

**List of Sessions**

**Tuesday, September 3**

9:00-10:30	Plenary lectures	Room 1
11:00-13:00	Plasticity and Damage	Room 1
	System Optimization and Control	Room 2
14:30-16:30	Fracture Mechanic	Room 1
	Porous Media	Room 2
17:00-18:40	Composites	Room 1
	Discretization, Computation,Simulation	Room 2

**Wednesday, September 4**

9:00-10:30	Plenary lectures	Room 1
11:00-13:00	System dynamics	Room 1
	Material Identification and Shape Memory	Room 2
	Elasticity and Fracture	Room 3
14:30-16:30	Computational Methods in Micostructured Materials – Special Plenary AMAS Session	Room 1
17:00-18-40	Rail-Road Systems and Rigid Bodies	Room 1
	Soil / Rock / Mechanics	Room 2
	Experimental Methods	Room 3
18:40-19:10	<i>Information about the 6<sup>th</sup> Framework Programme of the Eurpean Union</i>	Room 1

**Thursday, September 5**

9:00-10:30	Plenary lectures	Room 1
11:00-13:00	Micro and Nano-Mechanics	Room 1
	Plates and Shells	Room 2
	Short Presentations of Posters	Room 3

**Friday, September 6**

9:00-10:30	Plenary lectures	Room 1
11:00-13:00	Elasticity and Thermoelasticity	Room 1
	Experimental Methods	Room 2
14:30-16:30	Mechanics in Engineering Practice – Special Plenary AMAS Session	Room 1
17:00-19:10	Structural Mechanics	Room 1
	Special Problems	Room 2

**Saturday, September 7**

9:00-10:40	System Optimization and Control	Room 1
	Plasticity and Damage	Room 2
11:00-12:20	Contact Problems	Room 1
	Biomechanics	Room 2

# Scientific Program

## Tuesday, September 3

08.30 - 09.00      **Opening**

09.00 - 10.30      **Plenary Lectures**

9:00	H. Petryk (Poland), <i>Material instabilities in inelastic solids</i>
9:45	B.F. Spencer (USA), <i>Smart damping technology: Applications and opportunities</i>

10.30 - 11.00      **Coffee Break**

11:00 - 13:00      **Morning Sessions**

Start	Room 1 <i>Plasticity and Damage</i>	Room 2 <i>System Optimization and Control</i>
11:00	<b>Glema A., Łodygowski T., Perzyna P.</b> <i>Physical and Numerical Aspects of Plastic Strain Localization- Dependence on Dispersive Properties of Solids</i>	<b>Garstecki A., Pozorski Z.</b> <i>Optimal Load and Support Conditions in Forced Periodic Vibrations Accounting for Damping</i>
11:20	<b>Tejchman J.</b> <i>Numerical Investigations of Shear Localizations in Earth Pressure Problems</i>	<b>Borkowski A., Grabska E., Nikodem P., Strug B.</b> <i>On Graph Grammar and Genetic Algorithms in Layout Optimization</i>
11:40	<b>Oliferuk W., Raniecki B.</b> <i>Theoretical and Empirical Analysis of Energy Storage Rate During Plastic Deformation of Polycrystalline Metal</i>	<b>Myśliński A.</b> <i>Shape Optimal Design of Dynamic Viscoelastic Contact Problems</i>
12:00	<b>Gambin W., Kowalczyk K.</b> <i>Influence of Elastic Anisotropy on Yield Surface of Crystals and Polycrystals</i>	<b>Paczkowski W. M., Jendo S., Badower A., Silicka E.</b> <i>Reliability based Discrete Polyoptimization of Steel Bar Shell Structures</i>
12:20	<b>Santaoja K.</b> <i>Description of Time-independent Plasticity Using the Principle of Maximal Rate of Entropy Production</i>	<b>Latański J.</b> <i>Laminate Ply Stacking Sequence Optimization with Fibres Orientation Imperfections</i>
12:40	<b>Korbel K.</b> <i>Mathematical Description of Finite Plastic Deformation due to the Sequence of Slips</i>	<b>Baksa A., Paczelt I.</b> <i>Different Solution Methods for Contact Optimization Problems</i>

