



**БЪЛГАРСКО ДРУЖЕСТВО ПО БИОМЕХАНИКА
ИНСТИТУТ ПО МЕХАНИКА- БАН**

НАУЧНА ПРОГРАМА

**„Дни на Биомеханиката 2011”
03.11-04.11.2011 г**

3 ноември, четвъртък

Заседателна зала на Института по механика

9:30 – 10:00

Регистрация

10:00 – 10:10

Откриване – приветствие на Директора на Института по механика на БАН

10:10 – 10:40

Пленарен доклад – **R. Raikova**

Indeterminate problems in biomechanics: models of muscles and their control

10:40 – 11:00

Кафе пауза

11:00 – 12:00

Пленарни доклади:

L. Nikolov, S. Stoytchev

Computerized investigations on the kinetics of bioconversions in fixed films

N. Antonova

Methods in hemorheology

12:00 – 14:00

Почивка

Секция „Реология на биологични тъкани и флуиди”

Председатели: Н. Антонова, С. Николов

Зала 300 на Института по механика

14:00 – 14:20

M. Kirilova, V. Georgieva, D. Pashkouleva, V.Kavardzhikov, G. Georgiev

The influence of grafted polyzwitterions on the viscoelastic mechanical properties of hernia meshes

14:20 – 14:40

M. Antonova, S. Stoytchev

Stress-strain relations for rat thoracic aorta

14:40– 15:00

M.Kirilova

Experimental investigation of static and dynamic mechanical properties of soft biological tissues

15:00 – 15:20

I. Ivanov, Y. Gluhcheva, N. Antonova

Influence of incubation temperature and CoCl_2 concentration upon blood hemorheological properties and erythrocyte morphological parameters

15:20 – 15:40

Кафе пауза

Секция „Механика на биопроцесни системи”

Председатели: Л. Николов, С. Стойчев

Зала 300 на Института по механика

15:40 – 16:00

L. Nikolov

Creation and implementation of models in development of bioprocess systems with fixed films

16:00 – 16:20

R. Ivanova, G. Simeonov

An algorithm of identification of the parameters of Michaelis-Menten model of tissue respiration based on data from Warburg-type experiments

16:20 – 16:40

L. Nikolov, V. Mamatarkova

Need of knowledge about mechanics of the bioprocess systems with fixed films as basis of new developments and innovation

16:40 – 17:00

E. Petrova

Assessment of *Acidithiobacillus ferrooxidans* oxidation ability for ferric ions production in different modifications of nutrient medium

4 ноември, петък

Заседателна зала на Института по механика

Секция „Компютърни методи в биомеханиката”

Председатели: С. Стойчев, С. Николов

10:00 – 10:20

S.G. Nikolov, M.I. Nenov

Time delay model of miRNA regulation

10:20 – 10:40

G. Nikolova

Analytical study of the human extremities parameters via three different approaches

10:40 – 11:00

I. Edisonov, S. Ranchev

Prognosis, monitoring and prevention of the risk of postoperative infectious

11:00 – 11:30

Кафе пауза

Секция „Рехабилитационна биомеханика”

Председатели: Д. Чакъров, И. Венева

Заседателна зала на Института по механика

11:30 – 11:50

M. Tsveov, D. Chakarov

Analysis of controllable compliance joint with leaf spring

11:50 – 12:10

P. Kiriazov, I. Veneva, S. Karastanev

Controllability criteria in designing human assistive devices

12:10 -12:30

I. Veneva

Data management in gait analysis using autonomous system for control and monitoring

12:30 – 14:00

Почивка

Секция „Биомеханика и управление на движенията”

Председатели: Р. Райкова, П. Кирязов

Заседателна зала на Института по механика

14:00 – 14:20

Hr. Aladjov, D. Łochyński, D. Kaczmarek, R. Raikova

Experimental and modeling investigation of muscle activities during elbow flexion

14:20 – 14:40

G. Donkov, R. Raikova

Rat muscle model composed by 30 motor units - simulation of its force during different patterns of impulsation

14:40 – 15:00

P. Kiriazov, G. Nikolova, R. Antonova

Structure Identification in Motor Control of Human Motion

15:00 – 15:20

I. Yotov

Phase structure of a self-learning system of movements in shooting with cross back jumped step in handball

15:20 – 15:30

Закриване на конференцията