

SURF2026

The 10th Symposium on Pavement Surface Characteristics

Tokyo, Japan - November 9-11, 2026

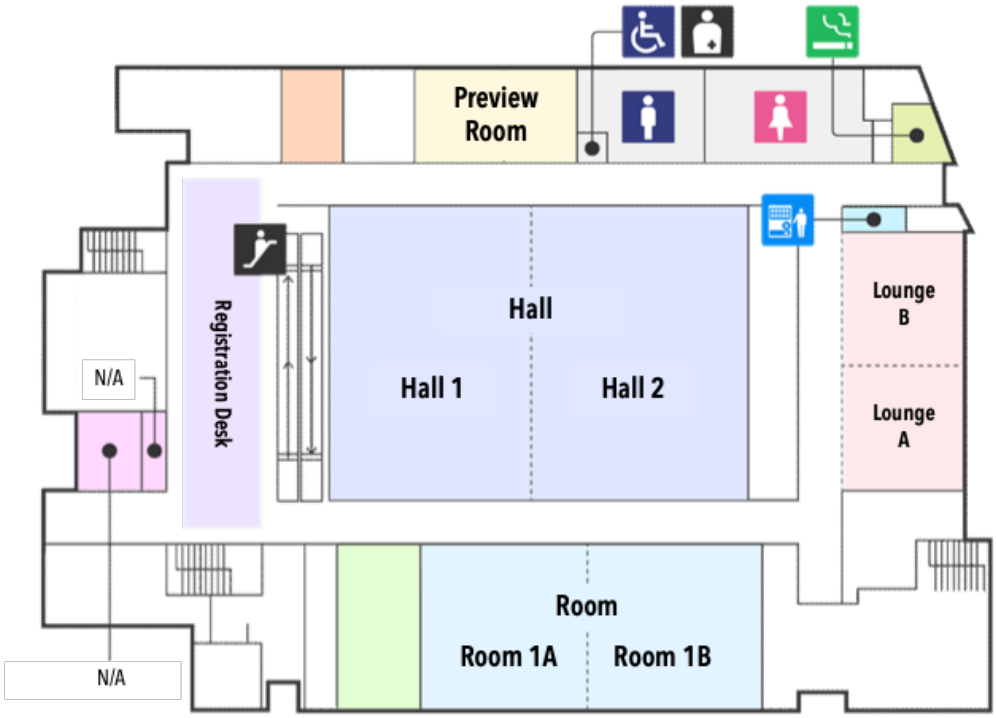
"Driving Innovation of Road Surface Characteristics and Social Interaction"

Program

Ver. 2.0

JAPAN ROAD ASSOC.

Floor Plan



Timetable DAY 1 | Monday, November 9, 2026

Time	Hall 1	Hall 2	Room 1A	Room 1B
12:00 p.m.				
01:00 p.m.	Preliminary Session (JRCA Symposium) 12:45 p.m. – 04:30 p.m.			
02:00 p.m.				
03:00 p.m.				
04:00 p.m.				
	Break			
05:00 p.m.	Welcome Reception 05:00 p.m. – 06:30 p.m.			
06:00 p.m.				



Timetable DAY 2 | Tuesday, November 10, 2026

Time	Hall 1	Hall 2	Room 1A	Room 1B
09:00 a.m. – 10:00 a.m.	Opening Ceremony 09:00 a.m. – 10:30 a.m.			
	Break			
11:00 a.m. – 12:00 p.m.	Surface Monitoring and Data Collection 1 11:00 a.m. – 12:40 p.m.	Surface Monitoring and Data Collection 2 11:00 a.m. – 12:40 p.m.	Eco-Friendly Surfaces and Recycling Technologies 1 11:00 a.m. – 12:40 p.m.	Cycle Path and Walkway Safety and Comfort 1 11:00 a.m. – 12:40 p.m.
01:00 p.m.	Poster Session #1 12:40 p.m. – 02:00 p.m.	Poster Session #2 & #3 12:40 p.m. – 02:00 p.m.	Break	Break
02:00 p.m. – 03:00 p.m.	Surface Monitoring and Data Collection 3 02:00 p.m. – 03:40 p.m.	Surface Monitoring and Data Collection 4 02:00 p.m. – 03:40 p.m.	Eco-Friendly Surfaces and Recycling Technologies 2 02:00 p.m. – 03:40 p.m.	Cycle Path and Walkway Safety and Comfort 2 02:00 p.m. – 03:40 p.m.
04:00 p.m.			Break	
04:00 p.m. – 05:00 p.m.			AI-enabled Data-driven Decision Support 1 04:10 p.m. – 05:30 p.m.	Next-Generation Vehicles and Social Needs for Pavement Surface/History and Cultural Roles of Pavement Surface 04:10 p.m. – 05:30 p.m.
05:00 p.m.			Break	
06:00 p.m.	Gala Dinner (Open) 06:00 p.m. (Start) 06:20 p.m. – 08:30 p.m.			



