

Third Conference of the Euro-American Consortium for Promoting the Application of Mathematics in Technical and Natural Sciences, Albena, Bulgaria, June 20-25, 2011

## Minisymposium on **Stability, Vibrations and Control of Systems**

organized by

**Ardeshir Guran**

### ➤ **Speakers:**

**Claudia Timofte (ROMANIA)**

**Katrin Laas (ESTONIA)**

**Kamran Iqbal (USA)**

**Oleg Kirillov (Germany)**

**Nikolai Magnitskii (Russia)**

**Goodarz Ahmadi (USA)**

**Ako Sauga (ESTONIA)**

**Ardeshir Guran (CANADA)**

### ➤ **Titles and Authors:**

**On the Asymptotic Behavior of a Reaction-Diffusion System in a Porous Medium Micro-channel**  
**C. Timofte**

**Resonant Behavior of a Fractional Oscillator with Random Damping Micro-channel**  
**K. Laas, R. Mankin**

**Postural Stability Analysis and PID Controller Synthesis for Movement Coordination in a Multi-segment Biomechanical Model**  
**K. Iqbal**

**Paradoxes of Dissipation-Induced Instabilities in Mechanics and Physics**  
**O. N. Kirillov**

**The Universal Theory of Chaotic Dynamics With Applications in Nonlinear Differential Equations and Turbulence in Fluids**  
**N. A. Magnitskii**

**Computational Approaches to the Lorenz System**  
**A. Guran, G. Ahmadi**

**Energy Transfer in Ratchets Driven by Additive Trichotomous Noise**  
**A. Sauga, R. Mankin and D. Martila**

**The Static and Dynamic Stability of Carbon Nanotubes**  
**A. Guran**