13:00 - 14:30      **Lunch**

**14:30 - 16:30      Afternoon Sessions (Tuesday)**

<b>Start</b>	<b>Room 1 Fracture Mechanics</b>	<b>Room 2 Porous Media and Wood</b>
14:30	<b>Białas M., Mróz Z.</b> <i>Propagation of Cracks within Concrete Slabs under Cyclic and Monotonic Temperature Loading</i>	<b>Kowalski S.J., Rybicki A.</b> <i>Drying Induced Stresses with Rheological Aspect</i>
14:50	<b>Papenfuss C., Van P.</b> <i>Mesosopic Theory of Microcracks</i>	<b>Barvenov S.A., Taranchuk V. B.</b> <i>Numerical Methods of the Solving of Problems of a Multiphase Filtration in the Porous Medium</i>
15:10	<b>Kourkoulis S. K.</b> <i>The Process Zone around the Tip of Cracks in Metal Matrix Composites</i>	<b>Telega J.J. , Bielski W.</b> <i>Nonstationary Flow of Viscous Fluid through a Random Elastic Porous Medium</i>
15:30	<b>Podgorski J., Jonak J.</b> <i>Influence of the Limit State Criterion on Direction of the Crack Propagation in the Elastic- Brittle Material</i>	<b>Nustrov V. , Podoplelov V.</b> <i>Some Problems of Filtration Flows in Fissured Media</i>
15:50	<b>Fortino S., Bilotta A.</b> <i>A Finite Increment Formulation of the Coupled Displacement -crack Propagation Problem in Elastic Fracture</i>	<b>Musielak G., Kowalski S. J.</b> <i>Mechanical Effects in Drying of Wood and Ceramics-like Materials</i>
16:10	<b>Bhargava R.R., Bansal P.K.</b> <i>Closure Model for an External Crack Weaking a Plate</i>	<b>Shi-lin Yan, Long-yuan Li.</b> <i>An Equivalent Constitutive Model of Intermittent Jointed Rock Mass</i>

**16:30 - 17:00      Coffee Break**

**17:00 - 18:40      Afternoon Sessions (Tuesday)**

<b>Start</b>	<b>Room 1 Composites</b>	<b>Room 2 Discretization, Computation, Simulation</b>
17:00	<b>Haramburu E., Collombet F., Ferret B., Vignes J-S.</b> <i>Coupling Between Composite Material in Injected Parts and Manufacturing Process</i>	<b>Tolstykh A.I., Lipavskii M.V., Shirobokov D.</b> <i>A High-accuracy Discretization Method for Solid Mechanics</i>
17:20	<b>Marzano S., Piccioni M.D.</b> <i>Two Phase Deformation in Fiber Reinforced Materials</i>	<b>Kosinski W., Prokopowicz P.</b> <i>Fuzzy Logic and Fuzzy Numbers and their Applications in Approximation and Modelling</i>
17:40	<b>Szekeres A., Pramila A.</b> <i>Heat and Moisture in Solids (in Composites) Application of the Similarity Method</i>	<b>Yoshida S., Hoshi Y., Li Y.</b> <i>Particle Impact Simulation on Ceramic Gas Turbine Blade</i>
18:00	<b>Galka A., J.J Telega, R. Wojnar</b> <i>Effective Properties of Nonlinear Elastic Composites in the Presence of Thermodiffusion</i>	<b>Kim B.-K., Youn S.- K., Lee W.-S.</b> <i>FEA of Rubber Under Small Steady-State Vibration Superimposed on Large Static Deformation</i>
18:20	<b>Khoshravan M. R., Monir Vaghefi M.</b> <i>Numerical Evaluation of Delamination on Mode II in Glass Fiber Reinforced Composites</i>	<b>Andrianov I.V., Danishevs'kyi V.V., Tokarzewski S., Weichert D.</b> <i>Continuous Approximation of Discrete Media</i>

**19:00      Dinner**

**20:00      Welcome Party**

**Wednesday, September 4****09.00 - 10.30 Plenary Lectures**

<b>9:00</b>	<b>J.L. Chaboche (France), <i>Nonlinear multi-scale analysis of materials and structures: review of some "integrated methodologies"</i>.</b>
<b>9:45</b>	<b>G. Glinka (Canada), <i>Contemporary methods for the assessment of fatigue durability of metal components and structures.</i></b>

