

## PROGRAMME

10:00 – 11:00 Festive Opening Session

11:00 – 12:30 Session I

**Czesław Woźniak** (TUŁ, Łódź): *On the continuum modelling of functionally graded materials*

**Gerard Maugin** (UPMCurie, Paris): *On the conservation of material momentum and action in continuum thermomechanics*

**Gwidon Szefer** (TUC, Kraków): *Continuum molecular modelling of nanostructured materials*

12:30 – 14:00 Lunch

14:00 – 15:30 Session II

**Carlo Lai** (EUCENTRE, Pavia): *On the stability of the inversion of measured seismic wave velocities to estimate porosity in fluid-saturated porous media*

**Kolumban Hutter** (ETH Zürich): *A continuum formulation of dense pyroclastic flows: lava flow – from fluid ejection to solid deposition*

**Bettina Albers** (TU Berlin): *Linear wave propagation in unsaturated rocks and soils*

15:30 – 16:00 Coffee break

16:00 – 17:30 Session III

**Łukasz Turski** (PAN i UKSW, Warszawa): *Waves and dislocations*

**Pavel Krejci** (CAS, Prague): *Mechanical effects of freezing*

**Mieczysław Kuczma** (UZ, Zielona Góra): *Composite beams with embedded shape memory alloy*

## CONTINUOUS MEDIA WITH MICROSTRUCTURE

20 March 2010, Zielona Góra, Poland

### CONFERENCE VENUE

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Institute of Building Engineering  
University of Zielona Góra

### PROGRAMME COMMITTEE

Bettina Albers

Bożena Kuczma

Mieczysław Kuczma (chairman)

Krzysztof Kula

Jolanta Mazgajczyk

Tomasz Socha

Romuald Świtka (vice-chairman)

Waldemar Szajna (secretary)

# Continuous Media with Microstructure

Special Jubilee  
International Conference



Professor

**Krzysztof Wilmański**

70<sup>th</sup> Birthday Anniversary

Honorable Patronage:

Professor **Michał Kleiber**

*President of the Polish Academy of Sciences*

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20 March 2010, ZIELONA GÓRA, POLAND

<http://www.cmwm2010.ib.uz.zgora.pl>

## KRZYSZTOF WILMAŃSKI –THE SCIENTIST

**MAIN RESEARCH FIELDS:** axiomatic and kinetic foundations of continuum thermodynamics, theory of mixtures, phase transformations in solids, non-newtonian fluids, acoustic waves in continua, crystal plasticity and the evolution of textures, thermodynamics of porous materials.

### SCIENTIFIC BIOGRAPHY

- [1962] M.Sc. at Civil Engineering Department, Technical University of Łódź, Poland.
- [1965] Ph. D. Technical University of Łódź; field: Continuous Models of Discrete Systems.
- [1966–1986] Associate Professor and Professor at the Institute of Fundamental Technological Research, Polish Academy of Sciences, Warsaw.
- [1969–1970] Postgraduate at the John Hopkins University, Baltimore, USA.
- [1970] D. Sc. (Habilitation) in the Polish Academy of Sciences (IFTR, Warsaw); field: Nonlocal Continuum Mechanics.
- [1971] M.T. Huber Prize of the Polish Academy of Sciences for the work on axiomatic foundations of thermodynamics.
- [1972–1974] Visiting Professor at the College of Engineering, University of Bagdad, Iraq.
- [1979] Nomination to the Professor title.
- [1979–1980] Alexander von Humboldt Stipend at the University of Paderborn, the Technical University of Berlin.
- [1984] Fellow at “Wissenschaftskolleg zu Berlin”, Institute for Advanced Studies; collaboration with Prof. I. Müller, Prof. R. Rivlin, Prof. J. Kestin.
- [1985–1986] Contract Professor at the Technical University of Berlin.
- [1986–1987] Visiting Professor at the University of Paderborn.
- [1987–1990] Contract Professor at the Technical University of Hamburg-Harburg.
- [1990–1992] Contract Professor at the Technical University of Berlin.
- [1992–1996] Lecturer at the University of Essen.
- [1995] Habilitation – (*Venia legendi*) at the University of Essen.
- [1996–2005] Head of the Research Group at the Weierstrass Institute of Applied Analysis and Stochastics, Berlin.
- [1996] Habilitation (*Venia legendi*) at the Technical University of Berlin.
- [2005–] Professor of Mechanics at the University of Zielona Góra.

