Congress Schedule

Overview Sessions

Monday, July 3, 2006

Time/Room	AudiMax	H2	H3	H4	H5	H7	H8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19
09:15-10:00	**Opening Ceremony (Hofburg)**																	
10:00-10:50	**Plenary Keynote Lecture 1 (Hofburg)**																	
	Walk to TU Vienna																	
11:40-13:10	**Lunch**																	
13:10-14:00	**Plenary Keynote Lecture 2 (AudiMax)**																	
Session	RS03-1	SS05-1	RS14-1	RS01-1	RS07-1	RS30-1	RS18-1	SS35-1	RS05-1	SS27-1	SS15-1	SS12-1	SS14-1	RS22-1	SS06-1	SS01-1	RS13-1	RS24-1	SS36-1
14:10-15:50	Active Noise & Vibration Control	Pattern Recognition in Acoustics & Vibration	Low-Frequency Noise & Vibration	Acoustic Signal Processing	Computational Acoustics	Underwater & Ship Acoustics	Modal Analysis	Silent Roads	Architectural Acoustics	Sound Quality & Applications	Aeroacoustics	Noise & Vibration Control In Vehicles	Near-Field Acoustic Holography	Non-linear Acoustics & Vibration	Combustion Noise	Active Control of Sound	Industrial Noise Sources & Control	Outdoor Sound Propagation	Thermoacoustics Engine Acoustics
15:50-16:20	**Coffee Break**																	
Session	RS03-2	SS05-2	RS14-2	RS01-2	RS07-2	RS30-2	RS18-2	SS35-2	RS05-2	SS34-1	SS15-2	SS12-2	SS14-2	RS22-2	SS06-2	SS01-2	RS17-1	RS24-2	RS19-1
16:20-18:00	Active Noise & Vibration Control	Pattern Recognition in Acoustics & Vibration	Low-Frequency Noise & Vibration	Acoustic Signal Processing	Computational Acoustics	Underwater & Ship Acoustics	Modal Analysis	Silent Roads	Architectural Acoustics	Psycho Acoustics & Hearing	Aeroacoustics	Noise & Vibration Control In Vehicles	Near-Field Acoustic Holography	Non-linear Acoustics & Vibration	Combustion Noise	Active Control of Sound	Mid & High Frequency Methods	Outdoor Sound Propagation	Musical Acosutics
18:00-19:00	**IIAV General Assembly Meeting (S18)**																	
19:30-22:00	**Reception (AAS)**																	

Monday, July 3, 2006

Time/Room	AudiMax	H2	H3	H4	H5	H6	H7	H8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19
09:15-10:00	**Opening Ceremony** (Hofburg)																		
10:00-10:50	**Plenary Keynote Lecture 1** (Hofburg)																		
	Walk to TU Vienna																		
11:40-13:10	Lunch																		
13:10-14:00	**Plenary Keynote Lecture 2** (AudiMax)																		
Session	**RS03-1**	**SS05-1**	**RS14-1**	**RS01-1**	**RS07-1**	**RS30-1**	**RS18-1**	**SS35-1**	**RS05-1**	**SS27-1**	**SS15-1**	**SS12-1**	**SS14-1**	**RS22-1**	**SS06-1**	**SS01-1**	**RS13-1**	**RS24-1**	**SS36-1**
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15:30-15:50	12		22	27	32		41		49		58	63	68	73		81	86		
15:50-16:20	Coffee Break																		
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17:40-18:00	100	104	109	114	119	124	129		137		146		155	160	165	170			
18:00-19:00	IIAV General Assembly Meeting (S18)																		
19:30-22:00	Reception (AAS)																		

Detailed Schedule

ICSV13 - Vienna

The Thirteenth International Congress on Sound and Vibration

Vienna, Austria, July 2-6, 2006

Monday

July 3, 2006

09:15 – 10:50

PS01		Hofburg
	Opening Plenary Session Chairperson: B. GIBBS	
09:15	Welcome addresses and music	
10:00	**Keynote Lecture** Active and passive damping of structures **Inman, D.J.***	1