Timetable DAY 3 | Wednesday, November 11, 2026

Time	Hall 1	Hall 2	Room 1A	Room 1B
09:00 a.m. – 10:00 a.m.	Surface Monitoring and Data Collection 5 09:00 a.m. – 10:40 a.m.	Relationship between Functional and Structural Performance 1 09:00 a.m. – 10:40 a.m.	Eco-Friendly Surfaces and Recycling Technologies 3 09:00 a.m. – 10:40 a.m.	Surface Improvement with Innovative Materials 1 09:00 a.m. – 10:40 a.m.
10:00 a.m. – 11:00 a.m.	Break			
11:00 a.m. – 12:00 p.m.	Surface Monitoring and Data Collection 6 11:10 a.m. – 12:30 a.m.	Surface Monitoring and Data Collection 7 11:10 a.m. – 12:30 a.m.	AI-enabled Data-driven Decision Support 2 11:10 a.m. – 12:30 a.m.	Surface Improvement with Innovative Materials 2 11:10 a.m. – 12:30 a.m.
12:00 p.m. – 01:00 p.m.	Poster Session #4 & #5 12:30 p.m. – 01:30 p.m.	Poster Session #6 & #7 12:30 p.m. – 01:30 p.m.	Break	Break
01:00 p.m. – 02:00 p.m.	Surface Monitoring and Data Collection 8 01:30 p.m. – 02:50 p.m.	Relationship between Functional and Structural Performance 2 01:30 p.m. – 02:50 p.m.	AI-enabled Data-driven Decision Support 3 01:30 p.m. – 02:50 p.m.	Eco-Friendly Surfaces and Recycling Technologies 4 01:30 p.m. – 02:50 p.m.
02:00 p.m. – 03:00 p.m.	Break			
03:00 p.m. – 04:00 p.m.	Surface Monitoring and Data Collection 9 03:20 p.m. – 04:20 p.m.	Relationship between Functional and Structural Performance 3 03:20 p.m. – 04:20 p.m.	Eco-Friendly Surfaces and Recycling Technologies 5 03:20 p.m. – 04:20 p.m.	Eco-Friendly Surfaces and Recycling Technologies 6 03:20 p.m. – 04:20 p.m.
04:00 p.m. – 05:00 p.m.	Break			
	Closing Ceremony 04:40 p.m. – 05:10 p.m.			

Lectern Session

DAY 2 | November 10, 2026

Surface Monitoring and Data Collection 1

Room: Hall 1 | 11:00 a.m. – 12:40 p.m. | Chair: Shigeki Takahashi

No.	Title
C000017	**Performance Verification System for Road Surface Measurement Vehicles Implemented in Japan** Keizo Kamiya, Tomoaki Kuramochi, Masaru Terada
C000085	**Study on Improving Measurement Efficiency Using Road Surface Condition Measurement Vehicle** Koichiro Yoshino, Tadashi Tsunematsu, Takayuki Mima
C000102	**Deep Learning-Based Photometric Stereo for Reliable Pavement Roughness Assessment** Benjamin Bringier, Majdi Khoudeir, Minh-Tan Do, Véronique Cerezo, Damien Pilet
C000139	**Road Surface Roughness Evaluation by Simplified IRI Measurement Device** Shuhei Tanabe, Masayuki Eguchi, Yuta Takahashi, Kazuhiko Kumada
C000197	**Deep Learning–Based Assessment of Unpaved Road Surface Condition from Smartphone Imagery** Gerald Obalim, Mitsuharu Tokunaga

