	2nd International Conference on Vehicle and Automotive Engineering		
		May 23, 2018 – May 25, 2018	
		Wednesday	
8:30-10.00		**Registration**	Parade Hall
		Plenary	**Parade Hall**
10.00-10.05		**Károly Jármai, main organizer**	Greetings
10.05-10.10		**Gabriella Bodnár Vadászné, vice dean**	Greetings
10.10-10.30		**Tamás Kokas, Head of Department, HIPA**	Investment of automobile industry in Hungary
10.30-10.50		**György Vécsi, Miskolc Holding**	Miskolc - the automotive center
10.50-11.10		**István Bertus, General Engineering manager, Joyson Safety Systems**	New results in tha car safety systems
11.10-11.30		**László Fükő, president, NOHAC**	About the NOHAC and the Automobile Industry
11.30-13.30		**Lunch Break**	**Parade Hall**
13.30	**Section F2 Autonomous Vehicles, A/5 building Room No. 202.**	**Section D1 Materials and Manufacturing, A/5 building Room No. 204.**	**Section C Vehicle Dynamics, A/5 building Room No. 206.**
	Charmen: Stephan Schmidt	**Chairman: Tamás Bányai**	**Chairman: Edgár Bertóti**
13.30-13.50	*Lengyel H., Tihanyi V.: Accident reconstruction tools, with special attention to autonomous vehicles*	*Ahola A., Skriko T., Björk T.: Fatigue Performance of GMA-Brazed Non-Load Carrying Joints Made of Ultra-High Strength Steel*	*Chen P-A., Chung Y-J., Chung T-T., Liu T.: Analysis of Steering Geometry and Design of Steering Mechanisms for Four-axle Vehicles*
13.50-14.10	*Nyerges Á., Tihanyi V.: Trajectory Planning for Automated Vehicles – A Basic Approach*	*Bányai T., Telek P., Landschützer Ch.: Milkrun based in-plant supply – an automotive approach*	*Erdős G., Takács L.: Durability Assessment: A Virtual Proving Ground Approach*
14.10-14.30	*Schmidt M., Schmidt S.: Functional Description of control variables in optimal control and application to maneuver planning for autonomous vehicles*	*Bárdos A., Walczer Cs., Kéri Z., Selmeczi I.: Copper rotor technology for high efficiency motors*	*Liu Ch., Zhou J., Gerhard A., Kubenz J., Prokop G.: Characterization of the Vehicle Roll Movement with the Dynamic Chassis Simulator*
14.30-14.50	*Szendrei Zs., Varga N., Bokor L.: A SUMO-based Hardware-in-the-Loop V2X Simulation Framework for Testing and Rapid Prototyping of Cooperative Vehicular Applications*	*Béres M., Paripás B.: Measurements of Vibration by Laser Doppler Method in the Course of Drilling*	*Szüle V., Pere B.: Modelling of heat generation in vehicle components made of rubber caused by finite deformations*
14.50-15.10		**Coffee Break**	

15:10	**Section B Alternative Powertrain, A/5 building Room No. 202.**	**Section D2 Materials and Manufacturing, A/5 building Room No. 204.**	**Section K Design of Vehicle Structures and Surface, A/5 building Room No. 206.**
	Chairman: Attila Trohák	**Chairman: Gyula Varga**	**Chairman: László Könözsy**
15.10-15.30	*Bihari J., Sarka F.: Human-Electric Hybrid Drives in Medium-sized Cities by Daily Traffic*	*Dietz S., Djurdjevic M.B., Gutiérrez R.F., Rafetzeder M.: Solidification path of NemAlloy*	*Bognár G.: Characterization of surface roughness for growth models*
15.30-15.50	*Heidfeld H., Hinzelmann R., Schünemann M., Schmidt S.: Development of an electric powered light-stilt-tractor for the application of biological plant protection products in corn*	*Illés B., Varga A.K., Czap L.: Logistics and Digitization*	*Parry L., Könözsy L., Temple C.: Airbox Design, Analysis and Improvement for a High Performace Road Racing Sidecar*
15.50-16.10	*Kiss D., Trohák A.: Hybrid drivetrain of a self-driving go-kart*	*Juhász J., Bányai T.: What Industry 4.0 means for just-in-sequence supply in automotive Industry?*	*Petrik M., Szepesi G., Varga T.: Numerical and experimental study of finned tube heat transfer characteristics*
