Technical session will be made in oral sessions. All presentation is oral and limited up to 20 minutes including about 5 minutes discussion.

Tuesday, November 10, 2015

Room A

10:40-12:20 Electrical-Power 1

Chair: Kazuki Nakamura (Railway Technical Research Institute, Japan)
Tetsunori Hattori (East Japan Railway Company, Japan)

1A11 METHODS OF MODELING AND CALCULATION OF A FEEDING CIRCUIT FOR EVALUATING ENERGY EFFICIENCY AND OPERATIONAL ROBUSTNESS BY TRAIN TRAFFIC SIMULATION
Masafumi Miyatake (Sophia University, Japan)
1A12 RADIO COMMUNICATION NETWORK SIMULATOR TO EVALUATE STABILITY OF RADIO COMMUNICATION BASED TRAIN CONTROL SYSTEMS
Kunihiro Kawasaki (Railway Technical Research Institute, Japan)
1A13 DEVELOPMENT OF SECURE RADIO SYSTEM
Hisashi Kimura (East Japan Railway Company, Japan)
1A14 DEVELOPMENT OF A SYSTEM TO UTILIZE TABLETS FOR IMPROVED RESPONSE TO ABNORMAL SITUATIONS
Hideto Murakami (East Japan Railway Company, Japan)
1A15 EFFECT OF PROTOTYPING OF ONLINE LOADING SYSTEM AT THE STAGE OF EXAMINING SPECIFICATIONS
Sei Takahashi (Nihon University, Japan)

13:30-14:50 Electrical-Power 2

Chair: Kunihiro Kawasaki (Railway Technical Research Institute, Japan)

1A21 INTEGRATED TRAIN CONTROL SYSTEM: THE NEW DIRECTION OF TRAIN CONTROL SYSTEM
Akira Asano (Kyosan Electric Manufacturing Co., Ltd., Japan)
1A22 SECURITY EVALUATION FOR COMMUNICATION BASED TRAIN CONTROL SYSTEM USING ATTACK TREE METHOD
Shunsuke Yatabe (West Japan Railway Company, Japan)
1A23 DEVELOPMENT OF MICROELECTRONIC LEVEL CROSSING CONTROLLER WITH A BUILT-IN CONSTANT WARNING TIME CONTROL LOGIC
Manabu Teramoto (East Japan Railway Company, Japan)
1A24 DEVELOPMENT AND EVALUATION OF MIXED DIGITAL AND ANALOG SIGNALS FOR RAILWAY SIGNALING
Hiroshi Mochizuki (Nihon University, Japan)

Room B

11:00-12:20 Vehicles-System 1

Chair: Kimihiko Nakano (The University of Tokyo, Japan)
Masahito Adachi (Central Japan Railway Company,Japan)

1B11 DEVELOPMENT OF CONTACTLESS SPEED SENSOR BASED ON THE MICROWAVE RADAR TECHNOLOGY
Wataru Tsujita (Mitsubishi Electric Corporation, Japan)
1B12 RELIABILITY IMPROVEMENT METHOD OF THE ELECTRICAL DOOR SYSTEM FOR THE RAILWAY VEHICLES
Yong Joon Yang (Seoul National University of Science and Technology, Republic of Korea)
1B13 A CASE STUDY OF THE APPLICATION OF BIOPLASTIC TO A RAILWAY VEHICLE INTERIOR COMPONENT
Michiko Tanaka (East Japan Railway Company, Japan)
1B15 OVERVIEW OF SUPERCONDUCTING MAGLEV AND CHUO SHINKANSEN
Masahito Adachi (Central Japan Railway Company, Japan)

13:30-14:50 Vehicles-System 2
Chair: Qunsheng Wang (Southwest Jiaotong University, China)

1B21 EFFECTS OF UNDERNEATH EQUIPMENT ON CARBODY ELASTIC VIBRATION FOR RAILWAY VEHICLE
Qunsheng Wang (Southwest Jiaotong University, China)
1B22 REDUCTION OF DELAY TIME CAUSED BY TROLLEY WIRE FROSTING BASED ON THE IMAGE ANALYSIS
Keisuke Usami (West Japan Railway Company, Japan)
1B23 CONTAMINATION DEPOSITION CHARACTERISTICS ANALYSIS OF INSULATORS ON A HIGH SPEED TRAIN
Chen Dawei (CSR Qingdao Sifang Co., Ltd., China)
1B24 DEVELOPMENT OF 100MBPS-ETHERNET-BASED TRAIN COMMUNICATION NETWORK THE "INTEROS"
Tetsuya Hirose (East Japan Railway Company, Japan)

15:30-16:30 Condition Monitoring-Vehicle 1
Chair: Hi Sung Lee (Seoul National University of Science and Technology, Republic of Korea)
Hitoshi Tsunashima (Nihon University, Japan)

1B31 DEVELOPMENT OF AN OVERHEAD CONTACT LINE EQUIPMENT MONITORING SYSTEM
Yoji Sugama (East Japan Railway Company, Japan)
1B32 DERAILMENT COEFFICIENT DATA FOR COMMERCIAL LINES MEASURED BY PQ MONITORING BOGIES AND METHODS OF APPLICATION
Tomoki Fukushima (Tokyo Metro Co., Ltd., Japan)
1B34 INFLUENCE OF THERMAL DEPENDENCY OF PAD STIFFNESS ON MEASUREMENT OF RAIL AXIAL LOAD BASED ON A VIBRATION METHOD
Hiroshi Takahashi (Niigata University, Japan)