**10.30 - 11.00 Coffee Break****11:00 - 13:00 Morning Sessions (Wednesday)**

<b>Start</b>	<b>Room 1 System Dynamics</b>	<b>Room 2 Material Identification and Shape Memory</b>
11:00	<b>Szemplińska-Stupnicka W.</b> <i>(Sectional Lecture)</i> <i>From Weakly-Nonlinear to Chaotic Oscillations in Mechanical Systems</i>	<b>Mróz Z., Dems K.</b> <i>(Sectional Lecture)</i> <i>Application of Thermographic Methods in Defect Identification within Solid Body</i>
11:30	<b>Trębicki J., Sobczyk K.</b> <i>Stochastic Dynamics of Structures with Fatigue Accumulation and Random Properties</i>	<b>Nowak Z., Stachurski A.</b> <i>Identification of Material Functions of Void Nucleation in Steels During Tensile Deformation</i>
11:50	<b>Osiński J., Żach P.</b> <i>Dynamic Deformation Construction Made by Viscoelasticity Materials</i>	<b>Zagubień A., Kłosowski P.</b> <i>Identification of Viscoplastic Properties of Coated Technic Fabric "PANAMA"</i>
12:10	<b>Pielorz A.</b> <i>Dynamic Investigations of Discrete-continuous Systems with a Local Nonlinearity</i>	<b>Ziółkowski A., Raniecki B., Tanaka K.</b> <i>Kinetics of Stress Induced Phase Transformation under Plane Stress State in NiTi Alloy</i>
12:30	<b>Socha L.</b> <i>Policriterial Linearization for Stochastic Dynamic System</i>	<b>Tobushi H., Endo M., Ikawa T., Shimada D.</b> <i>Pseudoelastic Behaviour of TiNi Shape Memory Alloy under Stress-Controlled Subloop Loadings</i>
<b>Start</b>	<b>Room 3 Elasticity and Fracture</b>	
11:00	<b>Mishuris G.</b> <i>Various Imperfect Interfaces and Singular Stress Fields Near the Interface Crack Tip</i>	
11:20	<b>Kourkoulis S.K., Ninis N.</b> <i>The Post-Failure Behaviour as a Compatibility Criterion for Natural Building Stones: Application in Monument Restoration</i>	
11:40	<b>Gambin B., Nazarenko L.V., Telega J.J.</b> <i>Stationary Thermoelasticity and Stochastic Homogenization</i>	
12:00	<b>Telega J.J., Bytner S., Gambin B.</b> <i>Extremum Principles for Dynamical Piezoelectricity and Thermopiezoelectricity</i>	
12:20	<b>Brigadnov I.A.</b> <i>Limit Analysis in Non-linear Elasticity: Dual Method of Approach</i>	

**13:00 - 14:30 Lunch**

**14:30 - 16:30 Afternoon Sessions (Wednesday)**

**Plenary Session on:  
Computational Methods in Micostructured Materials – invited lectures  
(supported by Centre of Excellence for Advanced Materials and Structures AMAS)**

<b>14:30</b>	<b>Öberg S.</b> <i>Computational methods for modelling materials</i>
<b>15:00</b>	<b>Forest S. Cailletaud G.</b> <i>Large scale 3D computations of microstructures: numerical tools and applications</i>
<b>15:30</b>	<b>Stupkiewicz S., Petryk H.</b> <i>Computation of microstructure evolution in shape memory alloys under stress</i>
<b>16:00</b>	<b>Traczykowski P., Dłużewski Pawel, Postek E., Dłużewski Piotr</b> <i>Computer simulation of atomic positions in quantum dots by means of molecular dynamics</i>