11:40	**LUNCH**

13:10 – 14:00

PS02		AudiMax
	Plenary Session 2 Chairperson: J. VERHEJ	
13:10	**Keynote Lecture** The tuned liquid column damper as the cost-effective alternative of the mechanical damper within vibration prone civil engineering structures **Ziegler, F.***	2

14:10 – 15:50

RS03-1		AudiMax
	Active Noise and Vibration Control Chairperson: N. TANAKA	
14:10	Mutually converging adaptive feedback active noise control with on-line secondary path modeling **Chou, C.*; Li, H.; Chang, C.**	8
14:30	An approach to active noise control **El-Bardisi, M.***	9
14:50	Synthesis of control algorithms for active vibration isolation system constructed on the basis of mechanism with parallel kinematics **Rybak, L.*; Chichvarin, A.; Shatochin, U.**	10
15:10	Development of CO-FXLMS algorithm for the performance improvement in the active noise control **Oh, J.; Lee, K.*; Lee, H.; Ahn, Y.; Lee, J.**	11
15:30	Using fuzzy logic to control active suspension system of one-quarter-car model **Rakhsha, R.*; Ghazavi, S.**	12

SS05-1		H2
	Pattern Recognition in Acoustics and Vibration Organiser: L. GELMAN	
14:10	Use of acoustic intensity spatial distribution & frequency spectra for machinery condition monitoring **Marscher, W.***	14
14:30	A review of applications for advanced engine health monitoring in civil aircraft engines **King, S.*; Anuzis, P.; King, D.**	15
14:50	Time-frequency segmentation for engine speed monitoring **Millioz, F.*; Martin, N.**	16
15:10	Discrete wavelet-based thresholding study on acoustic emission signals to detect bearing defect on a rotating machine **Feng, Y.*; Schlindwein, F.**	17

RS14-1 — H3

Low-Frequency Noise and Vibration
Chairpersons: D. BLISS, S.A. MCINERNY

14:10	Energy minimisation criterion as a methodological guide to the dynamic analysis and optimisation of fully trimmed and equipped vehicles **Avenati-Bassi, F.*; Lorea, S.; Tinti, F.**	18
14:30	A study on the low vibration design of 4,100 teu container carrier superstructure using the structural intensity analysis **Kim, B.*; Park, H.; Choi, S.; Kim, B.; Cho, D.**	19
14:50	Natural vibration analysis for stiffened plate of ship tank side in contact with water using assumed mode method **Kim, B.*; Cho, D.**	20
15:10	A systems approach to powertrain dynamics **Guzzomi, A.*; Stone, B.**	21
15:30	The suppression of vibration in machining **Stone, B.***	22

RS01-1 — H4

Acoustic Signal Processing
Chairperson: L. FENG

14:10	Impulse response pressure transducer **King, J.***	23
14:30	Analysis of a hybrid control algorithm for disturbance rejection and its application on an active isolation system **Tsai, M.*; Huang, C.; Yeh, C.**	24
14:50	Design and analysis of a low-frequency active vibration isolator **Sun, Q.*; He, X.**	25
15:10	Mode localization in doubly coupled cantilever beams in cyclic configurations **Al-Jawi, A.*; Mohamad, A.; Hawsawy, A.**	26
15:30	Eigenfrequencies analysis of the Helmholtz problems **Yas'ko, M.***	27