Room C
10:40-12:20 Safety-Infrastructure 1
Chair: Mathias Linden (The University of Koblenz-Landau, Germany)
Shigeto Hiraguri (Railway Technical Research Institute, Japan)

1C11 RADIO COMMUNICATION NETWORK FOR TRAIN CONTROL OF SPARCS
Akira Kurita (Nippon Signal Co., Ltd., Japan)
1C12 DYNAMIC TIME WARPING BASED STATE MONITORING OF TRAIN AXLE TEMPERATURE
Yuan Cao (Beijing Jiaotong University, China)
1C13 STUDY ON STANDARD SAFETY ASSESSMENT METHODS FOR GUIDED TRANSPORTATION SYSTEMS WHICH USE FMEA AND FTA AS CORE TOOLS
Morimasa Hayashida (National Traffic Safety and Environment Laboratory, Japan)
1C14 SAFETY AND RELIABILITY BALANCE FOR JAPANESE RAILWAY DESIGN
Takeshi Mizuma (National Traffic Safety and Environment Laboratory, Japan)
1C15 A STUDY ON THE SAFETY PROTECT SYSTEM OF CHINESE RAIL TRANSIT
Xiuzhen Yan (Southwest Jiaotong University, China)

13:30-14:50 Safety-Infrastructure 2
Chair: Yuan Cao (Beijing Jiaotong University, China)
Hiroaki Ishida (Meisei University, Japan)

1C21 DEVELOPMENT OF THE EVALUATION METHOD ON MEASURES AGAINST INUNDATION AT AN UNDERGROUND STATION
Susumu Mafune (East Japan Railway Company, Japan)
1C22 INTRODUCTION WITH NEW METHODS FOR TRAIN OPERATION CONTROL IN STRONG WINDS AT JR EAST
Yosuke Nagumo (East Japan Railway Company, Japan)
1C23 RAILWAY ACCIDENT COSTS: DETERMINING THE VALUE OF PREVENTING A CASUALTY BY

ANALYZING NATIONAL INVESTIGATION BODIES REPORTS
Mathias Linden (The University of Koblenz-Landau, Germany)
1C24 STATISTICAL ANALYSIS OF ROPEWAY ACCIDENTS IN JAPAN IN THE PAST 10 YEARS
Hisao Sato (National Traffic Safety and Environment Laboratory, Japan)

15:30-16:30 Traffic Planning 1
Chair: Boris Davydov (Far Eastern State Transport University, Russia)
Kenji Ejiri (The University of Tokyo, Japan)

1C31 RESCHEDULING OF THE MIXED TRAFFIC ON THE RAILWAY SECTION
Boris Davydov (Far Eastern State Transport University, Russia)
1C32 A PREDICTION METHOD OF URBAN RAILWAY STATION DEMAND BASED ON QUANTITATIVELY DEFINED STATION CATCHMENT AREAS AND POSSIBILITY OF ITS ENHANCEMENT
Munenori Shibata (Railway Technical Research Institute, Japan)
1C33 TEMPORAL AND SPATIAL DIFFERENCES OF LEISURE TRAVEL FREQUENCY DISTRIBUTION IN JAPAN
Hiromichi Yamaguchi (Tohoku University, Japan)

Room D
10:40-12:20 Vehicles-Dynamics 1
Chair: Roger Goodall (Loughborough University, UK)
Masataka Hidai (Hitachi, Ltd., Japan)

1D11 RUNNING SAFETY ANALYSIS OF RAILWAY VEHICLE DEPENDING ON RAIL INCLINATION CHANGE ON ACTUAL TRACK CONDITIONS
Moon Ki Kim (Seoul National University of Science and Technology, Republic of Korea)
1D12 RUNNING SAFETY ANALYSIS OF RAILWAY VEHICLE IN CASE OF SPEED-UP IN ACTUAL TRACK CONDITIONS
Taegeon Kim (Seoul National University of Science and Technology, Republic of Korea)
1D13 ASSESSMENT METHODS FOR RUNNING STABILITY OF HIGH SPEED TRAIN USING SMALL-SCALED DERAILMENT SIMULATOR
In Che Noh (Seoul National University of Science and Technology, Republic of Korea)
1D14 EXAMPLES FOR EUROPEAN ASSESSMENT OF VEHICLE'S DYNAMIC RUNNING BEHAVIOUR
Hinnerk Stradtmann (Alstom Transport Deutschland GmbH, Germany)
1D15 DEVELOPMENT OF VIRTUAL RUNNING TEST ENVIRONMENT TO REPRODUCE ACTUAL RUNNING TEST
Reiko Koganei (Railway Technical Research Institute, Japan)

13:30-14:50 Vehicles-Dynamics 2
Chair: Jan Kalivoda (Czech Technical University in Prague, Czech Republic)

1D22 RESEARCH ON CURVING SAFETY OF FREIGHT TRAIN BASED ON 1D AND 3D MIXED MODEL
Liangliang Yang (Southwest Jiaotong University, China)
1D23 A STUDY OF TRAIN SET MOTION WITH LARGE DISPLACEMENT AND DEFORMATION UNDER LONGITUDINAL EXCESS FORCE CONDITION
Toyokazu Hamajima (Central Japan Railway Company, Japan)
1D24 COUPLED SIMULATION OF VEHICLE DYNAMICS AND AERODYNAMICS FOR TRAIN
Masataka Hidai (Hitachi Ltd., Japan)
1D25 DIFFERENCES IN THE DYNAMIC BEHAVIOR OF HALF-BODY AND FULL-BODY VEHICLE MODELS ON ROLLER RIGS UNDER FORCED VIBRATION
Yuki Kunimatsu (Central Japan Railway Company, Japan)

