

# 2<sup>nd</sup> International Conference on Vehicle and Automotive Engineering VAE2018



23-25. May 2018. University of Miskolc, Hungary

# Call for papers

We are calling for papers on the technical topics that are related to vehicle and automotive engineering. The aim of the conference is to bring together the experts from both the academic and industrial areas. With reference to the automotive industry in Hungary, many global automotive suppliers and manufacturers have production and R+D facilities here, such as AUDI, BOSCH, MERCEDES-BENZ, OPEL, SUZUKI, TAKATA, etc.

# Main branches of topics of the conference:

# • A. Conventional Powertrain & Emission

Gasoline engines & emissions, Diesel engines & emissions, Transmissions, simulation, Virtual design and testing, Fuels & lubricants

### • B. Alternative Powertrains

Hybrid vehicles, Electric vehicles, Fuel cell vehicles

## • C. Vehicle Dynamics

o Suspension, steering & brakes, Tyres, Advanced dynamic vehicle control, Advanced driver assistant systems, Stability

# • D. Materials & Manufacturing

o Advanced materials and innovations in manufacturing. Metal parts forming, joining and casting technologies. Coating, Wear, Corrosion Protection and Surface Engineering. Fatigue, Fracture, Failure and Testing of Materials and Structural Parts. Prototype building. Flexible processes. Supply chain and logistics.

#### • E. Vehicle Electronics

o Engine control, Voice and motion recognition, Vehicle tracking and monitoring, Suspension control, Brakes management

#### • F. Autonomous vehicles

o Autonomous & connected vehicles, Artificial intelligence, Internet of Things (IoT), Applications in Smart Cities, Future Trends and Emerging Technologies

#### G. Noise & Vibration

 Engine noise, Tyre noise, Other sources of noise, Measurement techniques, Simulation and analysis

## • H. Active and Passive Safety

Structural crashworthiness, Biomechanics, Test Methods, Safety management, Accident reconstruction, Traffic and human factors, Fire safety

## • I. Sustainability

Standards and regulations, Design for environment, Virtual design and testing, Inspection and maintenance, Life cycle assessment, Recycling

# • <u>J. Education</u>

 Vehicle and automotive engineering education, Dual training, Industrial practice, Educational aids

# • K. Design of Vehicle Structures and Surfaces

Geometric modelling, Design and reconstruction of vehicle structures, and surfaces, Evaluation and correction of vehicle surfaces, Computer, graphics and image processing in visualization and design, 3D printing, and prototyping in vehicle development

## • L. Optimization

o Topology optimization, shape optimization, sizing. Optimization methods, cost calculation.

The conference language is English. One person can have max. one lecture and one poster.

#### **Publication of Papers**

All papers are peer-reviewed and the accepted ones will be published in the *Lecture Notes in Mechanical Engineering series*, published by *Springer Verlag*, indexed by Scopus, as is was on the previous conference. The homepage of the series is as follows: <a href="http://www.springer.com/series/11236">http://www.springer.com/series/11236</a> The Proceedings will be available to all registered participants electronically upon arrival at the Conference. Paper length is minimum 6 pages, maximum 15 pages.

#### Advertisements

Those companies, who would like to show their activities, related to the conference, a poster show is available. A poster size is 1x2 m. In the Program book one can have one/some pages also for introducing themselves. Please contact to the organizers.

### **University of Miskolc**

The history of the university is dated back to 1735, when it was established. The world's first higher education institution on technology, the Mining Academy of Selmecbánya, represented special knowledge and value. Nowadays it has seven faculties. Among them is the Mechanical engineering and informatics, Material science and Earth science faculties. There are about 10000 students at the university.

#### Time schedule

| Event                 | Deadline           |
|-----------------------|--------------------|
| Call for papers       |                    |
| Abstract submission   | October 20. 2017.  |
| Abstract acceptance   | November 15. 2017. |
| Full paper submission | December 1. 2017.  |
| Full paper acceptance | January 20. 2018.  |
| Conference            | May 23-24. 2018.   |

The abstracts must be written and presented in **English** language only. The abstract text must be between **300 and 500 words.** 

Registration fee: 390 Euro up to January 20. 2018, for PhD students 330 Euro

**490 Euro** after January 20. 2018, for PhD students 430 Euro

**200 Euro** for accompanying persons

#### For further details, please contact:

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