



# II INTERNATIONAL SCIENTIFIC CONGRESS INNOVATIONS IN ENGINEERING

20 – 23 JUNE, 2016, VARNA, BULGARIA

---

## ORGANIZER

**SCIENTIFIC-TECHNICAL UNION OF MECHANICAL ENGINEERING BULGARIA**

## CO-ORGANIZERS

Federation of the Scientific-Technical Unions in Bulgaria  
Technical University – Sofia  
Technical University – Gabrovo  
Ruse University „Angel Kanchev”  
Technical University – Varna  
”Todor Kableshkov” Higher School of Transport  
University of Chemical Technology and Metallurgy – Sofia  
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**

## INTERNATIONAL PROGRAM COMMITTEE

### CHAIRMAN:

**Prof. Dimitar Damianov** Bulgaria

### VICE-CHAIRMAN:

**Prof. Kiril Angelov** Bulgaria

### MEMBERS:

**Assoc.Prof.Alexander Skaskevich** Belarus  
**Prof. Andrzej Golabczak** Poland  
**Prof.Askar Kamerbaev** Kazakhstan  
**Prof.Atanas Kochov** Macedonia  
**Prof.Auezchan Turdaliev** Kazakhstan  
**Prof.Vesko Panov** Bulgaria  
**Prof.Vasil Kostadinov** Bulgaria  
**Prof.Wolfgang Drechsler** Estonia  
**Prof. Günay Anlas** Tukey  
**Prof.Galina Alekseevna** Russia  
**Prof.Diana Antonova** Bulgaria  
**Prof.Dimcho Chakarski** Bulgaria  
**Prof. Zvonimir Guzović** Croatia  
**Prof.Ivan Dimitrov** Bulgaria

<b>Prof.Lubomir Dimitrov</b>	Bulgaria
<b>Prof.Ivan Lamin</b>	Russia
<b>Prof.Ivo Malakov</b>	Bulgaria
<b>Prof.Igor Kuzo</b>	Ukraine
<b>Prof.Kakha Demeretashwili</b>	Georgia
<b>Prof.Predrag Dašić</b>	Serbia
<b>Prof.Silvio Makuka</b>	Romania
<b>Prof.Simeon Simeonov</b>	Slovakia
<b>Prof. Sreten Savićević</b>	Montenegro
<b>Prof.Stefan Kartunov</b>	Bulgaria
<b>Prof.Stojance Nusev</b>	Macedonia
<b>Prof.Uwe Füssel</b>	Germany
<b>Prof.Hristo Shehtov</b>	Bulgaria
<b>Assoc.Prof.Jurate Cerneviciute</b>	Lithuania

### NATIONAL ORGANIZING COMMITTEE

#### HONORARY CHAIRMAN:

Assoc.Prof.Pantcho Tomov    Technical University - Sofia

#### MEMBERS:

Assoc.Prof.Tanya Vakarelska	Technical University - Sofia
Assoc.Prof.Mihaela Topalova	Technical University – Sofia, Branch Sliven
Assoc.Prof.Vanya Georgieva	Technical University - Sofia
Assoc.Prof.Reni Dimitrova	Technical University - Sofia
Dr. Sijka Demireva	Technical University - Varna
Dr. Petko Engiosov	University „Prof.Asen Zlatarov” - Burgas

### INVITATION

Dear colleagues,

The forthcoming II International scientific congress “**Innovations in Engineering 2016**”, which will take place from June 20 to June 23, 2016 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. DHC Georgi Popov,**  
**President of Bulgarian Scientific-Technical Union of Mechanical Engineering,**  
**Prof. D.Sc. Dimitar Damianov,**  
**Chairman of the International Program Committee**

# 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 IN THE MACHINE-BUILDING

Innovative solutions in the general and the branch machine-building. Ecological and energy-saving technologies.

Innovative solutions through automation of production processes. Robots and robotized operations. Mechatronics.

Innovative technologies for computer-aided design and 3D systems. Innovative basis of the CALS systems for tracing of product, beginning from its concept until its falling out of use.

Innovative solutions in the nanotechnologies and the materials science.

Strengthening technologies and functional coatings.

Control and measurement systems. Sensors.

Organizational and social innovations in the machine-building. Other innovative solutions.

*The official language of the II International Congress "Innovations in Engineering 2016" 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 **28.02. 2016**.

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 **05.03. 2016**.

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 **30.04.2016** 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 **10.06.2016** 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 **Scientific Announcements of the Scientific-Technical Union of Mechanical Engineering** (ISSN 1310-3946). 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 journal [„Innovations in discrete productions”](#) (ISSN 1314-8907).
- **CD** containing all the papers.

## FEES AND PAYMENTS

Fee	Euro	
	Until 30.04.2016	After 30.04.2016
<b>1. Congress Fees:</b> <b>1.1 Participation fee for the II International congress “Innovations in Engineering 2016”.</b> <b>Includes:</b> “Welcome” cocktail, congress materials, coffee breaks, publication in the International scientific journal “ <b>Innovation in Discrete Production</b> ” and in the periodical “ <b>Scientific Proceedings of Scientific-Technical Union of Mechanical Engineering</b> ”, ISSN 1310-3946, 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 the international scientific journal “ <b>Innovation in Discrete Production</b> ” and in the periodical “ <b>Scientific Proceedings of Scientific-Technical Union of Mechanical Engineering</b> ”, ISSN 1310-3946, 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 – 35 EURO, double room – 45 EURO.

### PAYMENTS

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

**IBAN: BG20 PRCB 9230 140779 0813, BIC: PRCBBGSF**

**Beneficiary:** NTS mashinostroene

Please write in the payment document “IM16” 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

**20.06.2016 (Monday)** Registration of the participants.

**21.06.2016 (Tuesday)** Opening ceremony 10:00. Plenary session. Congress sessions. Special Congress Sub-sections. Poster session. Welcome party.

**22.06.2016 (Wednesday)** 09:00 Congress sessions. Closing of the Congress.

**23.06.2016 (Thursday)** 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"

**20.06.2016** from **16.00** to **20.00** and

**21.06.2016** 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:** on 20.06.2015 - 27,9 °C and on 22.06.2015 – 27,2 °C.

**Sea temperature:** on 20 and 22.06.2015 - 23 °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

<b>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>	<b>28.02.2016</b>
<b>Confirmation of the abstract approval</b>	<b>05.03.2016</b>
<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>	<b>30.04.2016</b>
<b>Payment of the Congress fees</b>	<b>30.04.2016</b>
<b>Announcement of the Congress program on the web page: <a href="http://www.innova-eng.eu">www.innova-eng.eu</a></b>	<b>10.06.2016</b>
<b>The Organizing Committee will receive posters up to</b>	<b>10.06.2016</b>
<b>Registration of the participants</b>	<b>16.00 - 20.00 h</b> <b>20.06.2016</b>
	<b>08.00 - 10.00 h</b> <b>21.06.2016</b>
<b>Opening of the Congress</b>	<b>10.00 h</b> <b>21.06.2016</b>
<b>Departure of the participants</b>	<b>23.06.2016</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)