15:30-17:10 Vehicles-Dynamics 3
Chair: Takahiro Tomioka (Railway Technical Research Institute, Japan)

1D31 THE PERFORMANCE IMPROVEMENT OF ACTIVE LATERAL SECONDARY SUSPENSION

CONTROL SYSTEM FOR CONVENTIONAL LINE VEHICLES BY CONTROLLER SWITCHING BETWEEN STRAIGHT AND CURVE
Hitoshi Yamao (Nippon Steel & Sumitomo Metal Corp., Japan)
1D32 DEVELOPMENT OF THE FREQUENCY DEPENDENT ORIFICE OF AIR SPRING
Yuichiro Takino (Nippon Sharyo, Ltd, Japan)
1D33 ACTIVE SECONDARY YAW CONTROL TO IMPROVE CURVING BEHAVIOUR OF A RAILWAY VEHICLE
Stefano Alfi (Politecnico di Milano, Italy)
1D34 ACTIVE SECONDARY SUSPENSION - FROM IDEA TO PRODUCT
Rickard Persson (Bombardier Transportation, Sweden)
1D35 THE DYNAMIC CHARACTER OF AIR SPRING AND ITS INFLUENCE ON THE BOGIE BOUNCE MODE
Haitao Li (CSR Qingdao Sifang Co., Ltd., China)

Room E

10:40-12:20 Environment and Energy 1

Chair: Hiroaki Ishida (Meisei University, Japan)

1E11 IDENTIFICATION OF A 'DRIVER CULTURE' AND ITS EFFECT ON ENERGY CONSUMPTION ON A DC RAIL NETWORK
Robert Joseph Ellis (The University of Birmingham, UK)
1E12 THE MEASUREMENT AND ANALYSIS OF THE DRIVING ENERGY IN THE SHINKANSEN
Yoshiki Mizuguchi (East Japan Railway Company, Japan)
1E13 EVALUATION OF A STEERING BOGIE ABOUT RUNNING RESISTANCE AND POWER CONSUMPTION
Takuya Ozaki (Nippon Steel and Sumitomo Metal Corp., Japan)
1E14 THE EXAMINATION WHICH MEASURES POWER CONSUMPTION SIMULTANEOUSLY IN THE TRAIN AND SUBSTATION OF A RAILWAY IN A DIRECT-CURRENT ELECTRIFIED SECTION
Shingo Minobe (West Japan Railway Company, Japan)
1E15 ECO-DRIVING TRIAL RUNS IN EUROPEAN RAILWAY
Rieko Kuwahara (Toshiba Corporation, Japan)

13:30-15:10 Environment and Energy 2

Chair: Robert Joseph Ellis (The University of Birmingham, UK)

1E21 STUDY OF PRACTICAL ENERGY-SAVING OPERATION FOR ELECTRIC RAILWAY VEHICLE
Suguru Hiramatsu (West Japan Railway Company, Japan)
1E22 ENERGY-SAVING SCHEDULE DESIGN BY INSTALLING OPTIMIZED RAPID SERVICE IN DC-ELECTRIC RAILWAYS
Shoichiro Watanabe (The University of Tokyo, Japan)
1E23 IMPROVEMENT OF ENERGY CONSUMPTION AND STOP POSITION ACCURACY BY REVISION OF ATO CONTROL LOGIC
Masahiro Kaneko (Tokyo Metro, Japan)
1E24 CHARGE EVALUATION OF NICKEL METAL HYBRID BATTERY FOR ENERGY STORAGE SYSTEM
Tetsuo Fujita (East Japan Railway Company, Japan)
1E25 EXPERIMENTAL ANALYSIS OF POWER SUPPLY SYSTEM USING RENEWABLE ENERGY FOR DC ELECTRIFIED RAILWAY
Takeshi Konishi (Railway Technical Research Institute, Japan)

15:30-17:10 Environment and Energy 3

Chair: Seigo Ogata (National Traffic Safety and Environment Laboratory, Japan)
Guowei Yang (Chinese Academy of Sciences, China)

1E31 WHAT HAPPENED TO HYDROGEN?
Robert Joseph Ellis (University of Birmingham, UK)
1E32 DEVELOPMENT OF BATTERY SYSTEM FOR ELECTRIC VEHICLE —STUDY ON COOLING

METHODS FOR HIGHLY-INTEGRATED STORAGE BATTERY SYSTEMS―
Tomoki Iwase (West Japan Railway Company, Japan)
1E33 NUMERICAL SIMULATION FOR PANTOGRAPH AERODYNAMIC NOISE REDUCTION
Nobuo Shiraishi (East Japan Railway Company, Japan)
1E34 AERODYNAMIC NOISE EVALUATION FOR HIGH-SPEED TRAINS BY SIMILARITY LAW
Akitoshi Matsui (Hitachi, Ltd., Japan)
1E35 AERODYNAMIC NOISE OPTIMIZATION OF STREAMLINED SHAPE OF HIGH SPEED TRAINS
Sun Zhenxu (Chinese Academy of Sciences, China)

Room F

10:40-12:00 Operation management 1

Chair: Norio Tomii (Chiba Institute of Technology, Japan)