RS07-1 — H5

Computational Acoustics
Chairperson: A. MOORHOUSE

14:10	Finite element modeling of piezoelectric materials using 3D element **Shaeri, N.*; Sadr Lahidjani, M.; Yousefi-Koma, A.**	28
14:30	Active vibration and noise control of thin-walled structures based on an overall finite element model **Gabbert, U.*; Lefevre, J.; Nestorovic, T.; Laugwitz, F.; Schmidt, G.**	29
14:50	Assessing sound insulation provided by a lateral confined single layer using a BEM approach **Pereira, A.*; Tadeu, A.**	30
15:10	Method of fundamental solutions for the purpose of coupling boundary elements to a raytracing procedure **Langer, S.*; Hampel, S.**	31
15:30	Acoustical response of a room with computational techniques - improving direct diffuse rays as an extension of specular images method **Feo Rodríguez, W.***	32

RS30-1 — H6

Underwater and Ship Acoustics
Chairpersons: N. KESSISSOGLOU, A. NILSSON

14:10	Broadband passive synthetic aperture towed array processing **Sullivan, E.*; Holmes, J.; Carey, W.**	33
14:30	Data error covariance matrix for vertical array data in an ocean waveguide **Huang, C.***	34
14:50	Classification of underwater objects by means of an acoustic method **Kozaczka, E.***	35
15:10	Underwater surface ship signature **Gloza, I.***	36

RS18-1 — H7

Modal Analysis
Chairperson: A. BARTOLINI, H. TSURU

14:10	Identification of spatial dynamic properties of the boring bar by means of finite element model: comparison with experimental modal analysis and Euler-Bernoulli model **Smirnova, T.*; Åkesson, H.; Håkansson, L.; Claesson, I.; Lagö, T.**	37
14:30	Free vibration of response of multiphase magneto-electro-elastic plates by finite element method **Swarnamani, S.; Ganesan, N.; Annigeri, A.***	38
14:50	Multivariable frequency-domain system identification algorithms for experimental and operational modal analysis **Guillaume, P.*; De Troyer, T.; De Sitter, G.; Devriendt, C.**	39
15:10	The frequency mapping of modal parameters identification by the rational fractional polynomial method **Chen, K.***	40
15:30	Optimization of a coupled fluid-structure system using a modal approach **Besset, S.*; Jezequel, L.**	41

SS35-1 — H8

Silent Roads
Organisers: W. VAN KEULEN, L. GOUBERT

14:10	The state of the art in the field of silent road surfaces in the Netherlands **Bochove, Van, G.***	42
14:30	On the numerical effects of replacing silent roadtypes by non-silent roadtypes on roundabouts **Van Keulen, W.*; Schuddeboom, J.**	43
14:50	Monitoring 20 silent roads over 10 years in the municipality of Groningen **Sikma, K.; Hoekstra, E.; van Keulen, W.***	44

RS05-1 — S9

Architectural Acoustics
Chairperson: M. CUDINA

14:10	Acoustic situation at the St. Stephen´s cathedral in Vienna **Fellner, M.*; Graf, F.; Graber, G.; Rohde, T.; Egger, J.**	45
14:30	Different solutions for the electro acoustic diffusion system in San Lorenzo cathedral's in Perugia **Buratti, C.; Cotana, F.; Vergoni, M.***	46
14:50	The "maria regina della pace" church in Perugia: acoustic measurements and correction design **Buratti, C.; Mariani, R.*; Costarelli, I.**	47
15:10	Acoustic measurement and simulation of an important shrine in Sicily **Barbaro, S.*; Caracausi, R.**	48
15:30	Acoustic measurement and simulation of a sport centre in Italy **Barbaro, S.*; Caracausi, R.**	49

SS27-1 — S10

Sound Quality and Applications
Organiser: S. WANG

14:10	Evaluation of loudness and sharpness of refrigerator noise **Jeon, J.*; You, J.; Lee, J.; Joo, J.**	50
14:30	Development of the target sound for the vacuum cleaner with respect to the consumer's perception **Lee, J.*; Joo, J.; Jeoung, J.; Lee, J.**	51
14:50	Analysis of the loud and sharp of the HVAC system using the design of experiments **Oh, J.*; Park, S.; Kim, H.; Sim, H.; Lee, J.**	52
15:10	Objective speech quality measure by the empirical modes decomposition method **Abdelaziz, O.; Kamel, Y.***	53

