



# IV INTERNATIONAL SCIENTIFIC CONGRESS INNOVATIONS 2018

20 – 23 JUNE, 2018, VARNA, BULGARIA

## ORGANIZER

SCIENTIFIC-TECHNICAL UNION OF MECHANICAL ENGINEERING BULGARIA  
UNION OF SPECIALISTS IN QUALITY IN BULGARIA

## CO-ORGANIZERS

Federation of the Scientific-Technical Unions in Bulgaria  
Technical University – Sofia  
Technical University – Gabrovo  
Ruse University „Angel Kanchev”  
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Society of Polish Mechanical Engineers and Technicians (SIMP) – Poland  
Association of Mechanical Engineers - Slovakia  
Scientific – Technical Association - China  
Union of Mechanical Engineers – Ukraine

## WITH THE SUPPORT OF

National Scientific-Technical Societies: Automation of Discrete Production Society  
Institute for scientific and applied research and technology  
Office of Technology Transfer of SCIENTIFIC-TECHNICAL UNION OF MECHANICAL ENGINEERING

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### **INTERNATIONAL ORGANIZING COMMITTEE**

#### **HONORARY CHAIRMAN:**

Assoc.Prof.Pantcho Tomov    Technical University - Sofia (BG)

#### **MEMBERS:**

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### **INVITATION**

Dear colleagues,

The forthcoming IV International scientific congress “**Innovations 2018**”, which will take place from June 20 to June 23, 2018 in the city of Varna, is aimed at giving place of meeting for scientists of different countries, where they can represent their scientific achievements and discuss the matters of innovations.

The human development has been always based on the ideas. They are moving forward the industry and the society as a whole.

We want to be a little part of the efforts at technological progress, at implementation of the innovative ideas into products and services, which create growth and working places for the constitution of one more just and fair society.

The congress will give the possibility of new acquaintances and friendships, which will boost the formation of new ideas.

We invite also the industrial companies as to participate in the discussions on the problems of innovations in machine-building, as well as to present at the congress or by advertisements on the congress papers their innovative products, technologies, materials and services.

The program of the congress will also give you the opportunity for relaxation, amusements and becoming acquainted with the Black Sea charm.

***Prof. D.Sc. Dimitar Damianov,  
Chairman of the International Program Committee***

***Prof. D.Sc. DHC Georgi Popov,  
President of Bulgarian Scientific-Technical Union of Mechanical Engineering,  
Prof. D.Sc. Georgi Tasev,  
President of the Union of Specialists in Quality in Bulgaria***

## **SCIENTIFIC PROGRAMME**

### **SUBJECTS**

#### **1. THEORETICAL PROBLEMS IN INNOVATIONS**

Knowledge and creativity. Knowledge management. Creative process and creative products. Creative techniques. Connection between creativity and innovations. Process of generating ideas and implementation of ideas into an innovative conception and innovations.

Principles and objective laws of the development and management of innovative processes. Innovation cycle. Innovation degrees of products and processes – assessment criteria. Technology of innovations and innovative production systems.

Open innovations. Knowledge and innovation transfer. Knowledge and innovation audit.

#### **2. INNOVATION POLICY AND INNOVATION MANAGEMENT**

Innovation policy and mechanisms of its implementation. Innovation activity and innovation development. Innovation infrastructure. Technological centers and offices for innovation technology transfer. Innovation networks and global innovation policy.

Functions of the innovation management. Methods and forms. Planning and forecasting. Management of innovations – theory and practice. Conflict management in the innovation activities. Innovative entrepreneurship. Innovative projects. Investment management in the innovation activities.

Market realization of innovative products. Intellectual property.

Education. Innovation games. Models of improving qualification. The personal factor's role in the innovation activities.

#### **3. INNOVATIVE SOLUTIONS**

Intellectual industrial technologies. Advanced machine-building technologies. Laser, plasma, ultrasonic, radiation and optic technologies. Additive technologies and additive production. Digital production of optimal products of metal, polymers, composites and ceramics.

Virtual engineering technologies and simulations. Information and computer technologies. Robotics, artificial intelligence, radio-electronics, instrument engineering. Communication and navigation engineering and technologies. Mathematical modelling and supercomputer engineering.

Materials, structures, systems - SMART technologies. Powder and plasma metallurgy, rigid-body physics, rigid-body mechanics and rigid-body chemistry. Composition materials and coatings, strengthening technologies. Nanotechnologies, nanoelectronics, nanometrology, nano-equipment and nanoindustry.

Ecologically clean technologies. Waste treatment. Solar and hydrogen power engineering. Energy recuperation.

Research, design, use and maintenance of agricultural machinery. Sustainable development and environmental aspects of agricultural production. Mechanisation and Electrification of Agriculture. Geology and geophysics. Mining and processing of mineral raw materials. Mechanization, electrification and automation in mines.

