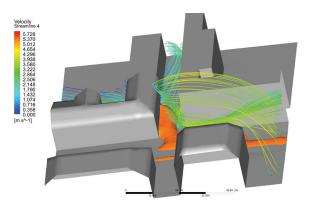
# ABOUT SZE JKK

The Research Centre of Vehicle Industry based at Széchenyi István University aims at providing appropriate research and development cooperation between automotive partners and higher education involving:

- Basic and targeted elementary research;
- Ensuring R&D human resources and services;
- Improvement of R&D services;
- Common work in research and innovation;
- Establishing R&D and innovation activities with infrastructure.

The Research Centre of Vehicle Industry has been operating since May 2011 and consists of the following research groups: Vehicle Dynamics, Vehicle Electronics, Electronic Vehicle Powertrain, Simulation and Optimization. These groups give an excellent background for the planned basic and targeted research on the topics of modelling and analysing complex hybrid and electric vehicle dynamics, electronic measuring and control methods, mathematical models and optimization processes, automotive info communication technologies. Based on the results of the different research areas significant and continuous cooperative industrial developments of vehicle (sub) systems can be achieved.





#### > VENUE

The workshop takes place at the Széchenyi István University in Győr. The University is located 10 minutes walk from the city centre.

#### ADDRESS

Széchenyi István University Conference Hall (Academic Building E) H-9026 Győr, Egyetem tér 1. GPS coordinates: 47.695148; 17.627349

#### CONTACT

If you have any questions please contact us by e-mail: dsoc@sze.hu

If you would like to personally speak to someone regarding your participation in the workshop please contact Rozália Varga.

#### **Contact details**

Széchenyi István University 9026 Győr, Egyetem tér 1. phone: +36 96 613 707 e-mail: dsoc@sze.hu





# Workshop on

Design,

Simulation,

Optimization and

**C**ontrol of

Green Vehicles and

Transportation

21-23 MAY, 2014 GYŐR, HUNGARY

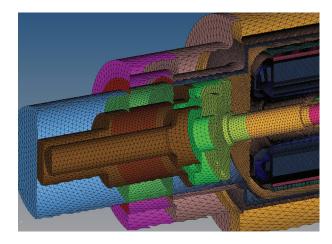




### WORKSHOP

The workshop is a scientific event of the projects running at the Research Centre for Vehicle Industry of Széchenyi István University, Győr, Hungary under the grants TÁMOP-4.2.2.A-11/1/KONV-2012-0012 and TÁMOP-4.2.2.C-11/1/KONV-2012-0012. In these projects we perform research to solve some of the challenges of green vehicles and smart transportation faced by modern society. More specifically, the conference themes are focused on design and the development of electric motors for vehicles, urban traffic flow and its environmental effects with pollutant formations.

The engineering goals cannot be achieved without using the methods of mathematical modelling, computer simulation, optimization and control, which combined have recently become one of the key enabling technologies of the industry. Within the themes the scientific background and application of this technology concerning electric vehicles and urban traffic should be presented. In order to support this aim and assist young and new researchers of the fields, some tutorials have been organized as part of the workshop. Another vital part of the workshop will be lectures on industry and on funding opportunities in Horizon 2020.



# > CHAIRS

Péter Földesi (SZE)

László Keviczky (SZE, MTA)

## WORKSHOP ORGANIZERS

- József Bokor (SZE, MTA SZTAKI)
- László Palkovics (SZE, Knorr-Bremse)
- Zoltán Horváth (SZE)
- Péter Gáspár (SZE, MTA SZTAKI)
- Zoltán Varga (SZE)
- Balázs Horváth (SZE)

## MAIN TOPICS

- Green Vehicle concepts (PMS electric motors)
- Urban traffic flow and its environmental effects (e.g. air pollution)
- Design, simulation and optimization of PMS motors for vehicles
- Positive systems and control
- Industrial applications and funding opportunities.

#### **TUTORIAL**

A tutorial will be held on May 21<sup>st</sup> 2014 as part of the workshop.

#### DAVID KETCHESON

(KING ABDULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY)

An introduction to hyperbolic conservation laws with PyClaw

#### All participants are welcome!



TÁMOP-4.2.2.C-11/1/KONV-2012-0012: Smarter Transport" - Kooperatív közlekedési rendszerek infokommunikációs támogatása

# CALL FOR PARTICIPATION

We welcome all academics and experts from industry to participate in the workshop and submit an abstract for a presentation.

Lectures given by keynote speakers will be 40 minutes long and 20 minutes long by further invited speakers. We welcome applications for 15 minute long contributed lectures. The organizers will inform you if your contributed lecture has been accepted or not within 3 working days of your registration.

The participation in the workshop is free but registration is required.

Deadline of registration for participation with presentation: **May 12<sup>th</sup>, 2014.** 

It is our firm intention to follow up this event with international publications. Please indicate your intention at registration to submit a paper or not for publication in special issues of appropriate journals with impact factor or in a survey paper in an edited scientific book series. Details of publication (dead-lines, specifications of journals and book series) will be announced later on the basis of the registrations by April 20<sup>th</sup>, 2014.

You can register on-line through the web page of the workshop:

#### http://jkk.sze.hu/en\_GB/dsoc-workshop

# FINANCIAL SUPPORT

Participation in the workshop is free but registration is required. It is foreseen that the travelling and accommodation expenses of a certain number of participants can be supported.

Please contact us by e-mail: dsoc@sze.hu