**16:30 - 17:00 Coffee Break**

**17:00 - 18:40 Afternoon Sessions (Wednesday)**

<b>Start</b>	<b>Room 1 Rail-Road Systems and Rigid Bodies</b>
17:00	<b>Bogacz R., Bajer Cz.</b> <i>The Wear and Corrugations of Rails and Polygonization of Wheels</i>
17:20	<b>Adelaide L., Jourdan F., Bohatier C.</b> <i>Shock Law Modelling for Rigid Bodies and Space-time Finite Element Method</i>
17:40	<b>Kowalska Z.</b> <i>Vibro-impact Motion of Heavily Loaded Compact Hard Bodies</i>
18:00	<b>Jovanovic R., Radosavljevic A.</b> <i>Duration of High Skidding Rate Resulting in Crack Occurrence in Wheel Set Axles of Electric Locomotives</i>
<b>Start</b>	<b>Room 2 Soil / Rock / Mechanics</b>
17:00	<b>Mróz Z., Leśniewska D.</b> <i>Analysis of Shear Band Patterns in Soils Retained by Flexible Walls</i>
17:20	<b>Więckowski Z.</b> <i>The Material Point Method in Dynamic Analysis of Granular Flow</i>
17:40	<b>Maciejewski J., Jarzębowski A.</b> <i>The Influence of Teeth on the Earth-Working Processes.</i>
18:00	<b>Staroszczyk R.</b> <i>A Discrete-Grain Model for Dynamic Recrystallization of Polar Ice</i>
18:20	<b>Staroszczyk R., Hędzielski B.</b> <i>Determination of Forces Exerted on a Structure by a Floating Ice Cover</i>
<b>Start</b>	<b>Room 3 Experimental Methods</b>
17:00	<b>Rusinek A., Klepaczko J.R.</b> <i>Numerical Analysis of Size Effects in Dynamic Tension Tests</i>
17:20	<b>Dietrich L., Kowalewski Z.L., Socha G., Turski K.</b> <i>Behaviour of Metals under Non-proportional Cyclic Loading</i>
17:40	<b>Socha G., Dietrich L., Kowalewski Z.L, Turski K.</b> <i>Effects Induced in Metallic Alloys due to Reversible and Pulsating Propotional Cycling</i>

**18:40 Room 1**  
**A. Siemaszko; Head of National Contact Point (NCP) – Poland**  
*Information about the 6<sup>th</sup> Framework Programme of the European Union*

**19:10 Dinner**

**Thursday, September 5****09.00 - 10.30 - Plenary Lectures**

<b>9:00</b>	<b>S. Ghosh (USA), <i>Multi-level modelling of heterogeneous structures with evolving damage: An overview.</i></b>
<b>9:45</b>	<b>L.A., Bergman (USA), <i>Some recent results in moving load problems.</i></b>

**10.30 - 11.00 Coffee Break****11:00 - 13:00 Morning Sessions**

<b>Start</b>	<b>Room 1 Micro and Nano-Mechanics</b>
11:00	<b>Molinari A., F. El Houdaiguy, L. Toth</b> <i>Non-linear Inclusion Problem</i>
11:20	<b>Nappa L.</b> <i>Some Results in the Theory of Micromorphic Elasticity</i>
11:40	<b>Dłużewski P., Postek E., Jurczak G.</b> <i>Self-organization of Quantum Dots in Semiconductor Layers under Stress Field</i>
12:00	<b>Dłużewski P., Jurczak G., Maciejewski G., Kret S., Ruterana P., Nouet G.</b> <i>From HRTEM Micrographs of Misfit Dislocations to FE Modelling of Stress Distribution</i>

<b>Start</b>	<b>Room 2 Plates and Shells</b>
11:00	<b>Wiśniewski K., Turska E.</b> <i>(Sectional Lecture)</i> <i>On Second Order Parameters in Kinematics of Finite Rotation Shells</i>
11:30	<b>Szwabowicz M., Pietraszkiewicz W.</b> <i>Determining Deformed Position of a Thin Shell From Three Strains and Height Function</i>
11:50	<b>Sławianowska A., Telega J.J.</b> <i>Solutions of Dynamic Plate Problems Accounting for Asymptotic Correctors</i>
12:10	<b>Makowski J., Pietraszkiewicz W.</b> <i>Thermomechanics of Irregular Shells - Field Equations and Side Conditions</i>
12:30	<b>Kłosowski P., Bouhafs B., Woznica K.</b> <i>Large and Moderate Rotations in Static and Dynamic Analysis of Shells under Suddenly Applied and Thermal Loadings</i>