Research and improving the operational performance of vehicles. Efficiency, safety and sustainable transport. Electric vehicles and eco mobility. Diagnostics and repair of transport vehicles. Creation of new and advanced design and process management in the oil refining and petrochemical, chemical, metallurgical, plastic and rubber, paper, textile, leather, pharmaceutical and others industries. Creation of new highly effective materials for the technique and household by using organic and inorganic technologies.

Education - the role of technological thinking to the development of humanity. Language Technology.

Organizational and social innovations. Other innovative solutions.

*The official language of the IV International Congress “Innovations 2018” is English.*

## CALL FOR PAPERS

Scientists from all over the world are kindly invited to present the results of their researches in the plenary, section and poster sessions.

**Paper’s abstract** up to 200-350 words, **written in English**, in .doc or .docx format, with up to 10 keywords, authors’ names and titles, occupation and e-mail address, together with the *Author’s Response* (**Form A**) or the [online registration](#) has to be sent to the Organizing Committee not later than **31.03. 2018**.

The Author’s response **Form A** will be registered in the section [“Received Abstracts and Papers”](#) of the congress web-site and a registration number will be given the paper. The Organizing Committee will be appreciated, if the authors use this registration number in the further correspondence and if the files sent also begin with this number and the phrase **“IM”**. For example: **131\_Spenser\_IM.doc**.

Authors of the approved papers will be informed about the Program Committee’s decision not later than **05.04. 2018**.

Only papers formatted in accordance with the **graphical** and **text** instructions, accepted peer-reviewed and presented at the oral and poster congress sections will be published.

**The full text papers** up to 4 pages, written in English, must be sent not later than **15.05.2018** by email, together with the Application form for participation (**Form B**) or [online registration](#). The name of the paper’s file has to consist of the registration number, author’s name and the phrase **“IM”**. For example: **“131\_Spenser\_IM.doc”**

**If the authors cannot participate personally in the Congress, they can participate in the poster session.** In that case the author should pay only the publication fee and the paper will be published in the congress journals. The poster papers have to be formatted according to the poster [graphical](#) and [text](#) instructions. They should be sent by e-mail until **10.06.2018** so the papers could be presented at the Congress. The Organizing Committee takes the obligation to print the poster and to include it in the poster session.

All instructions can be found on the congress website: [www.innova-eng.eu](http://www.innova-eng.eu). An example of the title page can be downloaded there, so the authors could write easy the whole paper according to the requirements.

## PUBLICATIONS

All papers included in the congress scientific program will be published as follows:

- **All reports will be published** in separate volumes for each subject session of „**International Scientific Congress „INNOVATIONS” - ISSN 2535-0285 (Print), ISSN 2535-0234 (Online)**”. The volumes will be deposited at the Saints Cyril and Methodius National Library, as well as at the National Scientific and Technical Library
  - **Papers written in English:** in the separate issue of the international scientific journals ([www.stumejournals.com](http://www.stumejournals.com)) according to the themes of the reports:
    - "[Machines.Technologies.Materials](#)" (Print ISSN 1313-0226, Web ISSN 1314-507X)
    - "[Innovations](#)" (Print ISSN 1314-8907, Web ISSN 2534-8469)
    - "[Materials Science. Non-Equilibrium Phase Transformations](#)" (Print ISSN 2367-749X, Web ISSN 2534-8477)
    - "[Science.Business.Society](#)" ( Print ISSN 1313-0226, Web ISSN 2534-8485)
    - "[Industry 4.0](#)" (Print ISSN 2534-8582, Web ISSN 2534-8582)
- **CD** containing all the papers.

## FEES AND PAYMENTS

Fee	Euro	
	Until 15.05.2018	After 15.05.2018
<b>1. Congress Fees:</b> <b>1.1 Participation fee for the IV International congress “Innovations 2018”.</b> <b>Includes:</b> “Welcome” cocktail, congress materials, coffee breaks, publication in international scientific journals according to the themes of the reports and in the periodical „ <b>International Scientific Congress „INNOVATIONS” - ISSN 2535-0285 (Print), ISSN 2535-0234 (Online)</b> ”, CD with all papers. <b>1.2.</b> For the second and third paper, you pay only the publishing fee	<b>150/100*</b> <i>* fee for Young scientists up to the age of 35.</i>	<b>200/140*</b> <i>* fee for Young scientists up to the age of 35.</i>
	<b>90</b>	<b>130</b>
<b>02. Accompanying person (coauthors included)</b> <b>Includes:</b> “Welcome” cocktail, congress materials, coffee breaks	<b>75</b>	<b>100</b>
<b>03. Publication fee</b> (For authors who will participate with posters) <b>Includes:</b> publication in international scientific journals according to the themes of the reports and in the periodical „ <b>International Scientific Congress „INNOVATIONS” - ISSN 2535-0285 (Print), ISSN 2535-0234 (Online)</b> ”, CD with all papers, presented at the congress and A1print of the poster paper.	<b>90</b>	<b>130</b>
<b>04. Additional payments:</b> <b>4.1</b> to receive the volume of the journal (congress proceedings) at the Congress <b>4.2</b> to receive the journal (congress proceedings) by mail;	<b>20</b>	<b>20</b>
	<b>30</b>	<b>30</b>

## PAYMENT FOR NIGHT’S LODGING

**Aqua Azur Hotel \*\*\*\***

Standard rate per night : single room – 40 EURO, double room – 55 EURO.