SS15-1 — S11

Aeroacoustics
Organiser: S. KAJI

14:10	From jet noise to rocket noise **McInerny, S.***	54
14:30	Acoustic-to-mechanic efficiency of turbulent jets **Krasheninnikov, S.; Mironov, A.***	55
14:50	Relating far field noise spectra of cold and hot jets **Musafir, R.***	56
15:10	Frequency halving due to vortex pairing for the jet-slot oscillator **Billon, A.*; Glesser, M.; Valeau, V.; Sakout, A.**	57
15:30	Numerical inverse method predicting spinning modes radiated by a ducted fan from free-field simulated test data **Lewy, S.*; Gounet, H.**	58

SS12-1 — S12

Noise & Vibration Control in Vehicles
Organiser: N. IVANOV

14:10	Investigation of construction machine cab noise generation **Ivanov, N.*; Copley, D.; Kurtsev, G.**	59
14:30	Prediction of car interior noise using frf-based sub-structuring and transfer path analysis **Jeong, W.*; Kang, Y.; Kim, S.**	60
14:50	Vehicle exterior noise simulation **Alt, N.; Eisele, G.; Pichot, F.; Wolff, K.***	61
15:10	A study on the hydraulic noise reduction of excavator **Ko, K.*; Joo, W.; Kim, D.; Bae, J.**	62
15:30	Errors in standard spectral confidence interval estimates and other statistics, in relation to sound emitted from rotating machinery, with application to a tractor engine cooling fan **Wen, L.; Sherman, P.***	63

SS14-1 — S13

Near-Field Acoustic Holography
Organiser: B. ROOZEN

14:10	Quantitative and qualitative verification of pressure and velocity based planar near-field acoustic holography **Scholte, R.*; Roozen, B.; Lopez, I.**	64
14:30	Fast evaluation of the Rayleigh integral and applications to inverse acoustics **Wind, J.***	65
14:50	Statistically optimised near field acoustic holography based on particle velocity measurements **Jacobsen, F.*; Jaud, V.**	66
15:10	Multi-patch near-field acoustical holography and spatial resolution enhancement **Lee, M.*; Bolton, J.**	67
15:30	Evaluation of the sound insulation of multilayer panels by means of near-field acoustic holography **Escuder Silla, E.*; Ramis Soriano, J.; Alba Fernández, J.**	68

RS22-1 — S14

Non-Linear Acoustics and Vibration
Chairpersons: K.-J. KIM, C.-K. SUNG

14:10	Control method of an underactuated space manipulator using high-frequency excitation **Hattori, M.*; Yabuno, H.; Aoshima, N.**	69
14:30	Residual vibrations of electrostatic micro-actuators with different electrode shapes **Hsu, M.***	70
14:50	On the study of nonlinear suspensions **Marinescu, P.*; Matei, M.; Stan, G.**	71
15:10	Accuracy improvement in rotor balancing by using influence coefficient method based on Tikhonov regularization **Lin, T.***	72
15:30	Research of nanoparticles in colloids suspension via acoustic method **Damdinov, B.*; Banakov, Y.; Dembelova, T.**	73

SS06-1	**Combustion Noise** Organisers: M. OCHMANN, M. HECKL, R. PISCOYA	S15
14:10	Sound generation by flames and thermo acoustic instabilities in combustion: a review of fundamental aspects **Clavin, P.***	74
14:50	Calculating the turbulent noise source of premixed swirl flames from time mean reactive rans variables **Hirsch, C.*; Winkler, A.; Wäsle, J.; Sattelmayer, T.**	75
15:10	On mechanisms of intense combustion noise emission **Thierry, S.*; Nicolas, N.; Daniel, D.; Sébastien, C.**	76