Surface Monitoring and Data Collection 2

Room: Hall 2 | 11:00 a.m. – 12:40 p.m. | Chair: Auckpath Sawangsuriya

No.	Title
C000054	**Combining Pavement Surface Imaging and TSD measurement for Complementary Surface and Structural Diagnostic** Magnus H. Jørgensen, David Malmgren-Hansen
C000056	**Development of Pavement Inspection and Diagnostic Technology for Network-Level Structural Evaluation** Takafumi Nezu, Takayuki Ayabe, Kazuhiro Watanabe
C000076	**Development of Composite Traffic Speed Deflectometer Index for Network-Level Structural Assessment of Pavements** Sadiya Shaikh, Pahirangan Sivapatham, Barbara Esser, Panujan Naguleswaran, Ankit Gupta
C000150	**Research and Development of Highway-Speed Deflectometer Using Light Section Method** Yoshinari Sano, Yuki Mera, Koichi Kawanishi
C000220	**Formation of Homogeneous Sections based on Bearing Capacity Measurements for Maintenance Planning** Tim Schrödter, Pahirangan Sivapatham

Lectern Session

DAY 2 | November 10, 2026

Eco-Friendly Surfaces and Recycling Technologies 1

Room: Room 1A | 11:00 a.m. – 12:40 p.m. | Chair: Osamu Kamada

No.	Title
C000009	**Eco-Design Insights into High-RAP Asphalt: Assessing Rejuvenation Efficiency and Low-Temperature Resistance** Yuxuan Sun, Fan Zhang, Di Wang, Augusto Cannone Falchetto
C000049	**Effect of Rejuvenator Composition on Surface Microstructure and Performance of Recycled Asphalt Binder** Hideyuki Ando, Tsuyoshi Hyakutake, Iwao Sasaki, Hiroyuki Nitta
C000051	**Crack Initiation and Resistance in PET-Fibre-Reinforced High-Performance Asphalt: Insights from Thermal and Mechanical Testing** Mohamed Saleh, Leila Hashemian
C000207	**Quality Evaluation of Asphalt Mixtures Mixed with Agricultural Plastic Waste** Riku Yotsumoto, Kenichi Sato, Takuro Fujikawa, Chikashi Koga
C000212	**Study on the Performance Recovery Characteristics of Aged Asphalt Pavements Treated with Sepiolite–SBR / Epoxidized Soybean Oil Rejuvenating Fog Seal** Tianhao Qi, Zhiqiang Shu, Tingyu Li, Jialin Tu, Yu Yan

Cycle Path and Walkway Safety and Comfort 1

Room: Room 1B | 11:00 a.m. – 12:40 p.m. | Chair: Sakura Kakefuda

No.	Title
C000048	**Towards Safe and Comfortable Cycle Paths: Measurement Methods for Assessing Surface Quality** Anneleen Bergiers, Carl Van Geem, Luc Goubert, Tim Massart, Ali Yeganeh
C000052	**Finite Element Analysis of Bicycle–Pavement Interaction for Cycle Path Skid Resistance and Braking Performance** Ali Yeganeh, Linh Thuy Nguyen, Ali Pirdavani, Luc Goubert, Anneleen Bergiers, Tim Massart, Carl Van Geem
C000057	**Cycle Path Evenness Evaluation in 3D** Roland Spielhofer, Torsten Merkens, Ulrike Stöckert
C000090	**The Skid Resistance of Cycle Infrastructure: An Empirical Study** Luc Goubert, Tim Massart, Carl Van Geem, Anneleen Bergiers, Ali Yeganeh
C000147	**Application of a Motion Base Driving Simulator in the Ride Quality Evaluation of Cycle Paths** Kazutoki Kagawa, Takuma Sanada, Yasuo Endo, Kimio Maruyama, Kazuya Tomiyama



