

MECHANICS 2008

Proceedings of the International Scientific Conference

Rzeszów University of Technology, Poland

Rzeszów, June 2008

INTERNATIONAL PROGRAM COMMITTEE

Co-Chairmen:

Feliks STACHOWICZ (*Rzeszów University of Technology, Poland*)

Piotr P. MELNICHUK (*Zhitomir Institute of Engineering and Technology, Ukraine*)

Miroslaw BADIDA (*Technical University of Kosice, Slovakia*)

Members:

Tadeusz BURAKOWSKI (*The Institute of Precision Engineering, Warszawa, Poland*)

Jan BURCAN (*Łódź Technical University, Poland*)

Dusan KNIEVALD (*Technical University of Kosice, Slovakia*)

Nikolay M. KOLODNITSKY (*Zhitomir Institute of Engineering and Technology, Ukraine*)

Mieczysław KORZYŃSKI (*Rzeszów University of Technology, Poland*)

Władimir LUBIMOW (*Rzeszów University of Technology, Poland*)

Piotr P. MELNICHUK (*Zhitomir Institute of Engineering and Technology, Ukraine*)

Aleksander NAKONIECZNY (*The Institute of Precision Engineering, Warszawa, Poland*)

Paweł PAWLUS (*Rzeszów University of Technology, Poland*)

Piotr M. POVIDAYKO (*Zhitomir Institute of Engineering and Technology, Ukraine*)

Włodzimierz PRZYBYLSKI (*Gdańsk Technical University, Poland*)

Stanisław PYTKO (*The Mining and Metallurgic Academy, Kraków, Poland*)

Laurentiu SLATINEANU (*Technical University "Gh. Aschai" of Iasi, Romania*)

Aleksander SCHIRTLADZE (*Moscow Technical University "STANKIN", Russia*)

Feliks STACHOWICZ (*Rzeszów University of Technology, Poland*)

Jarosław SEP (*Rzeszów University of Technology, Poland*)

Wiktor SZABAJKOWICZ (*Rzeszów University of Technology, Poland*)

Włodzimierz TIMIRAZEW (*Moscow Technical University "STANKIN", Russia*)

Frantisek TREBUNA (*Technical University of Kosice, Slovakia*)

Krzysztof TUBIELEWICZ (*Częstochowa Technical University, Poland*)

Leonid WOŁCZKIEWICZ (*Moscow Technical University, Russia*)

Organizing Committee

I. G. Grabar (*Co-Chairman*), M. Korzyński (*Co-Chairman*), V. Kyrylovych (*Co-Chairman*),
F. Greskovic, G. N. Andreev, K. Korzyńska (*Secretary*), W. Szabajkowicz

Reviewers

M. Korzyński, P. Pawlus, J. Sep, F. Stachowicz, W. Szabajkowicz

MECHANICS 2008

Proceedings of the International Scientific Conference

The Conference Organizers

Rzeszów University of Technology, Poland

Kosice University of Technology, Slovakia

Zhytomir Institute of Engineering and Technology, Ukraine

**Edited by
Mieczysław Korzyński**

Rzeszów, June 2008

Scientific Bulletins of Rzeszów University of Technology No 193, Mechanics 58

was printed in cooperation between:

Faculty of Mechanical Engineering and Aeronautics of Rzeszów University of Technology,
Poland

Faculty of Mechanical Engineering of Kosice University of Technology, Slovakia

Zhytomir Institute of Engineering and Technology, Ukraine

The papers were accepted by International Program Committee of the Conference without
essential corrections and authors responsibility.

Wydrukowano z matryc dostarczonych przez Komitet Organizacyjny.
Skład komputerowy: Mirosława Kaczor