SS01-1	**Active Control of Sound** Organiser: M. PAWELCZYK	S16
14:10	Polynomial approach to design of feedback virtual-microphone active noise control system **Pawelczyk, M.***	77
14:30	Active noise control at a moving location using virtual sensing **Petersen, C.*; Cazzolato, B.; Zander, A.; Hansen, C.**	78
14:50	Active noise control with moving error microphone: preliminary results **Czyz, K.*; Michalczyk, M.**	79
15:10	Virtual error approach for direct multichannel adaptive active sound control **Sano, A.*; Kamata, M.; Sasaki, E.; Nagata, T.**	80
15:30	Verification of the simultaneous equations method by an experimental system **Fujii, K.*; Yamaguchi, K.; Fujita, Y.; Muneyasu, M.**	81

RS13-1	**Industrial Noise Sources and Control** Chairpersons: P. BOREJKO, I. DOMBI	S17
14:10	Noise with the discharge of steam from the boiler **Tupov, V.***	82
14:30	External noise control in the pulp and paper industry **Pettersson, H.***	83
14:50	The trial of a combine method that can be used against the noise employees are exposed to at industrial enterprises at a mid-size work place **Barlı, Ö. *; Demirel, Ö.; Kaya, D.; Dane, Ş.; Paksoy, M.**	84
15:10	Importance of temporary noise sources evaluation **Hunyadi, Z.***	85
15:30	Frequency sinks on transient periodic signals **Alvarenga, E.***	86

RS24-1	**Outdoor Sound Propagation** Chairperson: D.-S. CHEN	S18
14:10	A model for calculating specular and diffuse reflections in outdoor sound propagation **Salomons, E.***	87
14:30	Outdoor noise propagation: integration terms of general equation for sound propagation model (spm) **Ciolfi, A.***	88
14:50	Experimental outdoor sound propagation **Ishac, N.*; Bullen, R.**	89
15:10	Outdoor propagation using the higher-order parabolic equation **Malbéqui, P.***	91

SS36-1	**Thermoacoustic Engine Acoustics** Organisers: T. SCHARTON, W. ROBERTS	S19
14:10	A new acoustic model for valveless pulsejet operation **Roberts, W.*; Ordon, R.; Scharton, T.; Kuznetsov, A.**	92
14:30	The principles of operation of a pulsejet with valves **Travis, T.*; Ordon, R.; Kuznetsov, A.; Scharton, T.; Roberts, B.**	93
14:50	Numerical simulation of streaming in resonator based thermoacoustic devices **Galiullina, E.*; Botteldooren, D.**	94
15:10	Simulation of thermo-acoustic instabilities including mean flow effects in the time domain **Pieringer, J.*; Sattelmayer, T.**	95

15:50	**COFFEE BREAK**

16:20 – 18:00

RS03-2 — AudiMax

Active Noise and Vibration Control
Chairperson: N. TANAKA

16:20	A comparative study of analytical and numerical system identification of smart structures with piezoelements **Akbari, S.*; Yousefi-Koma, A.; Khanmirza, E.**	96
16:40	Study of dynamic vibration absorption by piezoelectric patches, used in active vibration control **Gopalakrishnan Nair, J.*; Sujatha, C.**	97
17:00	Vibration of rotating silicon rings excited by electric field - an application to micro-rate sensors **Chang, C.*; Chou, C.**	98
17:20	Robust h[inf] control of a novel vibration active-passive isolation system **Tsai, M.*; Sun, Y.**	99
17:40	Control of an ER engine mount for vibration suppression **Shaw, J.*; Pan, R.**	100