1F11 DESIGNING A SIMULATION MODEL OF A RAILWAY SECTION USING CAD LAYERS
Andrew V. Merkulov (Far Eastern State Transport University, Russia)
1F12 OPTIMIZATION OF TRAIN RESCHEDULING PROBLEMS USING THE MIMIC PANEL STATE MODEL AND THE GENETIC ALGORITHMS
Masayuki Yamada (Kogakuin University, Japan)
1F13 A MESOSCOPIC TRAIN TRAFFIC SIMULATION ALGORITHM CONSIDERING RUNNING TIMES OF BLOCK SECTIONS
Yutaro Watanabe (Chiba Institute of Technology, Japan)
1F14 REAL-TIME TRAIN TRAFFIC OPERATION ASSISTANCE SYSTEM
Hajime Ochiai (West Japan Railway Company, Japan)

13:30-14:50 Vehicles-Rail/Wheel 1

Chair: Roger Goodall (Loughborough University, UK)
Kenji Ejiri (The University of Tokyo, Japan)

1F21 EARLY AND PRESENT TECHNOLOGY OF RAILROAD VEHICLE AXLE AND WHEEL
Haruo Sakamoto (Kochi University of Technology, Japan)
1F23 ANALYSIS ON THE DERAILMENT MECHANISM OF RAIL VEHICLE DUE TO LARGE EARTHQUAKES WITH EXPERIMENTS AND SIMULATION
Kazuhiko Nishimura (Central Japan Railway Company, Japan)
1F24 DEVELOPMENT OF THE CRUSHABLE STOPPER AS BOGIE PARTS FOR COUNTERMEASURES AGAINST DERAILMENT IN CASE OF EARTHQUAKE
Daichi Nakajima (Railway Technical Research Institute, Japan)
1F25 STUDY ON WHEELSET WEAR OF THE HEAVY-HAUL LOCOMOTIVE BASED ON DIAMETER DIFFERENCE
Chen Wang (The Southwest Jiaotong University, China)

15:30-17:10 Vehicles-Rail/Wheel 2

Chair: Akira Matsumoto (Japan Transport Safety Board, Japan)
Chen Wang (Southwest Jiaotong University, China)

1F31 ACTIVE CONTROL OF RAILWAY BOGIES – ASSESSMENT OF CONTROL STRATEGIES
Roger Goodall (Loughborough University, UK)
1F32 FORCED STEERING CONTROL WITH ESTIMATED WHEEL WEAR
Smitirupa Pradhan (Indian Institute of Technology, India)
1F33 DEVELOPMENT OF A BOGIE TO CONTROL THE DECREMENT OF WHEEL LOAD
Mitsugi Suzuki (Railway Technical Research Institute, Japan)
1F34 DESIGN OF SCALED EXPERIMENTAL MECHATRONIC BOGIE
Jan Kalivoda (Czech Technical University in Prague, Czech)
1F35 PERFORMANCE EVALUATION OF AXLE BEARING FOR SHINKANSEN BASED ON AXLE BEARING ENDURANCE TEST EQUIPMENT
Fumihiko Suzuki (East Japan Railway Company, Japan)

Wednesday, November 11, 2015

Room A

10:10-10:50 Boundary 1

Chair: Akira Matsumoto (Japan Transport Safety Board, Japan)

2A11 INFLUENCE OF DAMPING AND RAIL STRESS ON PARAMETRIC INSTABILITY OF A WHEEL
Kazuhisa Abe (Niigata University, Japan)

2A12 EXPERIMENTAL RESEARCH ON RAIL/WHEEL WEAR
Koichi Nishitani (Sophia University, Japan)

11:00-12:20 Boundary 2

Chair: Roger Lundén (Chalmers University of Technology, Sweden)
Kazuhisa Abe (Niigata University, Japan)

2A21 THE INFLUENCE OF LUBRICATION CONDITIONS OF FOUR WHEELS IN A BOGIE ON CURVING PERFORMANCE
Kensuke Nagasawa (Nippon Steel and Sumikin Railway Technology Co., Ltd, Japan)

2A22 INFLUENCE OF SURFACE ROUGHNESS AND TEMPERATURE ON THE ADHESION OF WHEEL AND RAIL IN WET CONDITIONS
Hiraku Tanimoto (Railway Technical Research Institute, Japan)

2A23 CHARACTERISTICS OF THE TRAIN WIND FOR THE TRAIN PASSING THE TUNNEL AND PASSING BY EACH OTHER IN THE TUNNEL
Dilong Guo (Chinese Academy of Sciences, China)

2A24 DESIGN OF A NEW MOVING MODEL RIG FOR AERODYNAMIC EXPERIMENTS OF HIGH-SPEED TRAINS
Guowei Yang (Chinese Academy of Sciences, China)

Room B

09:50-10:50 Condition Monitoring-Vehicle 2

Chair: Hisao Sato (National Traffic Safety and Environment Laboratory, Japan)

2B11 STUDY ON BIG DATA ANALYTICS OF RUNNING RECORDS IN RAILWAY SYSTEMS
Shihpin Lin (The University of Tokyo, Japan)

2B13 DEVELOPMENT OF A NEW SCOUR DETECTOR THAT ENABLES MONITORING OF PIER SOUNDNESS
Takenori Keyaki (East Japan Railway Company, Japan)

2B14 TEMPERATURE CONDITION MONITORING FOR SHINKANSEN BOGIES
Takuya Oba (Central Japan Railway Company, Japan)

11:00-12:20 Condition Monitoring-Infrastructure 1

Chair: Makoto Ishida (Nippon Koei, Japan)