16.10-16.30	*Morganti M.V., Longo S., Tirovic M., Auger D.J., Raja Ahsan R.M.S.B.: Modular battery cell model for thermal management modelling*	*Nagy G., Bányainé Tóth Á., Illés B., Glistau E.: Analysis of supply chain efficiency in blending technologies*	*Benke M., Salyi Zs., Baumli P., Somlyai-Sipos L.,Takats V.,Csik A., Rugoczky P.: Development of TiB2 coated selective soldering tools for the automotive industry*
17.30-20.00	**Welcome reception**		**University Restaurant**
	Thursday		
8.00-9.00	**Registration**		**Parade Hall**
9.00	**Section H Active and Passive Safety, A/5 building Room No. 204.**	**Section D3 Materials and Manufacturing, A/5 building Room No. 206.**	
	Chairman: Zoltán Siménfalvi	**Chairman: Angelos P. Markopoulos**	
9.00-9.20	*Gazdag A., Holczer T., Buttyán L., Szalay Zs.: Vehicular Can Traffic Based Microtracking for Accident Reconstruction*	*Kundrák J., Markopoulos A.P., Makkai T., Karkalos N.E.: Correlation between Process Parameters and Cutting Forces in the Face Milling of Steel*	
9.20-9.40	*Mikáczó V., Siménfalvi Z., Szepesi L. G.: Investigation of Pressure Rise in Automotive Airbags*	*Kundrák J., Molnár V., Deszpoth I.: Analysis of machining time and material removal performance as factors influencing efficiency and profitability*	
9.40-10.00	*Pinter K., Szalay Zs.: Comparison of data required for accident reconstruction based on crash test*	*Karpuschewski B., Kundrák J., Felhő Cs., Varga Gy., Sztankovics I., Makkai T., Borysenko D.: Preliminary investigations for the effect of cutting tool edge geometry in high-feed face milling*	

10.00-10.20	*Vida G., Bodollo I.: Presentation of modern accident reconstruction procedures - case study*	*Sepsi M., Salata M., Cseh D., Mertinger V., Benke M.: Significance of the Residual Stress Monitoring in the Automotive Industry*	
10.20-10.40	**Coffee Break**	**Coffee Break**	
10.40	**Section E Vehicle Electronics, G Noise and Vibration, Section I Sustainability, A/5 building Room No. 204.**	**Section D4 Materials and Manufacturing, A/5 building Room No. 206.**	
	Chairman: László Pokorádi	**Chairman: Tamás Bányai**	
10.40-11.00	*Czap L., Pinter J.M.: Noise Reduction for Voice-Activated Car Commands*	*Spisák B., Róbert Beleznai R.: Design and analysis of composite oil pan for automotive*	
11.00-11.20	*Szabó J.Z., Dömötör F.: Verification of Rolling Element Bearing Defect Frequencies by Vibration Measurements on Bearings with Artificial Faults on the Outer/Inner Rings*	*Telek P., Bányai T.: Advanced materials handling processes and devices in the automotive industry*	
11.20-11.40	*Pokorádi L., Ványi G.: Sensitivity Investigation of Failure Mode and Effect Analysis*	*Tokár M., Fegyverneki Gy., Boros V., Mertinger V.: The Examination of the Effects of Strontium Content on the Properties of Cylinder Heads*	
11.40-12.00	*Václav S., Košťál P., Lecký Š., Michal D., Bako B.: Assembly system planning in automotive industry with use of discrete event simulation*	*Trohák A., Forgács Zs.: Conceptual Design of a Measurement- and Data Acquisition System*	
12.00-13.30	**Lunch Break**	**Lunch Break**	**University restaurant**
13.30	**Section L1 Optimization, A/5 building Room No. 204.**	**Section F1 Autonomous Vehicles, A/5 building Room No. 206.**	
	Chairman: Károly Jármai	**Chairman: József Vásárhelyi**	
13.30-13.50	*Szabó F.J.: Optimization of Springs Applied in Vehicle Suspension Structure*	*Barsi A., Poto V., Tihanyi V.: Creating OpenCRG road surface model from terrestrial laser scanning data for autonomous vehicles*	
13.50-14.10	*Topaç M.M., Karaca M., Deryal U., Atak M.: Design and Optimization of a Bus Steering Linkage by Using Response Surface Methodology*	*Bartók R., Vásárhelyi J.: Fuzzy Rule Interpolation Based Object Tracking and Navigation for Social Robot*	