SS05-2 — H2

Pattern Recognition in Acoustics and Vibration
Organiser: L. GELMAN

16:20	Novel signal processing techniques based on higher order spectra **Gelman, L.*; Anuzis, P.; Petrunin, I.; Thompson, C.**	101
17:00	Crack detection in structures using proper orthogonal decomposition and morphological processing **Antoniadis, I.*; Gryllias, K.; Koukoulis, I.; Yiakopoulos, C.; Provatidis, C.**	102
17:20	Phase and frequency spectrograms **Leonard, F.***	103
17:40	Design of an intelligent expert system for failure diagnostics of rotating machinery **Vizintin, J.***	104

RS14-2 — H3

Low-Frequency Noise and Vibration
Chairpersons: D. BLISS, S.A. MCINERNY

16:20	Evaluation for the pump tower vibration of LNG carrier due to propeller excitations **Lee, J.*; Park, J.; Bae, J.**	105
16:40	Full scale shaking table test of a 3 story steel frame with friction dampers **Bae, C.*; Cho, C.; Yang, K.; Koo, J.**	106
17:00	Piezoelectrically induced vibrations of sandwich panels with interlayer slip **Heuer, R.***	107
17:20	Dynamic analysis of a tracked vehicle with hydrogas suspension **Ravishankar, M.*; Sujatha, C.**	108
17:40	Proposals of criteria for assessment of low frequency noise annoyance in the work environment **Pawlaczyk-Luszczynska, M.*; Dudarewicz, A.; Sliwinska-Kowalska, M.**	109

RS01-2 — H4

Acoustic Signal Processing
Chairperson: L. FENG

16:20	Application of demodulated resonance technique based on blind source separation to gear contact diagnosis **Ting-Tao, M.*; Yong-xiang, Z.**	110
16:40	Broadband acoustic absorption coefficient measurement in a simple circular waveguide using OFDM modulated acoustic signals **Petošiæ A.*; Ivanèeviæ B.; Jambrošiæ K.**	111
17:00	Automatic understanding method of signals applied to identification of acoustic patterns **Wszolek, W.*; Tadeusiewicz, R.**	112
17:20	Application of the corona acoustic signal in the diagnosis of the UHV power lines technical condition **Wszolek, T.***	113
17:40	Use of a coupled mechanical-acoustic computational model to identify failure mechanisms in paper production **Kao, D.; Pericleous, K.*; Graham, D.; Knight, B.**	114

RS07-2 — H5

Computational Acoustics
Chairperson: A. MOORHOUSE

16:20	Adjusted complex position of extra sources in the image sources method **Guignard, T.*; Martin, V.**	115
16:40	Vibration energy flow in assembled structures **Cieslik, J.***	116
17:00	Component mode synthesis for high frequency acoustics **Padmanabhan, C.*; Saisankaranarayana, K.**	117
17:20	Computation of flow-induced sound by turbulent boundary layer using LES method **Zhang, H.*; Pan, Y.**	118
17:40	ILU preconditioners for solving three-dimensional Helmholtz equation **Gopalaswamy, B.*; Rice, H.**	119

RS30-2 — H6

Underwater and Ship Acoustics
Chairpersons: N. KESSISSOGLOU, A. NILSSON

16:20	An experimental study on the characteristics of the noise field generated by a fishing boat in a very shallow-water environment **Liu, J.***	120
16:40	Striation processing of spectrogram data **Brooks, L.*; Kidner, M.; Zander, A.; Hansen, C.; Zhang, Y.**	121
17:00	A high-speed high-frequency acoustic modem (HS-HFAM) for ports and shallow water operations **Beaujean, P.*; Blue, P.; Kriel, D.**	122
17:20	Remote sensing of the sea surface Gerstner's wave parameters by the inverted echo sounder **Fuks, I.***	123
17:40	Sound scattering from the edge of a submerged coated wedge **Uberall, H.*; Hughes, R.; Niemiec, J.**	124

