center;"><b>SESSION II: Computational Support for Engineering (Chairman: Prof. A. Truty)</b></p> <p><b>Prof. Herbert Mang</b> (TU Wien – Austria)  <i>Computational Mechanics - An Ideal Research Area for Innovative Solutions of Challenging Engineering Problems</i></p> <p><b>Prof. Piotr Noakowski</b> (Dortmund University – Germany)  <i>Proper Design of the R/C Structures in Terms of the Actual Bending Moments. Redistribution and Drop of the Cross - Sectional Forces due to Cracking</i></p> <p><b>Prof. Leszek Demkowicz</b> (University of Texas – USA)  <i>Application of hp-Adaptive Finite Element (FE) Method to Simulation of Sonic Measurements in a Borehole</i></p> <p><b>Prof. Tadeusz Burczyński</b> (IPPT PAN, CUT – Poland)  <i>Computational Intelligence in Multiscale and Biomedical Engineering</i></p>
13.00-14.00	Lunch
14.00-15.30	<p style="text-align: center;"><b>SESSION III: Materials and Structures (Chairman: Prof. A. Prociak)</b></p> <p><b>Prof. Holm Altenbach</b> (Magdeburg University – Germany)  <i>Material Modelling: a Game for Scientists or an Effective Tool to Improve Structures</i></p> <p><b>Prof. Krzysztof Pielichowski</b> (CUT – Poland)  <i>New Polymeric Materials - Challenges and Perspectives</i></p> <p><b>Prof. Dieter Weichert</b> (RWTH - Aachen – Germany)  <i>Limit States of Materials and Structures</i></p>
15.30-15.50	Coffee break
15.50-17.50	<p style="text-align: center;"><b>SESSION IV: General Engineering Problems (Chairman: Prof. J. Pamin)</b></p> <p><b>Prof. René de Borst</b> (University of Glasgow – Great Britain)  <i>Simulation as the Third Pillar in Engineering Science</i></p> <p><b>Prof. Zbigniew Kundzewicz</b> (PAN – Poland)  <i>Flood Risk Management Under Global Change</i></p> <p><b>Prof. Herbert Bühler</b> (Münster University – Germany)  <i>Architecture at the Beginning of the Fourth Industrial Revolution</i></p> <p><b>Prof. Grzegorz Skarpetowski</b> (Bombardier, ZHAW Zurich, CUT – Switzerland, Poland)  <i>Multisystem Locomotives - The Future of European Railway</i></p>
17.50-18.00	<b>Closure of the Conference, Prof. B. Skoczeń</b>