Lectern Session

DAY 2 | November 10, 2026

Surface Monitoring and Data Collection 3

Room: Hall 1 | 02:00 p.m. – 03:40 p.m. | Chair: Takumi Asada

No.	Title
C000018	**A Study on Road Surface Usability Characteristics Such as Skid Resistance and Surface Texture After Surface Grinding Using Diamond Cutters and Their Effect on Reducing Traffic Accidents** Takahiro Sato, Kimio Maruyama
C000022	**Efficient Prediction of Highway Friction from High-Speed Texture Profiles** Can Chen, Christian Andres Sabillon-Orellana, Danilo Inoue, Jorge A. Prozzi
C000011	**Optimal Sampling Frequency for Network-Level Pavement Texture Parameter** Christian Andres Sabillon-Orellana, Danilo K.N. Inoue, Jorge Prozzi
C000046	**Harmonizing Pavement Skid-Resistance Measurements: Review from four editions of the European Pavement Friction Workshops** Veronique Cerezo, Sylvie Dauvergne, Malal Kane, Minh-Tan Do
C000066	**Effect of aggregates' hardness on tire-road wear particle emissions** Manuela Lopes Gennesseaux, Stepan Bobrovnikov, Minh-Tan Do, Bogdan Muresan-Paslaru

Surface Monitoring and Data Collection 4

Room: Hall 2 | 02:00 p.m. – 03:40 p.m. | Chair: Kazuya Tomiyama

No.	Title
C000059	**Data-Centric Pavement Crack Segmentation with In-Vehicle Smartphones and Human-in-the-Loop Annotation** Chunliang Xue, Kai Xue, Naoto Yokozawa, Boyu Zhao, Tomonori Nagayama
C000061	**Preventive Pavement Maintenance Management Using Predicted Crack Progression** Mikako Sano, Shuichi Kameyama, Susumu Matsui, Akira Sakuraba, Toru Morioka, Kou Onodera
C000080	**Development of a Crack Evaluation Method for Expressways Using Deep Learning and Comparative Verification with Conventional Methods** Keizo Endo, Tetsuya Konno, Shigeru Shimeno, Shinpei Chiba, Hayato Nakajo
C000131	**Pavement Repair Planning Using a Crack Depth Estimation Method** Kunikazu Saito,Sadao Sato, Masayuki Minegishi
C000186	**Investigation on the Relationships between Cracking Conditions and Functional Performance of Road Pavements** Valeria Farruggia, Orazio Baglieri, Enea Sogno, Ezio Santagata

Lectern Session

DAY 2 | November 10, 2026

Eco-Friendly Surfaces and Recycling Technologies 2

Room: Room 1A | 02:00 p.m. – 03:40 p.m. | Chair: Takashi Kawamura

No.	Title
C000037	**Study on CO_2 Fixation in Asphalt Mixtures by Chemisorption Method** Naotoshi Watanabe, Shingo Kitazoe, Yoshihide Tanaka, Yasuhiro Sakamoto
C000055	**Investigation of CO_2-Fixing Pervious Concrete for Pavement Decarbonization** Hiroshi Fujii, Kazuhiro Yamauchi, Takafumi Noguchi
C000082	**Development of Environmentally Friendly Asphalt Mixtures Utilizing Carbon-Negative Materials** Norihiro Tachibana, Taimin Hiramatsu, Tadashi Tsunematsu
C000087	**Evaluation of the Practicality of Mixture Using Natural / Plant-Based Binder for CO_2 Emission Reduction** Keisuke Aoyagi, Hiroshi Fujii, Tsuyoshi Hyakutake
C000124	**Study on CO_2 Reduction Methods in the Aggregate Heating Process of Asphalt Mixture Manufacturing** Junji Kubota, Shinichi Tsuchikawa