2B21 TRACK GEOMETRY ESTIMATION OF RAILWAY FROM CAR-BODY ACCELERATION
Shohei Azami (Graduate School of Nihon University, Japan)

2B22 TRACK GEOMETRY ESTIMATION FROM CAR-BODY MOTIONS OF SHINKANSEN VEHICLES
Yasukuni Naganuma (Central Japan Railway Company, Japan)

2B23 CONDITION DIAGNOSIS OF RAILWAY TRACKS BY A COMPACT SIZE ONBOARD DEVICE
Hirotaka Mori (National Traffic Safety and Environment Laboratory, Japan)

2B24 INFLUENCE OF TRACK CONDITIONS ON THE AXIAL FORCE MEASURING METHOD OF CONTINUOUS WELDED RAIL BASED ON THE NATURAL FREQUENCY
Fumihiro Urakawa (Railway Technical Research Institute, Japan)

Room C

09:30-10:50 Safety-Vehicle 1

Chair: Takeshi Itani (Kinki Sharyo, Japan)
Yohei Michitsuji (Ibaraki University, Japan)

2C11 INVESTIGATION INTO IMPROVING CURVING PERFORMANCE THROUGH TORSION EQUALIZER MECHANISM
Keiichiro Kamura (Kawasaki Heavy Industries, Japan)
2C12 IMPROVEMENT OF WHEEL LOAD VARIATION WITH TORSION EQUALIZER MECHANISM UNDER ACTUAL CAR TEST CONDITIONS
Kenta Yano (Tokyo Metro, Japan)
2C13 RECENT ENDEAVORS FOR HIGH PERFORMANCE BRAKE SYSTEM OF SHINKANSEN
Seiji Kanamori (Central Japan Railway Company, Japan)
2C14 JAPANESE ROLLING STOCK VEHICLES IN EUROPE? PROCESS OF APPROVAL, EXAMPLE FIRE SAFETY
Alfred Beer (TÜV SÜD Rail GmbH, Germany)

11:00-12:20 Safety-Vehicle 2
Chair: Ohno Hiroyuki (National Traffic Safety and Environment Laboratory, Japan)

2C21 DEVELOPMENT OF SECONDARY SUSPENSION FOR IMPROVEMENT OF WHEEL LOAD VARIATION (PART1)
Yoshinori Hagio (Nippon Steel and Sumitomo Metal Corporation, Japan)
2C22 DEVELOPMENT OF THE SECONDARY SUSPENSION FOR THE IMPROVEMENT OF THE WHEEL LOAD VARIATION (PART2)
Takuya Saito (Tokyo Metro, Japan)
2C23 A STUDY OF FLANGE CLIMB DERAILMENT ON LOW SPEED RANGES ~FRICTION COEFFICIENT BETWEEN WHEEL FLANGE AND RAIL.~
Hitoshi Iijima (East Japan Railway Company, Japan)
2C24 RAILWAY WHEEL AND AXLE INSPECTION BY PHASED ARRAY ULTRASONIC TECHNOLOGY
Chaoyong Peng (Southwest Jiaotong University, China)

Room D
10:10-10:50 Vehicles-Dynamics 4
Chair: Hidehisa Yoshida (National Defense Academy, Japan)

2D12 FEASIBILITY OF AUTOMATIC PLATOONING OF TRAM CARS AT LOW SPEED
Masataka Fukumoto (The University of Tokyo, Japan)
2D13 HUMAN MOTION ANALYSIS ON A RAILWAY VEHICLE
Akihiro Takazawa (Sophia University, Japan)

11:00-12:20 Vehicles-Dynamics 5
Chair: Kazuhiko Nishimura (Central Japan Railway Company, Japan)

2D21 DEVELOPMENT OF TORUS-SHAPED ELASTIC BODY AS A VIBRATION ABSORBER FOR FLEXURAL VIBRATION IN RAILWAY VEHICLE CARBODY AND ITS EXPERIMENTAL VALIDATION
Takahiro Tomioka (Railway Technical Research Institute, Japan)
2D22 CARBODY FLEXIBLE VIBRATION SUPPRESSION OF A RAILWAY VEHICLE BY MEANS OF UNDER-CHASSIS DAMPERS
Dao Gong (Tongji University, China)
2D23 ADVANCEMENT OF SHINKANSEN ROLLING STOCK BY DOWNSIZING AND WEIGHT REDUCTION OF PROPULSION SYSTEM
Kenji Sato (Central Japan Railway Company, Japan)
2D24 APPLICATION OF TRANSFER PATH ANALYSIS TO THE VIBRATION AND NOISE OF A RAILWAY VEHICLE
Mineyuki Asahina (Railway Technical Research Institute, Japan)

Room E
09:50-10:50 Infrastructure 1
Chair: Roger Goodall (Loughborough University, UK)

2E11 MILLIMETER-WAVE TRAIN RADIO COMMUNICATION SYSTEM BASED ON LINEAR CELL CONCEPT
Hiroshi Nishimoto (Mitsubishi Electric Corporation, Japan)
2E12 DESIGN AND CONSTRUCTION OF GEOSYNTHETIC-REINFORCED SOIL STRUCTURES FOR HOKKAIDO SHINKANSEN
Takayuki Yamazaki (Transport and Technology Agency, Japan)
2E14 EXTENDING MAINTENANCE INTERVALS OF TRACK SWITCHES UTILISING MULTI-CHANNEL REDUNDANCY OF ACTUATION AND SENSING
Samuel David Bemment (Loughborough University, UK)