## KRZYSZTOF WILMAŃSKI –THE TEACHER

### RECENTLY PUBLISHED BOOKS:

- Thermomechanics of Continua, Springer, Heidelberg, Berlin, N.Y., 1998.
- Kinetic and Continuum Theories of Granular and Porous Media, (edited with: K. HUTTER), CISM Courses and Lectures No. 400, Springer Wien New York, 1999.
- Waves in Porous and Granular Materials: in: *Kinetic and Continuum Theories of Granular and Porous Media*, pp. 131-185, K. HUTTER, K. WILMAŃSKI (eds.), Springer Wien New York, 1999.
- Thermodynamics of Multicomponent Continua. In: *Earthquake Thermodynamics and Phase Transformations in the Earth's Interior*, J. MAJEWSKI and R. TEISSEYRE (eds.), pp. 567-655, Academic Press, San Diego, 2001.
- Surface Waves in Geomechanics: Direct and Inverse Modelling for Soils and Rocks, Springer Wien New York, 2005 (edited with C. LAI).
- Elastic Modelling of Surface Waves in Single and Multicomponent Systems, in: *Surface Waves in Geomechanics: Direct and Inverse Modelling for Soils and Rocks*, pp. 205-278, C. LAI, K. WILMAŃSKI (eds.), Springer Wien New York, 2005.
- Continuum Thermodynamics. Part I: Foundations, WorldScientific, Singapore, 2008.

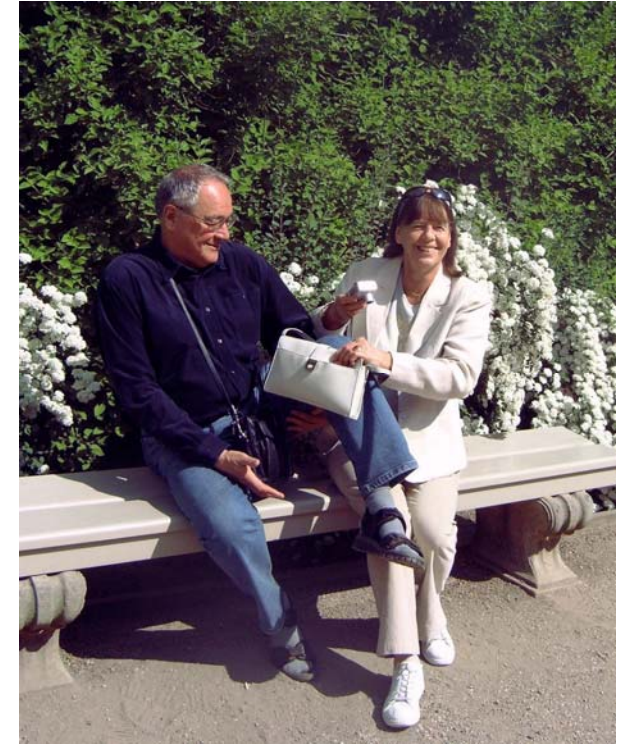


### TEACHING SUBJECTS

Undergraduate and graduate courses in: linear and nonlinear mechanics of continua, phenomenological thermodynamics, theory of propagation of linear and nonlinear waves in continua, theory of mixtures and of multicomponent systems, magnetohydrodynamics and macroscopic theory of electrolytes, extended thermodynamics, kinematic theory of gases.

## KRZYSZTOF WILMAŃSKI –THE MAN, HUSBAND AND FATHER

Born in Łódź, March, 1, 1940  
Wife - Anna Sosin (married in 1959)  
Two sons: - Paweł and Jan  
Friends - all over the world



with wife (Sanssouci 2008)



with sons and grandson (Christmas Eve 2008)