<b>Start</b>	<b>Room 3 Posters Presentation</b>
11:00	<i>5 min. for each poster presentation – details please find on the next page. Discussion at poster hall on Friday, Sept. 6 during the Coffee Breaks</i>

**13:00 - 14:30**      **Lunch****14:30 - 19:00**      **Relaxation afternoon****19:00**              **Dinner**

**POSTERS Thursday, September 5, Room 3, 11:00-13:00****Room 3 Posters presentation (5 min. for each poster).**

1	<b>Gadaj S.P., Nowacki W.K., Pieczynska E.A.</b> <i>Thermomechanical Coupling in Polymers- Experimental Study</i>
2	<b>Breczko T., Lempaszek A.</b> <i>Determination of Electrostriction in Gd<sub>2</sub>(MoO<sub>4</sub>)<sub>3</sub> Monocrystal</i>
3	<b>Grądzki R., Kowal-Michalska K.</b> <i>Behaviour of Metal-composite-metal Plates under In-plane Loading</i>
4	<b>Grądzki R., Kotelko M., Kowal-Michalska K., Kubiak T.</b> <i>Estimation of Load Carrying Capacity of Muti-layered Plates</i>
5	<b>Kotelko M.</b> <i>Post-failure Analysis of Muti-layered Plates</i>
6	<b>Łodygowski T., Oleszkiewicz E.</b> <i>Numerical Study on the Overall Behaviour of Fiber Reinforced Metal Matrix Composites</i>
7	<b>Stankiewicz A., Pamin J.</b> <i>Numerical Analysis of Instabilities in Geomaterials Using a Gradient -dependent Modified Cam-Clay Model</i>
8	<b>Turant J.</b> <i>Optimization of Reinforcing Flywheels Using a Hybrid Genetic Programming</i>
9	<b>Błachowski B., Gutkowski W.</b> <i>Vibration Control of Masts with Tendons</i>
10	<b>Gutkowski W., Holobut P.</b> <i>Control of a Hydraulically Actuated Robotic Arm</i>
11	<b>Gutkowski W., Zawidzka J.</b> <i>Stress Controlled Shape Optimization 2D Elastic Structures</i>
12	<b>Raniecki B., Nguyen H.V.</b> <i>On the Incremental Plastic Work and Related Aspects of Invariances</i>
13	<b>Bodaszewski W., Buczyński A.</b> <i>Domain Existence Limit Stress Discontinuity System in Oyane Porous Media</i>
14	<b>Cieszko M.</b> <i>Description of Fluid Motion in Permeable Porous Materials with Anisotropic Pore Space Structure. Application of Minkowski Space</i>
15	<b>Łukowski J., Kolodziej J.A.</b> <i>Determination of Formation Factor and Tortuosity for Model Porous Materials Filled with Electrolyte</i>
16	<b>Cieszko M., Kubik J., Pakuła M.</b> <i>Modelling of Waves Attenuation Induced by Scattering Effect in Elastic Porous Materials</i>
17	<b>Breczko T., Frączyk A.</b> <i>Changes in Elastic Field with Forming of Nano Structure</i>
18	<b>Mishuris G., Alexandrov S.</b> <i>Asymptotic Analysis of Planar and Axially Symmetric Radial Plastic flow of Composite Material</i>
19	<b>Śliwa R.E., Mishuris W., Mishuris G.</b> <i>Theoretical and Experimental Analysis of Compression of Two-layer Plastic Material</i>
20	<b>Tomczyk B.</b> <i>The Tolerance Model of Thin Partly-substructured Shells</i>
21	<b>Tauzowski P., Kleiber M.</b> <i>Parameter and Shape Optimization of Viscoelastic Bodies in Object-oriented Finite Element Environment</i>
22	<b>Mica L.</b> <i>Mathematical Modelling of Soil Reinforcement by Means of Geosynthetics</i>
23	<b>Malinowski J., Kowalewski Z.L.</b> <i>An Influence of Strain Rate on the Flow Stress of 34GS Steel Subjected to Slow and Impact Compression</i>
24	<b>Knabel J., Bielawski G., Siemaszko A.</b> <i>Reliability Analysis of Elastic-plastic Structures using Response Surface Methodology</i>
25	<b>Gawłowski S., Pęcherski R.B.</b> <i>Asymmetrical Bending of Elastic-plastic Beams</i>



