#### The topics of the Conference

## 1. Mathematical modeling of:

- processes of energy, pulse, mass and charge transfer in welding arcs;
- process of metal transfer in welding;
- thermal, electromagnetic, hydrodynamic and mass exchange processes taking place in welding, surfacing and coating deposition;
- stress-strain state of welded structures;
- kinetics of solid phase transformations in heat affect zone;
- formation of weld, heating, melting and transfer of electrode metal;
- solidification of weld metal and formation of chemical heterogeneity;
- interaction of highly-concentrated power sources with metal being welded;
- effect of external factors (magnetic field, current modulation, activating factors etc.) on welding process;
- defect detection in non-destructive methods of welded joint testing.

# 2. Information technologies in welding and related processes:

- data base of properties of structural materials and shielding gases;
- information-calculation systems for selection of welding consumables and mode parameters of welding, surfacing, coating deposition and other related processes;
- calculation software for mathematical physics equations in welding and affiliated processes.

# Working languages of the Conference:

Ukrainian, English, Russian.

To participate in the Conference, it is necessary to fill in the Registration Form and Abstracts of the papers and send them to the Organizing Committee before June 22, 2020.

#### Requirements to the abstract preparation

The 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 the 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 and Registration Form should be sent to E-mails: romanova@paton.kiev.ua or journal@paton.kiev.ua

Archive of the *Proceedings* of the nine previous MMITWRP conferences for the years 2002-2018 in the open access:

https://patonpublishinghouse.com/eng/proceedings/mmw

#### **Deadlines**

1.	Registration form and Abstracts	Before 22 June, 2020
2.	Second call for papers and confirmation of participation	Before 15 July, 2020
3.	Payment of Registration Fee	Before 14 September, 2020

The Registration Fee is  $\in$  300 ( $\in$  150 – for accompanying persons and students).

The Registration Fee includes the preparation and publishing the Conference materials, rent for the conference hall and the display equipment, coffee and tea during breaks between sessions, official dinner, banquet, as well as other organizing expenses.

#### Hotel «Arcadia»

65009, Ukraine, Odessa, Genuezskaya St., 24

Tel: +38 048 750 50 50

E-mail: reservation@hotel-arkadia.com

GPS: 46.437474, 30.756969 http://www.hotel-arkadia.com

#### Accommodation

The Conference will take place at the hotel «Arcadia», conference hall #3.

Participants will make their own reservations at «Arcadia» or other hotels in Odessa.

#### Social Program

Participants and guests of the Conference will be offered various guided tours in Odessa. The tour prices are not included in the participation fee.

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

X International Conference MMITWRP-2020

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

### Program Committee

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Prof. A. Akhonin, PWI, Ukraine;

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Prof. V. Sydorets, PWI, Ukraine.

## Organizing Committee

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







# X International Conference

# Mathematical Modeling and Information Technologies in Welding and Related Processes

Dedicated to the 150<sup>th</sup> anniversary of prof. E.O. Paton – founder of the first welding institute in the world



## The First Call for Papers

Ukraine, Odessa Hotel «Arcadia» 14-18 September, 2020

Information support:

«Automatic Welding»

«Electrometallurgy Today»

«Technical Diagnostics and Nondestructive Testing»

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