Cycle Path and Walkway Safety and Comfort 2

Room: Room 1B | 02:00 p.m. – 03:40 p.m. | Chair: Atsushi Kawakami

No.	Title
C000094	**Road Safety (DX) from the User Viewpoint: Streamlining School Route Management in Mountainous Regions** Thae Su Nyein, Keiji Mikoshiba, Etsuko Kusuda, Noriyoshi Kitahara
C000123	**Performance Evaluation of Environmentally Friendly Geothermal Snow Melting System at an Expressway Rest Area in a Severe Cold Region** Rina Kitamura, Hirokazu Koizumi, Taichi Saito, Satoki Wada, Kento Suzuki, Tadashi Maruyama
C000136	**Research on Hazard Inspection in Pedestrian Spaces Using a Mobile Robot Vehicle** Yoshiki Kawano, Ikuo Yamamoto, Akihiro Morinaga, Takeki Haraguchi, Ikkei Nishitake, Kazunari Hirakawa, Quoc Thuyet Dang
C000146	**Evaluation of Road Surface in Pedestrian Spaces Considering Walkability Based on Pedestrian Body Core Acceleration** Subaru Yoshida, Kazuya Tomiyama, Shohei Sakan, Takahiro Yokoyama, Kazushi Moriishi
C000164	**Direction of Case Examples for Freeze-restraint Musial Road** Reina Yaginuma, Hiroyasu Katou, Kunihiro Adachi

Lectern Session

DAY 2 | November 10, 2026

AI-enabled Data-driven Decision Support 1

Room: Room 1A | 04:10 p.m. – 05:30 p.m. | Chair: Kazuya Tomiyama

No.	Title
C000020	**Machine Learning Based Forecasting of Winter Road Surface Grip** Hao Wang, Tianjie Zhang
C000079	**Impact of Frozen Road Surfaces on Vehicle Safety: An Approach Using CARSIM and Machine Learning** Thuyet Quoc Dang, Ha Vinh Tran, Akihiro Kuno, Shuichi Kameyama
C000097	**Network-Level Evaluation of Pothole Risk Using a Simple In-Vehicle Camera and U-Net–Based Crack-Shape Analysis** Rau Tomidokoro, Takumi Asada
C000224	**International Friction Index (IFI) Prediction with Machine Learning for Pavement Management System** Ponlathep Lertworawanich, Songyasin Chonpatathip

Next-Generation Vehicles and Social Needs for Pavement Surface / History and Cultural Roles of Pavement Surface

Room: Room 1B | 04:10 p.m. – 05:30 p.m. | Chair: Hiroyuki Mashito

No.	Title
C000086	**Urban Pavement Condition Monitoring Using LiDAR-Instrumented Vehicles: Preliminary Experimental Evidence** Luca Colombo, Valentina Bonora, Misagh Ketabdari, Emanuele Toraldo, Monica Meocci
C000113	**Study on Pavement Sensing Using Optical Fibers for Pedestrian Position Detection** Tetsuri Kaji, Tomoya Monden, Masahiro Higuchi, Shozo Takaba, Kotaro Fujiwara, Yuichi Yoshimura, Michio Imai, Hidehiko Sekiya, Ikumasa Yoshida, Kenichi Soga
C000143	**Development and Field Application of Remote Operation and Automatic Steering Technology for an Asphalt Paver** Kaiho Takeuchi, Tomohiro Koshiba, Yoshihiro Bandou
C000095	**Empirically Accelerated Pavement Testing Track for Evaluating the Long Term Pavement Durability** Kazunari Hirakawa, Akihiro Kuno

Lectern Session

DAY 3 | November 11, 2026

Surface Monitoring and Data Collection 5

Room: Hall 1 | 09:00 a.m. – 10:40 a.m. | Chair: Kazuya Tomiyama

No.	Title
C000058	**Introducing the Weighted Longitudinal Profile (WLP) as Acceptance Test Method in Austria and Germany** Roland Spielhofer, Andreas Großmann, Reinhard Lohmann-Pichler, Tobias Riedl
C000064	**Application of Synthetically Trained Deep Learning Models in Chronological Pavement Surface Monitoring** Krishna Modak, Di Su, Kai Xue, Naoto Yokozawa, Tomonori Nagayama
C000115	**E-NEXCO INDIA's Initiatives for Pavement Condition Survey in India** Kentaro Oba, Tatsuo Takano, Kazuhiko Kumada, Michiya Kitayama, Kazuhiro Okajima, Keizo Endo, Takehiro Yamamoto
C000184	**Surface Characteristics Assessment with Traditional and Remote Monitoring Techniques** Gonçalo Teixeira, Dora Roque, Simona Fontul, João Cardoso, Carlos Roque, Teresa Alves
C000211	**Image-Based Monitoring and Analysis of Pavement Condition in Weigh-In-Motion Systems** Chun-Yu Liu, Jyun-Ping Jhan, Eliana Chen, Leo Chen