**Friday, September 6**

**09.00 - 10.30 Plenary Lectures**

<b>9:00</b>	<b>A. Movchan (England), <i>Filtering of elastic waves within periodic structures.</i></b>
<b>9:45</b>	<b>S. Kowalski (Poland), <i>Mechanics associated with drying of wet porous media.</i></b>

**10.30 - 11.00 Coffee Break (poster discussion at poster hall)**

**11:00 - 13:00 Morning Sessions**

<b>Start</b>	<b>Room 1 Elasticity and Thermoelasticity</b>
11:00	<b>Ignaczak J.</b> <i>Saint-Venant's Principle for a Microperiodic Composite Thermoelastic Semispace - The Dynamical Refined Averaged Theory</i>
11:20	<b>Beda P.B.</b> <i>On the Effects of Nonlinearities on Material Instability at Finite Deformations</i>
11:40	<b>De Cicco S.,</b> <i>A Note on the Uniqueness of Solution in the Theory of Thermoelastic Materials with Void without Energy Dissipation</i>
12:00	<b>Beda Gy., Beda P.B.</b> <i>Higher Order Waves in Strain Gradient Theories of Material Instability</i>
12:20	<b>De Tommassi D., Foti P., Marzano S.</b> <i>Multiphase Deformations in Incompressible Elastic Bodies under Dead-load Traction</i>
12:40	<b>Tokarzowski S., Galka A., Andrianov I., Danishevsky V.</b> <i>Homogenized Torsional Modulus of a Viscoelastic Beam Reinforced with Thin Viscoelastic Fibres</i>

<b>Start</b>	<b>Room 2 Experimental Methods</b>
11:00	<b>Klepaczko J.R.</b> <i>(Sectional Lecture) Introduction To Dynamic Failure Mechanics</i>
11:30	<b>Pieczyska E.A., Gadaj S.P., Nowacki W.K.</b> <i>On Polymers Subjected to Loading with Relaxation Sequences</i>
11:50	<b>Kowalewski Z.L.</b> <i>A Method of Creep Data Analysis for Metals under Complex Stress State</i>
12:10	<b>Melcer J.</b> <i>Experimental Measurement of Vibrations due to Traffic</i>

**13:00 - 14:30 Lunch**

**14:30 - 16:30 Afternoon Sessions (Friday)**

**Plenary Session on:**

**Mechanics in Engineering Practice – invited lectures**

(supported by Centre of Excellence for Advanced Materials and Structures - AMAS)

<b>14:30</b>	<b>Gierliński J.</b> <i>Some applications of structural reliability in civil engineering</i>
<b>15:00</b>	<b>Grunevald J.-Y., Collombet F., Mulle M.</b> <i>Integrated approach for designing composite structures: a new industrial challenge</i>
<b>15:30</b>	<b>Winkler T.</b> <i>Designing methodology and mechanics in mining machines</i>
<b>16:00</b>	<b>Sawicki A.</b> <i>Applied mechanics against the arts of geotechnical and coastal engineering</i>

**16:30 - 17:00 Coffee Break (poster discussion at poster hall)**

**17:00 - 19:00 Afternoon Sessions (Friday)**

<b>Start</b>	<b>Room 1 Structural Mechanics</b>
17:00	<b>Kacianauskas R., Jaras A.</b> <i>Capacity and Stiffness Analysis of Bisteeel I-Section Beams</i>
17:20	<b>Janas M., Sokół-Supel J., Postek E.</b> <i>Unstable Flexural Response of Composite Slabs Under Imperfect Support Conditions</i>
17:40	<b>Gawłowski S., Peçherski R.</b> <i>Analysis of Load-capacity at Collapse of Thin-walled Beams with Open Cross-sections</i>
18:00	<b>Pencik J.</b> <i>Time-dependent and Materially Non-linear Analysis of Concrete Plane Frame Structures</i>