14.10-14.30	*Ghafil H.N., Jármai K.: Research and application of industrial robot manipulators in vehicle and automotive engineering, a survey*	*Cservenák Á.: Further development of an AGV control system*	
14.30-14.50	*Jármai K.: Cost calculation of thin-walled structures using different manufacturing techniques*	*Lengyel H., Tihanyi V.: Accident reconstruction tools, with special attention to autonomous vehicles*	

14.50-15.10	**Coffee Break**	**Coffee Break**	
15:10	**Section L2 Optimization, Section J Education, A/5 building Room No. 204.**	**Section A Conventional Powertrain, A/5 building Room No. 206.**	
	Chairman: Luis M.C. Simões	**Chairman: Péter Bencs**	
15.10-15.30	*Lellep J., Vlassov B.: Elastic plastic analysis of elliptical plates*	*Dobai A., Bereczky Á.: Investigation of Diesel – n-Butanol Fuel Blend in the Function of Pre-Injection Angle*	
15.30-15.50	*Simões L.M.C., Jármai K., Virág Z.: ε– Optir Reliability-based Cost Design of Longitudinally Stiffened Welded Steel Pates*	*Dudás L.: Optimal Manufacturing Technology Determination for the Main Parts of a Rotary Internal Combustion Engine*	
15.50-16.10	*Veres P., Illés B., Landschützer Ch.: Supply chain optimization in automotive industry: a comparative analysis of evolutionary and swarming heuristics*	*Mohamad B., Szepesi G., Bollo B.: Review Article: Effect of Ethanol-Gasoline Fuel Blends on the Exhaust Emissions and Characteristics of SI Engines*	
16.10-16.30	*Bouzid A., Vásárhelyi J.: Survey about The PSOC5 LABBOOK*	*Nagy L.A., Knaup J., Zsoldos I.: A review on the effect of alternative fuels on the friction and wear of internal combustion engines*	
16.30-16.50	*Kelemen L.: 10 years of pneumobile competition at the University of Miskolc*	*Rosta L.: Neutrons for Materials Research in Automotive Industry*	
17.30-21.00	**Bankett**	**Bankett**	**University restaurant**
	Friday		
8.00-8.30	Registration	Parade Hall	
	Chairmen: Béla Palotás/Ádám Dobosy		
	Section M1 Welding, Parade Hall		
8.30-8.50	*Fiedler M., Plozner A., Rutzinger B., Scherleitner W.: Control of Mechanical Properties for high strength steels through optimized welding processes*		
8.50-9.10	*Brtník T., Mika I.: Welding of high strength steels*		
9.10-9.30	*Tervo H., Mourujärvi J., Kaijalainen A., Kömi J.: Mechanical properties in the physically simulated heat-affected zones of 500 MPa offshore steel for arctic conditions*		

9.30-9.50	*Lukács J.: Fatigue Crack Propagation Limit Curves for High Strength Steels and their Welded Joints Based on Two-Stage Relationship*		
9.50-10.10	*Mobark H.F.H., Dobosy Á., Lukács J.: Mismatch Effect Influence on the HCF Resistance of High Strength Steels and their GMA Welded Joints*		
10.10-10.30	*Kalácska E., Varbai B., Májlinger K.: MIG Welding and MIG Brazing of Different Austenitic Stainless Steel Grades*		
10.30-10.50	**Coffee Break**		
	Chairmen: András Balogh/Marcell Gáspár		
10.50	**Section M2 Welding, Parade Hall**		
10.50-11.10	*Dobosy Á., Gáspár M., Török I.: Resistance spot welding of 7075 aluminium alloy*		
11.10-11.30	*Gáspár M., Henri T., Kaijalainen A., Dobosy Á., Török I.: The effect of solution annealing and ageing during the RSW of 6082 aluminium alloy*		
11.30-11.50	*Kovács T.: Investigation of the Ultrasound Welded Aluminium Joint Microstructure*		
11.50-12.10	*Jaber H., Kovacs T.: Dissimilar Resistance Spot Welding of Ferrite-Martensite Dual Phase Steel / Low Carbon Steel: Phase Transformations and Mechanical Properties*		
12.10-12.30	*Pogonyi T., Palotás B., Bakos L.: Arc Welding of Zinc Coated High Strength Steels*	Visit TAKATA factory	
12.30-12.50	*Varbai B., Májlinger K.: Thermoelectric Power Measurements on Duplex Stainless Steel Weldments*		