Relationship between Functional and Structural Performance 1

Room: Hall 2 | 09:00 a.m. – 10:40 a.m. | Chair: Zsolt Boros

No.	Title
C000039	**German Guidelines M OB – Methods for Creating Surface Textures on Cement Concrete Pavements** Tim Alte-Teigeler
C000047	**Revision of Technical Standards for Pavement in Japan** Masuda Masashi, Kumeno Shinichiro, Kuwabara Masaaki
C000108	**Study on a Formula for Estimating the Average Temperature of Asphalt Mixture Layers Considering Application to MWD** Daisuke Matsumoto, Yasushi Takeuchi, Yuya Wakabayasahi, Syunsuke Tanaka, Chigusa Ueno, Kimio Maruyama
C000198	**Towards Full Deflection Bowl Characterization Beyond D0 Using a Moving Wheel Deflectometer: Integration of Viscoelastic FE Analysis and Practical Sensor Methods** Jun Umeda, Marei Inagi, Takuto Suzuki, Hironobu Maehara
C000205	**Evaluating Lane-Wise Loading Effects on Pavement Condition and Rehabilitation Strategies: A Practical Framework Using WIM and Network-Level Condition Data** Asyraf Naim Jamal Shahid Gurdial, Md Yunus Ab Wahab



Lectern Session

DAY 3 | November 11, 2026

Eco-Friendly Surfaces and Recycling Technologies 3

Room: Room 1A | 09:00 a.m. – 10:40 a.m. | Chair: Margo Briessinck

No.	Title
C000042	**Utilization Technology of Hot Mix Asphalt Using 100% Recycled Aggregates in Japan** Ryota Sasaki, Satoshi Sagawa
C000078	**Evaluation of Cracking Resistance Across a Wide Temperature Range for Repeatedly Recycled Asphalt Binders and Asphalt Mixtures** Thanh Nhat Tran, Hideyuki Ando, Tsuyoshi Hyakutake, Iwao Sasaki, Hiroyuki Nitta
C000130	**Evaluation of Carbonation Curing Conditions and Field Applicability of CO_2-Capture Concrete Pavements** Akane Muto, Kengo Seki, Ryuzo Kamishita, Shota Taguchi, Satoru Iwata
C000168	**Multiple Recycling of Asphalt Pavements with High Contents of Recycled Asphalt Aggregates** Joralf Aurstad, Roar Telle, Kjartan Eggebø
C000191	**Investigation of Damage Mechanisms in New and Recycled Asphalt Mixtures Using X-ray CT at the Large-Scale Synchrotron Radiation Facility SPring-8** Akira Seo, Yosuke Higo, Hirofumi Ito, Kiyoshi Kobayashi

Surface Improvement with Innovative Materials 1

Room: Room 1B | 09:00 a.m. – 10:40 a.m. | Chair: Alexandros Margaritis

No.	Title
C000044	**AFM Elastic Modulus Mapping-Based Fundamental Study of Structure–Physical Property Correlations in Asphalt** Miyu Fukaya, Ryotaro Shimizu, Toshiaki Hirato
C000063	**Development of New Slurry Material for Airport Pavement Surfaces** Binhui Wang, Yuji Seshita, Tomio Hiraoka
C000077	**Evaluation of The Effect of Aggregate Gradation on Non-exhaust Particulate Matter (PM) Emissions in SMA** Kyungnam Kim, Jong-Sub Lee, Soonmin Kwon
C000161	**Construction Case Studies and Effectiveness Verification of Anti-Icing Pavement Using Surface Treatment Methods According to Application Location** Satoshi Yanaka
C000167	**A Study on Structural Investigation of Asphalt Pavement in Cambodia** Otdom Penh, Takuya Maeshima, Zongyao He, Tatsuya Nagatsuka, Shinichi Watanabe, Nagato Abe