11:00-12:20 Infrastructure 2
Chair: Samuel Bemment (Loughborough University, UK)

2E21 DYNAMIC ANALYSES AND FIELD TESTS OF INCHEON URBAN MAGLEV TRAIN-GUIDEWAY INTERACTION SYSTEM
Sungil Kim (Korea Railroad Research Institute, Republic of Korea)
2E22 SEISMIC DESIGN METHOD OF RAILWAY STRUCTURE WHICH TAKES DYNAMIC EFFECT OF RAILWAY VEHICLES INTO ACCOUNT
Munemasa Tokunaga (Railway Technical Research Institute, Japan)
2E23 FRICTION MANAGEMENT AS AN INTEGRAL PART OF THE RAILWAY SYSTEM
Richard Stock (L. B. Foster Rail Technologies, Corp., Canada)
2E24 A STUDY ON THE INFLUENCE OF TRACK IRREGULARITY ON THE DYNAMIC INTERACTION BETWEEN THE VEHICLE AND THE STEEL GIRDER BRIDGE
Yoshiyuki Kawasaki (Central Japan Railway Company, Japan)

Room F
11:40-12:20 Vehicles-Rail/Wheel 3
Chair: Jan Kalivoda (Czech Technical University in Prague, Czech Republic)

2F23 STUDY ON LIGHTWEIGHT RAILWAY VEHICLE DYNAMICS IN WET CONDITION
Shihpin Lin (The University of Tokyo, Japan)
2F24 ADVANTAGES AND TECHNICAL ISSUES ON REGENERATIVE BRAKE ALL OVER THE SPEED RANGE METHOD
Sho Watanabe (Odakyu Electric Railway Co., Ltd., Japan)

Thursday, November 12, 2015

Room A

13:00-15:00 Customer Environment 1

Chair: Weibin Wang (CSR Qingdao Sifang Co., Ltd, China)

3A21 DEVELOPMENT OF AN INTEGRATED PUBLIC TRANSPORTATION INFORMATION SYSTEM BASED IN A RAILWAY STATION
Yousuke Hidaka (East Japan Railway Company, Japan)

3A22 MODELLING OF SEATED PASSENGER ON HIGH SPEED RAILWAY VEHICLE BY MULTI-BODY DYNAMICS
Kou Hisano (Tokyo University of Agriculture and Technology, Japan)

3A23 VIBRATION ANALYSIS OF HIGH SPEED RAILWAY VEHICLE SEAT BY MULTI-BODY DYNAMICS
Daiki Fukushima (Tokyo University of Agriculture and Technology, Japan)

3A24 NUMERICAL SIMULATION AND EXPERIMENTAL RESEARCH OF THE AIR CONDITIONING AND INTERNAL AIRFLOW FOR HIGH SPEED TRAIN
Wang Wei-Bin (CSR Qingdao Sifang Co., Ltd, China)

3A25 EXPERIMENTAL STUDY ON THERMAL COMFORT IN RAILWAY VEHICLE
Hiroharu Endoh (Railway Technical Research Institute, Japan)

3A26 MODELING OF THERMAL ENVIRONMENT AND EVALUATION OF THERMAL COMFORT IN RAILWAY VEHICLE CABIN BY CFD AND HUMAN THERMAL MODEL
Nobuaki Hayashi (East Japan Railway Company, Japan)

Room C

09:40-10:20 Infrastructure 3

Chair: Richard Stock (L. B. Foster Rail Technologies, Corp., Canada)

3C12 FE-BASED BALLAST SETTLEMENT ANALYSIS CONSIDERING WHEEL-TRACK DYNAMIC RESPONSE
Kazuhiro Koro (Niigata University, Japan)

3C13 DEVELOPMENT OF THE VEHICLE DYNAMIC SIMULATION MODEL OF RUNNING ON RAIL GAPS
Yuki Nishinomiya (Railway Technical Research Institute, Japan)

13:20-14:40 Safety-Vehicle 3

Chair: Shihpin Lin (The University of Tokyo, Japan)
Chaoyong Peng (Southwest Jiaotong University, China)

3C21 STUDY ON IMPROVED SIGN DETECTION SYSTEM OF FLANGE-CLIMB DERAILMENT BY REAL BOGIE FLANGE-CLIMB EXPERIMENT
Masaya Sakamoto (The University of Tokyo, Japan)

3C22 WEAR AND TEAR ANALYSIS FOR HIGH FRICTION COEFFICIENT SYNTHETIC BRAKE SHOE IN FREIGHT TRAIN UNDER HARSH CONDITIONS
Xu Chen (CSR Nanjing Puzhen Co., Ltd., China)

3C23 STUDY ON CONTACT MODEL BETWEEN WHEEL AND TRACK STRUCTURE AFTER DERAILMENT
Keiichi Goto (Railway Technical Research Institute, Japan)

3C24 APPROACH TO THE PREVENTION OF FALL AT THE HEAD CAR COUPLING SECTION
Takenobu Yoshioka (West Japan Railway Company, Japan)

Room D

09:20-10:20 Urban Transportation 1

Chair: Yohei Michitsuji (Ibaraki University, Japan)

