

**WELCOME**



to the 3<sup>rd</sup> **INTERNATIONAL CONFERENCE**

**"NONLINEAR DYNAMICS - 2010"**

*at the* **NATIONAL TECHNICAL UNIVERSITY  
"KHARKOV POLYTECHNICAL INSTITUTE"  
KHARKOV, UKRAINE**

Dear Colleagues,

The Organizing Committee of the 3<sup>rd</sup> ND-KhPI 2010 is pleased to invite you to participate at the Nonlinear Dynamics Conference to be held from **21** until **24 September, 2010**

Organized by:



**NATIONAL TECHNICAL UNIVERSITY  
"KHARKOV POLYTECHNICAL  
INSTITUTE"  
KHARKOV, UKRAINE**



**McGILL UNIVERSITY,  
MONTREAL, CANADA**



**INSTITUTE of MECHANICS, The NATIONAL ACADEMY of SCIENCE of UKRAINE  
NATIONAL COMMITTEE of UKRAINE on THEORETICAL and APPLIED MECHANICS**



**ABERDIN UNIVERSITY, UK  
CENTRE for APPLIED DYNAMICS  
RESEARCH in ABERDIN UNIVERSITY**



**GLASGOW UNIVERSITY  
GLASGOW, UK**

The conference official website: [http://kpispu.org.ua/en/ND2010\\_conference](http://kpispu.org.ua/en/ND2010_conference)



## SCOPE OF THE CONFERENCE

The objective of the Conference is to bring together scientists and engineers to present and discuss recent developments on the different problems of nonlinear dynamics

## MAIN TOPICS OF THE CONFERENCE

- ^* Analytical and numerical methods in nonlinear dynamics
- ^* Resonances, stability analysis and bifurcations in nonlinear systems
- ^* Nonlinear normal modes
- ^* Transient processes, localization of energy
- ^* Chaotic dynamics
- ^* Nonlinear dynamics of continuous systems, in particular, plates and shells
- ^* Vibro-impact systems and other non-smooth systems
- ^* Nonlinear Dynamics of Structures and Machines  
and other problems of engineering applications

In framework of the conference it will take place the **MINI-SYMPOSIUM**  
**«CREEP and PLASTICITY at CYCLIC LOADING»**

The main goal of the Mini-Symposium is focused on the discussion of problems on the behavior of structures, subjected by cyclic loading, with consideration of the creep & plastic strains. Constitutive equations which are suitable for these problems, as well as the methods of structural analysis, will be discussed.

All colleagues interested in organization of Mini-symposium, are welcome to send their propositions to the conference organizers.

THE WORKING LANGUAGE of the conference is **ENGLISH**.

## SUBMISSION OF ABSTRACT AND PRE-REGISTRATION FORM

Participants are invited to submit a Pre-Registration Form and the one-page Abstract before February, 28, 2010.

The ABSTRACT have to be sent (in the \*.doc, or \*.docx format) to the [Conference.kpi.nld@gmail.com](mailto:Conference.kpi.nld@gmail.com) e-mail. Only electronic submission is accepted.

Confirmation of acceptance will be provided by April, 9, 2010.

## PROCEEDINGS OF THE CONFERENCE

Authors of accepted presentations should send a 4-6 pages EXTENDED ABSTRACT by June, 6, 2010. Papers will be refereed and published in Proceedings of the conference.

Instructions for preparation of papers will be presented at the conference site. Participants will be provided by the conference Proceedings at the Conference.

## **NONLINEAR DYNAMICS 2010**



### **REGISTRATION PROCEDURE and FEES**

Participants of the conference will be asked to submit a REGISTRATION FORM and to pay a REGISTRATION FEE which is equal to \$300 for

participants and \$80 for accompanying persons (or an equivalent sum in EURO). It includes a publication in the conference Proceedings, attendance at all scientific sessions, lunches and coffee-breaks, social program and other organizational expenses. The fee should be paid before June, 6, 2010 by bank transfer (the bank account will be presented in January).

### **IMPORTANT DEADLINES**

February, 28, 2010	Pre-Registration, Submission of abstracts
April, 9, 2010	Acceptance notice of abstracts
June, 6, 2010	Registration, Submission of extended abstracts

### **ORGANIZING COMMITTEE**

- Prof. Tovazhnyansky, L.L., rector of the NTU “KhPI” - Chairman
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### **ADDRESS of the LOCAL ORGANIZING COMMITTEE**

Faculty of Physical Engineering  
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## ADDITIONAL INFORMATION

### **VENUE**

The conference will be held at the National Technical University “Kharkov Polytechnical Institute”.

**Kharkov** is situated in the east of Ukraine. It was founded in 1654. Kharkov is the second most important scientific and cultural center and the first machine-building center in Ukraine. Its population is about 1.5 million.

**National Technical University "Kharkov Polytechnical Institute"** (founded in 1885) has remarkable scientific traditions. Famous mathematicians A.M. Lyapunov and V.A. Steklov, the Nobel Prize laureate physicist L.D. Landau and other well-known scientists worked in this Institute. The University is situated in the center of the Kharkov city.

**The year 2010 is the 125-th anniversary of the University.**

### **TRAVEL**

Kharkov is easily accessible by plane or by train. It takes 5.5 hours to travel by daily train (twice per day) and about 8 hours by night train from Kiev. The train travel from Moscow to Kharkov is about 11 hours.

### **ACCOMMODATION**

Participants will be accommodated in the Kharkov hotels. You are welcome to order single or double rooms. More accommodation details will be presented at the conference Web site.

### **VISA**

The invitation to obtain the entry visa to Ukraine will be sent if needed.

For any problems we invite participants to contact with organizers by using the following e-mail addresses: Alexey Larin <[alexeya.larin@gmail.com](mailto:alexeya.larin@gmail.com)>

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**We look forward meeting you in Kharkov**