Lectern Session

DAY 3 | November 11, 2026

Surface Monitoring and Data Collection 6

Room: Hall 1 | 11:10 a.m. – 12:30 p.m. | Chair: Richard Wix

No.	Title
C000126	**Improving The Efficiency of Sidewalk Maintenance Using 3D Data** Bista Namrata, Shohei Sakan, Subaru Yoshida,Takahiro Yokoyama, Kazushi Moriishi, Kazuya Tomiyama
C000140	**Development of a 3D Camera and IoT-Based System for Identifying Defective Ground** Youhei Tachibana, Tsubasa Komasaka, Hisashi Aita
C000148	**Integrated Use of Terrestrial Laser Scanner and Photogrammetry for Monitoring and Predicting Road Deformation** Rogelio, Jr. Ontiveros Agron, Kazuya Tomiyama
C000174	**Improvement of Three-dimensional Surface Inspection in Sidewalks by a Local Difference Filter Applied to Point Clouds** Shohei Sakan, Kazuya Tomiyama, Subaru Yoshida, Takahiro Yokoyama, Kazushi Moriishi

Surface Monitoring and Data Collection 7

Room: Hall 2 | 11:10 a.m. – 12:30 p.m. | Chair: Tim Alte-Teigeler

No.	Title
C000069	**Surface Characteristics of Porous Concrete for Removable Urban Pavement (RUP): Optimisation and Monitoring Under Real Traffic Conditions** Eric Gennesseaux, Christophe Ropert, Minh-Tan Do, Thierry Sedran, Véronique Cerezo, Julien Waligora, Laurent Monnier
C000071	**Optimizing Hot Mix Asphalt Macrotexture at the Mix Design Stage** Stephen Goodman
C000099	**Effect of Differences in the Relative Permittivity of Pavement Layers on the Electromagnetic Characteristics of Cement Concrete Pavements with Subsurface Voids** Kohko Inaba, Mizuki Tawara, Shinichi Watanabe, Takuya Maeshima, Hideki Naito
C000170	**Quantitative Texture Characterization and Functional Evolution of Grooved Airport Cement Concrete Pavements under Rubber Deposits** Ziye Ma, Huyang Cao, Zeyu Liu, Hainian Wang



Lectern Session

DAY 3 | November 11, 2026

AI-enabled Data-driven Decision Support 2

Room: Room 1A | 11:10 a.m. – 12:30 p.m. | Chair: Takumi Asada

No.	Title
C000031	**Enhancing Multi-Distress Pavement Detection Accuracy of Deep Learning Models Through Dataset Optimization** Ha Vinh Tran, Thuyet Quoc Dang, Kensuke Kimura, Akihiro Kuno, Kazuya Tomiyama
C000103	**Long Short-Term Memory–Based Prediction of Flexible Pavement Surface Layer Performance Using Inspection Time-Series Data** Bernardo Mota Lontra, Leo Françoso Dal Piccol Sotto, Jan-Hinrik Borchers, Gina Torres-Alves, Artem Yushchenko
C000117	**Development and Technical Verification of A Temperature-inference Type Compaction Management System** Satoru Kajiwara, Gorou Ushikubo, Hisashi Aita
C000133	**Exploratory Analysis of Road Surface Vibration Effects on Occupant Heart Rate Variability Using a Driving Simulator** Mengqi Zheng, Kazuya Tomiyama, Tomoya Kitani

Surface Improvement with Innovative Materials 2

Room: Room 1B | 11:10 a.m. – 12:30 p.m. | Chair: Tatsuya Nagatsuka

No.	Title
C000128	**Development of Paving Materials to Replace Asphalt** Takeru Tsutsumi, Hiromi Murai, Tsuyoshi Hyakutake
C000153	**Evaluation of Rutting Resistance under Severe Conditions with Warm Mixed and High Rutting Resistance Polymer-Modified Asphalt** Ryota Fujikawa, Takehiro Takamoto, Shinsuke Tanaka
C000172	**Efforts to Extend the Life of Pavement by High-Durability Asphalt Pavement Using Modified Asphalt with Excellent Crack and Rutting Resistance** Shu Aikawa, Marin Toyama, Nobuyuki Nakao, Tran Thanh Nhat, Masashige Aoki
C000178	**Study on Geopolymer Concrete for Paving Using Recycled Plastics** Phaipakone Soulathathone, Daishin Hanaoka



Lectern Session

DAY 3 | November 11, 2026

Surface Monitoring and Data Collection 8

Room: Hall 1 | 01:30 p.m. – 02:50 p.m. | Chair: Margo Briessinck.

