

The topics of the Conference

1. Mathematical modeling of:

- physical phenomena determining the effectiveness and distribution of heat input in welding heating;
- process of metal transfer in welding;
- formation and hydrodynamics of weld pool in fusion welding of solid and porous metals;
- solidification of weld pool, chemical composition of penetration zone and formation of chemical heterogeneity;
- kinetics of microstructural changes in single- and multipass welding;
- relationships chemical composition – microstructure – mechanical properties;
- kinetics of deformation processes within the temperature intervals of hot crack formation and conditions of their prevention;
- thermodeformation processes at pressure welding with account for high deformations;
- hydrogen transport in welded joints;
- estimation of cold (hydrogen) cracks formation risk;
- residual stresses and strains in multipass welding with account for changes in metal microstructure;
- degradation of properties of materials of welded joints under the action of high temperatures;
- simulation of process of identification of defects in welded joints using NDT methods.

2. Information technologies in welding, surfacing and deposition of coatings:

- Development of data bases of structural and welding materials characteristics for mathematical simulation of physical processes;
- Calculation and information systems for obtaining rational technological solutions;
- Internet in the field of welding and related technologies.

3. Computer technologies in welding and manufacturing.

Working languages of the Conference

Ukrainian, Russian, English.

To participate in the Conference, it is necessary to fill the Registration Form and send it to the Organizing Committee before June 23, 2014.

Requirements to the abstract preparation

Text should be presented using one of the working languages in Microsoft Word (font size 12, 1.5 spacing) on single page. Margin at the top – 2 cm, at the bottom, on the right and on the left – 3 cm. Title of paper should be printed in capital letters at the middle of line. Below, initials and names of authors, again below the affiliation, city, country are followed. Abstract should not contain formulas, tables, figures and photos.

Abstracts of the papers should be sent to E-mails: romanova@paton.kiev.ua or journal@paton.kiev.ua

Deadlines

1. Registration form and Abstracts	Before 23 June, 2014
2. Second call for papers	Before 01 July, 2014
3. Sending of invitations to the Conference and confirmation of participation	Before 15 July, 2014
4. Payment of Registration Fee	Before 16 September, 2014

Registration fee

The full Registration is €300 (€150 – for accompanying persons), €70 for students (without transfer).

The Registration Fee includes the preparation and publishing the Conference materials, coffee, tea during breaks between sessions, transfer from Odessa (railway station/airport) to Hotel «Kurortniy» and back, official dinner, banquet, as well as other organizing expenses.

The Registration Fee for the accompanying persons does not include the cost of the Conference Proceedings and Abstracts.

Hotel «Kurortniy»:

65009, Ukraine, Odessa, 2 Kurortniy alleyway

Tel.: (38048) 784-76-00, 784-76-00

E-mail: sales@inkurort.com

<http://inkurort.com>

Accommodation

Cost of one day of living in the Hotel «Kurortniy» is approximately:

- Room «Lux» – € 60;
- Single room – € 40;
- One bed in two-bed room – € 20.

Three meals a day is approximately € 20 and paid separately.

The more precise prices will be given in the Second call for papers.



Social Program

Participants and guests of the Conference will be offered different excursions on Odessa.

Information on obtaining visas to Ukraine, options for payment of the registration fee, more detailed description of the social program and other information may be received by e-mail of Organizing Committee.

REGISTRATION FORM

Family name _____

First name _____

Country _____

Organization _____

Scientific degree _____

Title of paper _____

Visit duration _____ days

Accompanying persons _____

Address for service _____

Telephone/Fax _____

E-mail: _____

I intend

- to present a plenary paper
- to present a poster paper
- to participate in the Conference without paper

Chairmans of Program Commitee

Prof. I. Krivtsun, PWI, Ukraine;
Prof. I. Pokhodnya, PWI, Ukraine.

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Prof. V. Sudnik, Tula State University, Russia;
Prof. G. Turichin, St.-Petersburg Technical University, Russia.

Organizing Committee

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<http://pwi-scientists.com/eng/mmi2014>

*The National Academy of Sciences of Ukraine
E. O. Paton Electric Welding Institute
International Association «Welding»*



7th International Conference

MATHEMATICAL MODELING AND INFORMATION TECHNOLOGIES IN WELDING AND RELATED PROCESSES

*The conference is dedicated to the memory
prof. V.I. Makhnenko*

The First Call for Papers

**Ukraine, Odessa
Hotel «Kurortniy»
15-19 September, 2014**