3D11 PROPOSITION OF OBLIQUE AXLE INDEPENDENTLY ROTATING WHEELSET FOR IMPROVEMENT IN RUNNING STABILITY

Kenji Ejiri (The University of Tokyo, Japan)
3D12 INTRODUCTION OF PARTIAL-HEIGHT PLATFORM SCREEN DOOR SYSTEM WITH THE USE OF GAP FILLER
Hideto Nakajima (Kyosan Electric Manufacturing Co., Ltd., Japan)
3D13 85 KHZ WIRELESS POWER TRANSFER SYSTEM FOR RAPID CHARGING OF ELECTRIC BUS
Shuichi Obayashi (Toshiba Corporation, Japan)

13:40-14:40 Urban Transportation 2
Chair: Takefumi Miyamoto (Railway Technical Research Institute, Japan)

3D22 PROVIDING TRAIN INFORMATION AND CONSEQUENTIAL DECISION MAKING FOR TRAIN CHOICE IN URBAN AREA
Noriko Fukasawa (Railway Technical Research Institute, Japan)
3D23 REALIZATION OF ULTRA-CONVENIENT RAIL TRANSPORT: CURRENT STATUS AND TECHNICAL CHALLENGES
Masao Watanabe (Kogakuin University, Japan)
3D24 SCHEDULING TECHNIQUES TO ACHIEVE ULTRA-HIGH FREQUENCY OPERATION OVER EXISTING INFRASTRUCTURE FOR REALIZATION OF ULTRA-CONVENIENT RAIL TRANSPORT
Takahiro Shimizu (Kogakuin University, Japan)

Room E
09:20-10:20 Electrical-Vehicle 1
Chair: Ryo Takagi (Kogakuin University, Japan)
Shingo Makishima (Toyo Denki Seizo K.K., Japan)

3E11 INFLUENCES OF STATIC HEIGHT OF CONTACT WIRE ON THE PERFORMANCE OF CURRENT COLLECTING SYSTEM
Kunio Ikeda (East Japan Railway Company, Japan)
3E12 SERIES-PARALLEL CONTINUOUSLY REGULATED CHOPPER FOR AUXILIARY POWER SUPPLY OF ELECTRIC RAILWAY VEHICLES
Takao Mori (Toyo Denki Seizo K.K., Japan)
3E13 FUZZY CHARGE/DISCHARGE CONTROL OF STATIONARY ENERGY STORAGE SYSTEMS FOR DC ELECTRIC RAILWAYS BY USING ESTIMATED LINE RECEPTIVITY
Takuya Kikuchi (Kogakuin University, Japan)

13:20-14:40 Electrical-Vehicle 2
Chair: Zhongping Yang (Beijing Jiaotong University, China)
Masafumi Miyatake (Sophia University, Japan)

3E21 A NEW TRACTION POWER SUPPLY SYSTEM BASED ON MODULAR MULTILEVEL CONVERTER
Chang Fei (Beijing Jiaotong University, China)
3E22 A NOVEL NON-CONSTANT ASYNCHRONOUS MODULATION FREQUENCY SVPWM OVER-MODULATION TECHNIQUE FOR TRACTION DRIVE SYSTEM WITH PMSM
Wang Tingting (Beijing Jiaotong University, China)
3E23 EXPOSITION OF REVISION OF SEISMIC DESIGN GUIDELINE FOR OVERHEAD CONTACT SYSTEMS
Yuichi Kondo (Railway Technical Research Institute, Japan)
3E24 RATIONAL PLACEMENT OF CHARGING-STATION FOR LITHIUM-ION BATTERY ONBOARD OF RAIL VEHICLES
Yoshichika Noda (Sophia University, Japan)

Room F
09:20-10:20 Condition Monitoring-Infrastructure 2
Chair: Kazuhisa Abe (Niigata University, Japan)
Yasukuni Naganuma (Central Japan Railway Company, Japan)

3F11 EFFECTIVE METHOD OF INSPECTION FOR VOIDS NEAR SURFACE IN SUBWAY TUNNEL WITH INFRARED THERMOMETRY
Masumi Shinozaki (Tokyo Metro Co., Ltd., Japan)
3F12 CONDITION-BASED MAINTENANCE OF THE TICKET-ISSUING AND TICKET GATE EQUIPMENT
Kentaro Matsumura (JR East Mechatronics Co., Ltd., Japan)
3F13 FUNDAMENTAL STUDY FOR EVALUATING THE ROCK SLOPE STABILITY CONSIDERING THE SCALE OF THE ROCK MASS
Shintaro Minoura (Railway Technical Research Institute, Japan)

13:00-14:40 Condition Monitoring-Infrastructure 3
Chair: Hitoshi Tsunashima (Nihon University, Japan)

3F21 DEVELOPMENT OF A BRIDGE MAINTENANCE MANAGEMENT SYSTEM USING 3D MODELS
Akihiro Nakazawa (West Japan Railway Company, Japan)
3F22 STUDY ON THE AREA OF CAUTION FOR CHLORIDE ATTACK IN SUBWAY BOX TYPE TUNNELS
Toshiki Imamura (Tokyo Metro Co., Ltd., Japan)
3F23 DEVELOPMENT OF THE 3D OBSTACLE SENSOR FOR PLATFORM SCREEN DOORS
Tetsuya Hatanai (JR East Mechatronics Co., Ltd, Japan)
3F24 ANALYSIS INTO THE STATE OF RAIL CORROSION ACCORDING TO TRACK STRUCTURE IN SUBWAY TUNNELS
Hikaru Isozaki (Tokyo Metro Co., Ltd, Japan)
3F25 THE MONITORING SYSTEM USING 90GHZ BAND FOR RAILWAY
Kazuki Nakamura (Railway Technical Research Institute, Japan)