RS18-2 — H7

Modal Analysis
Chairperson: A. BARTOLINI, H. TSURU

16:20	Computation of real normal modes from complex eigenvectors **Fuellekrug, U.***	125
16:40	Non-linear dynamic analysis of a steel overhead electrical trussed tower crossing Guamá river **Amador, S.*; Souza, R.**	126
17:00	Analysis of automotive ride comfort considering vehicle body flexibility **Kim, J.*; Park, S.; Lee, J.; Kang, S.; Kang, J.**	127
17:20	Estimation of vehicle inertial properties based on on-road measurements **Rozyn, M.*; Dissanayake, G.; Zhang, N.**	128
17:40	Research on the improvement of riding comfort for motorcycles **Xu, Z.*; Zhang, Z.; He, Y.; Zhou, K.; Luo, C.**	129

SS35-2 — H8

Silent Roads
Organisers: W. VAN KEULEN, L. GOUBERT

16:20	Three years of experience with the Belgian test section of two layer porous asphalt **Goubert, L.***	130
16:40	Optimization of a special purpose trailer for the close proximity method according ISO/CD 11819-2 **Duskov, M.***	131
17:00	Silent block pavements as an alternative for SMA in urban situations **Siekmans, A.*; van der Veen, W.**	132

RS05-2 — S9

Architectural Acoustics
Chairperson: M. CUDINA

16:20	Air-opened auditorium and background noise **Dolejsi, J.*; Mikule, A.**	133
16:40	The challenge of heavy rehabilitation projects: case studies **Asselineau, M.***	134
17:00	Acoustical solutions in modern architecture **Kurjak, M.*; Domitrovic, H.**	135
17:20	Simplified method to estimate reverberation time in dwellings **Meza, L.*; Recuero, M.**	136
17:40	Clarity of the spoken in the university classrooms **Santarpia, L.*; Gelfù, A.**	137

SS34-1 — S10

Psycho Acoustics and Hearing
Organiser: K. NISHIMURA

16:20	Binaural psychoacoustic model applicable to sound quality estimation **Bures, Z.*; Rund, F.**	138
16:40	The layered binaural processing of high frequency interaural phase differences, interaural intensity differences, and short time analysis **Van Keulen, W.***	139
17:00	Modelling the frequency selectivity in modulation rate domain using the non-negative impulse response modulation filters concept **Kutzner, D.***	140
17:20	An experimental study on effect of vibration caused in stereophonic equipments to sound quality and summing localization **Nishimura, K.*; Ina, R.**	141

SS15-2 — S11

Aeroacoustics
Organiser: S. KAJI

16:20	New acoustic facility for testing universal propulsion simulators **Khaletsky, Y.*; Mileshin, V.; Povarkov, V.; Shipov, R.**	142
16:40	Optimal shock-wave structures and new ideas about supersonic gas jet noise generation **Uskov, V.*; Chernyshov, M.; Erofeev, V.; Genkin, P.**	143
17:00	Numerical simulation of acoustic wave radiation characteristic through the scarfed aero-intake **Park, Y.*; Kim, S.; Bin, J.; Lee, S.**	144
17:20	Measurement of sound in airflow **Kingan, M.; Pearse, J.***	145
17:40	Quasi-acoustical approach to blast shock wave interaction with contact discontinuities and protection surfaces **Uskov, V.; Chernyshov, M.***	146

SS12-2 — S12

Noise & Vibration Control in Vehicles
Organiser: N. IVANOV

16:20	Human response to shocks **Birlik, G.*; Sezgin, O.**	147
16:40	The influence of wheel and rail profiles condition on lateral dynamics of railway vehicle with increased load capacity **Opala, M.*; Chudzikiewicz, A.; Drozdziel, J.; Sowiński, B.**	148
17:00	Effects of frequency, grip force, and gender on the perception of steering wheel longitudinal vibration **Eksioglu, M.*; Kizilaslan, K.; Amman, S.**	149
17:20	Hunting control of railway vehicles using active primary suspensions **Fotoohi, A.*; Yousefi-Koma, A.**	150

SS14-2		S13
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