## PAYMENTS

**Bank transfer** to the account of the Scientific and Technical Union of Mechanical Engineering at ProCredit Bank:

**IBAN: BG53 PRCB 9230 1449 8985 01, BIC: PRCBBGSF**

**Beneficiary:** NTS mashinostroene „Industry-4.0”

Please write in the payment document “IM18” and your registration number which you may find here: [www.innova-eng.eu](http://www.innova-eng.eu) in the section “[Received abstracts and papers](#)”

**In cash** at the office of the Scientific and Technical Union of Mechanical Engineering: 1000 Sofia, 108 “G. S. Rakovski” str. Office №411.

All bank charges related to the transfer are borne by the participant.

**IMPORTANT NOTICE:**

**1. All bank fees, in regards to the transaction are paid by the participant.**

## GENERAL INFORMATION

### THE VENUE

Registration, opening, plenary and sectional sessions: Hotel "Aqua Azur" \*\*\*\*.  
Address: Varna, PO Box 9006, Resort "St. Konstantin and Elena "

### ACCOMODATION

#### Hotel “Aqua Azur” \*\*\*\*

If arriving by car you may use the GPS coordinates of the hotel "Aqua Azur":

**N 43grad 14,277'**

**EO 28grad 00,828'**

### TIME TABLE

**20.06.2018 (Wednesday)** Registration of the participants.

**21.06.2018 (Thursday)** Opening ceremony 10:00. Plenary session. Congress sessions. Special Congress Sub-sections. Poster session. Welcome party.

**22.06.2018 (Friday)** 09:00 Congress sessions. Closing of the Congress.

**23.06.2018 (Saturday)** Departure of the participants.

### PUBLIC TRANSPORT

From the airport to the hotel "Aqua Azur": there is a direct bus line 409 (23<sup>th</sup> stop "Minyor").

From the bus station to the hotel "Aqua Azur": there is a direct bus line 409 (16-th stop "Minyor").

From the railway station to the hotel "Aqua Azur" - Bus 9 (the last stop in the center of the resort "St. St. Konstantin and Elena". The hotel "Aqua Azur" is 250 meters away.

### REGISTRATION

In the lobby of the hotel "Aqua Azur“

**20.06.2018** from **16.00** to **20.00** and

**21.06.2018** from **08.00** to **10.00**.

### ENTRY TO BULGARIA

Visitors from the European Union coming to Bulgaria need an identity document.

Visitors from other countries require an entry visa.

Visitors are recommended to contact the Bulgarian Embassy (you can find them on: <http://www.mfa.bg/en/> or Consulate in their own country for information on visa requirements. If an official letter of invitation is requested, please contact the Congress Secretariat in due time (before the registration deadline).

### TIME

Bulgaria is in the Eastern European Time Zone (GMT+2)

## WEATHER

**Air temperature:** in this period June - 27 °C – 30 °C.

**Sea temperature:** in this period June - 24 °C

Check the weather in real time here: <http://weather.bg/indexen.php>

## CURRENCY

The official currency is the lev (plural: leva).

1 euro = 1.95583 lev

All major credit cards (e.g. VISA, MasterCard, Eurocard) are usually accepted in Bulgaria

## EMERGENCY SERVICES

Uniform European telephone number for emergency situations: **112**

## DEADLINES

The Abstract of the paper and Author's Response <a href="#">Form "A"</a> or <a href="#">online registration</a> should be sent up to	<b>31.03.2018</b>
Confirmation of the abstract approval	<b>05.04.2018</b>
The Full text of the paper(s) and Participation <a href="#">Form "B"</a> or <a href="#">online registration</a> should be sent up to	<b>15.05.2018</b>
Payment of the Congress fees	<b>15.05.2018</b>
Announcement of the Congress program on the web page: <a href="http://www.innova-eng.eu">www.innova-eng.eu</a>	<b>10.06.2018</b>
The Organizing Committee will receive posters up to	<b>10.06.2018</b>
Registration of the participants	16.00 - 20.00 h 08.00 - 10.00 h
	<b>20.06.2018</b> <b>21.06.2018</b>
Opening of the Congress	10.00 h
	<b>21.06.2018</b>
Departure of the participants	<b>23.06.2018</b>

## CONGRESS SECRETARIATE

Scientific-Technical Union of Mechanical Engineering

108 Rakovski str., 1000 Sofia

tel./fax (+359 2) 986 22 40, tel. (+359 2) 987 72 90

Mobile: +359 888003582

[office@innova-eng.eu](mailto:office@innova-eng.eu), [www.innova-eng.eu](http://www.innova-eng.eu)