Wednesday, November 11, 2015
Shotgun Session / Lecture Room
Chair: Kimihiko Nakano (The University of Tokyo, Japan)

13:30-14:00
2P01 CURVING PERFORMANCE IMPROVEMENT BY MECHANICAL PNEUMATIC STEERING SYSTEM
Shogo Kamoshita (Railway Technical Research Institute, Japan)
2P02 STUDY ON AXLE SUPPORTING SYSTEM WITH DAMPING ELEMENTS IN RAILWAY VEHICLES
Yuki Shiroshita (Meisei University, Japan)
2P03 THE STRENGTH ANALYSIS OF ANTI DERAILMENT AXLE BOX
Fubing Zhang (Southwest Jiaotong University, China)
2P04 A STUDY OF UNATTENDED LIGHT RAIL RUBBER TIRE VEHICLE (K-AGT) SYSTEM ENGINEERING PROCESS UNDER SAFETY REQUIREMENT,IEC 62267
Sang Don Kwon (Woojin industrial systems, Republic of Korea)
2P05 AERODYNAMIC SHAPE OPTIMIZATION OF TRAIN ROOF
Shoichi Ishimura (Meijo university, Japan)
2P06 SUSTINA TO THE GLOBAL MARKET: THE FIRST APPLICATION TO BANGKOK PURPLE LINE
Shingo Matsubara (Japan Transport Engineering Company, Japan)
2P07 ELECTRIC EQUIPMENT FOR 1000 SERIES LRV HIROSHIMA ELECTRIC RAILWAY CO., LTD.
Kazuki Fujimoto (Toyo Denki Seizo K.K., Japan)
2P08 DYNAMIC ANALYSIS OF LOCAL STRUCTURE OF HIGH-SPEED EMU BY USING THE MULTI SUB-MODEL METHOD
Dou Weiyuan (Beijing Jiaotong University, China)
2P09 SUSTINA-COMMUTER: TECHNOLOGIES FOR IMPROVEMENT IN SAFETY, AND COMFORT OF THE E235 SERIES PROTOTYPE
Keita Sawai (Japan Transport Engineering Company, Japan)
2P10 SUSTINA-HYBRID, EV-E301 AND HB-E210
Kazuo Ohno (Japan Transport Engineering Company, Japan)
2P11 ANTI-LOCK DRIVING WHEEL CONTROL BASED ON REGENERATIVE BRAKE FOR ELECTRIC TRAIN SET
Takumi Matsumoto (Nagaoka University of Technology, Japan)
2P12 RESEARCH ON THE CHARACTERISTICS AND THE INHIBITION METHODS OF THE RAIL ARC
Tianyu Wang (Beijing Jiaotong University, China)
2P13 A STUDY ON THE IMPROVEMENT OF RAIL EXPANSION JOINT FOR URBAN MAGLEV SYSTEM
Sung-Hyun Park (Seohyun Engineering Co., Ltd, Republic of Korea)
2P14 TECHNICAL PROPOSAL STUDIES OF THE IMPACT TEST BENCH FOR RAILWAY VEHICLES
Shaoqing liu (CSR Qingdao Sifang Co.,Ltd, China)
2P15 AN ANALYSIS OF HIGH-SPEED TRAIN AXLE TEMPERATURE BASED ON FUZZY C-MEANS CLUSTERING ALGORITHM
Guo Xie (Xi'an University of Technology, China)
2P16 STUDY ON THE RULES OF DEFECTS PRODUCTION AND DEGRADATION IN A HIGH-SPEED WHEELS
Dongli Song (Traction power state key laboratory of southwest Jiaotong University, China)
2P17 ABOUT CORRESPONDENCE ON TRACK SIDE IN THE 320KM/H HIGH-SPEED DRIVING TEST
Mitsuhiko Kubota (East Japan Railway Company, Japan)
2P18 A NEW CALCULATION MODEL FOR LINE CARRYING CAPACITY OF URBAN RAIL TRANSIT
Yang Xia (Beijing Jiaotong University, China)
2P19 WITHDRAW
2P20 A DATA STORAGE AND ACCESS MECHANISM OF 3D BUILDING INFORMATION MODELING FOR URBAN RAIL TRANSIT ENGINEERING
Qin Zhao (Xi'an University of Technology, China)
2P21 MIHARA TEST CENTER FOR URBAN TRANSPORTATION SYSTEM
Hiroyuki Kono (Mitsubishi Heavy Industries, Ltd., Japan)
2P22 PROVIDING INFORMATION FOR RAILWAY PASSENGERS
Keita Sasayama (East Japan Railway Company, Japan)
2P23 A STUDY ON THE RISK-MANAGEMENT BASED OF RELIEF TRAIN OPERATION
Young Seok Jeon

(Korea National University of Transportation, Republic of Korea)

2P24 ENERGY-EFFICIENT TRAIN OPERATION FOR URBAN RAIL TRANSIT SYSTEMS
Shuai Su (Beijing Jiaotong University, China)

2P25 DEVELOPMENT OF TRACK CONDITION MONITORING SYSTEM USING IN-SERVICE VEHICLE AND MONITORING EXAMPLES
Masayuki Ogino (Graduate School of Nihon University, Japan)

2P26 WITHDRAW

2P27 DEVELOPMENT OF VEHICLE POSITION DETECTION SYSTEM WITH ON-BOARD ACCELEROMETER
Hajime Iidaka (Ibaraki University, Japan)