<b>Start</b>	<b>Room 2 Special Problems</b>
17:00	<b>Sławianowski J.</b> <i>(Sectional Lecture)</i> <i>Invariant Geodetic Systems on Lie Groups and Affine Models of Internal and Collective Degrees of Freedom</i>
17:30	<b>Larecki W., Banach Z.</b> <i>Internal State Variable Model of a Rigid Conductor of Heat Motivated by Phonon Gas Hydrodynamics</i>
17:50	<b>Zorski H.</b> <i>Statics and Thermostatistics of Discrete Peptide Chains</i>
18:10	<b>Lipniacki T.</b> <i>Forced Nonlinear Waves on Continuous DNA Chain</i>
18:30	<b>Wojnar R.</b> <i>Rearrangement of Pentagon-heptagon Dislocations in Grain Boundary During the Growth of Circular Inclusion</i>
18:50	<b>Tokarzewski S., Telega J.J., Pindor M., Gilewicz J.</b> <i>Estimation of real Transport Coefficients of Two-phase Media by Multipoint Pade Approximants</i>

**20:00 Conference Dinner**

## Saturday, September 7

### 9:00 - 10:40 Morning Sessions

Start	Room 1 System Optimization and Control	Room 2 Plasticity and Damage
9:00	<b>Paczkowski W. M., Silicki A., Silicka E.</b> <i>Polyoptimization of Truss Structures with the use of Satisfaction Method</i>	<b>Frischmuth K., Kosinski W.</b> <i>Thermomechanical Coupled Waves in a Viscoplastic Medium</i>
9:20	<b>Paczkowski W.M., Silicki A.</b> <i>Analysis of Efficiency of Stiffness Increase Means in Optimal Designing of Spatial Trusses</i>	<b>Dornowski W., Perzyna P.</b> <i>Macrocrack Propagation Along a Bimaterial Interface in Adiabatic Dynamic Processes</i>
9:40	<b>Korycki R.</b> <i>Optimal Structural Design with Different Description of the Radiation</i>	<b>Losilla G., Chache M., Bles G., Nowacki W.K., Favier D., Tourabi A.</b> <i>Small Offset-strain Yield Stresses- Experimental Results and Mechanical Modelling</i>
10:00	<b>Gresownik I., Rodic T., Stupkiewicz S., Cukjati D.</b> <i>Application of Optimization Techniques in Metal Forming</i>	<b>Kowalczyk K., Ostrowska-Maciejewska J.</b> <i>Limit Criteria for Elastic Anisotropic Materials with Constraints</i>
10:20	<b>Telega J.J., Tokarzewski S., Pindor M., Gilewicz J.</b> <i>Estimation of Complex Transport Coefficients of Two-phase Media by Multipoint Inclusions Regions</i>	<b>Kowalczyk K., Ostrowska-Maciejewska J., Pęcherski R.B.</b> <i>An Energy-based Yield Criterion for Materials of Cubic Elasticity and Orthotropic Limit State</i>

### 10.30 - 11.00 Coffee Break

### 11:00 - 12:20 Morning Sessions

Start	Room 1 Contact Problems	Room 2 Biomechanics
11:00	<b>Bogdański S.</b> <i>Quasi-static and Dynamic Response of a Rolling Contact Fatigue (RCF) Crack to the Moving Contact Load</i>	<b>John A., Kuś W., Orantek P.</b> <i>Layer Model of Human Pelvic Bone with Variable Material Coefficient</i>
11:20	<b>Zmitrowicz A.</b> <i>Three-body Contact Problems and Solution Algorithms</i>	<b>Piekarski J.</b> <i>A Model for Simultaneous internal and Shape Remodelling of Bone: aspects of numerical implementation</i>
11:40	<b>Stupkiewicz S.</b> <i>Sensitivity Analysis of Frictional Contact Problems in Penalty and Augmented Lagrangian Formulation</i>	<b>Kowalczyk P.</b> <i>Shape Optimization of Femoral Implant Including Material Anisotropy of Bone</i>
12:00	<b>Telega J.J., Galka A., Bielski W.</b> <i>Augmented Lagrangian Methods for Unilateral Contact Problems, Nonconvex Duality</i>	<b>Stańczyk M., Telega J.J.</b> <i>Polymerization Process of the PMMA Bone Cement: Experimental and Numerical Investigation</i>

### 13:00 Lunch