No.	Title
C000074	**From Empirical to Intelligent: Optimization of Grading Standards for Pavement Distress in Automated Inspection** Wenruo Fan, Hui Wang, Shengchuan Jiang, Zhoucong Xu
C000083	**Development of a Pothole and Pavement Distress Detection Model Using Vehicle Big Data** Yuki Ito, Kyeonghwan Kwak, Shinpei Nomoto, Arata Sakurai, Takafumi Kurano
C000110	**Pothole Risk Assessment for Preventive Maintenance in Cold and Snowy Regions** Mayu Hazama, Boyu Zhao, Masahiko Konishi, Ryota Maekawa
C000192	**Development of a Frequency-based Metric for Characterizing Transverse Profiles** Aditya Kumar, Aditya Medury, Animesh Das

Relationship between Functional and Structural Performance 2

Room: Hall 2 | 01:30 p.m. – 02:50 p.m. | Chair: Atsushi Kawakami

No.	Title
C000109	**The Relationship Between Asphalt Pavement Damage and Vertical Compressive Strain in the Granular Base Layer** Naoki Yamamoto, Yasushi Takeuchi, Yuya Wakabayashi, Masaaki Kuwabara
C000119	**Evaluation of the Adhesion Performance of an Epoxy-Based Corrosion Inhibitor for Steel Decks bridge Incorporating Thermally Expandable Microcapsules** Akitaka Kiuchi, Yatuhiro Ichinose, Shinya Yokota, Kazuhiko Minakuchi, Hiroyuki Noguchi
C000173	**Development of Poured Waterproof Asphalt with Low-Molecular Weight Modifier Additives** Jang Daeseong, Han Kyungho, Cho Jeonghwan, Son Changmin, Lee Jaejun
C000218	**Influence of Pavement Surface Characteristics on Fine Particle Generation: A Controlled Rolling Experimental Study** Antoine-Victor Chavas, Mohamed Bouteldja, Nicolas Grignard, Younes Rizoug-Zeghlache



Lectern Session

DAY 3 | November 11, 2026

AI-enabled Data-driven Decision Support 3

Room: Room 1A | 01:30 p.m. – 02:50 p.m. | Chair: Sakura Kakefuda

No.	Title
C000098	**Traffic Impact Assessment of Earthquake-Induced Pavement Damage Using Connected Car Data and Machine Learning: The Case of the 2024 Noto Peninsula Earthquake** Saki Tabata, Takumi Asada
C000106	**Graph Convolutional Networks for Network-Level Forecasting of Pavement Surface Condition Indicators** Artem Yushchenko, Jan-Hinrik Borchers, Léo Françoso Dal Piccol Sotto, Bernardo Mota Lontra, Gina Torres-Alves
C000142	**Development of a Machine Learning-based Prediction Model for Forecasting the Pavement Surface Deterioration of Ghanaian Trunk Roads** Belinda Mamphey, Kazuya Tomiyama
C000175	**A Dual-Model Machine Learning Framework for Pavement Rutting and Condition Classification** Aaditya Ojha, Jialu Yu, Shadi Saadeh

Eco-Friendly Surfaces and Recycling Technologies 4

Room: Room 1B | 01:30 p.m. – 02:50 p.m. | Chair: Shigeki Takahashi

No.	Title
C000060	**Pushing the Boundaries For Asphalt Recycling in Surface Layers** Alexandros Margaritis, João Crucho, Tine Tanghe, Stefan Vansteenkiste
C000089	**Next Generation Concrete Surface (NGCS): a Status Quo** Luc Goubert, Barbara Vanhooreweder
C000121	**Fundamental Study on the Application of Recycling Methods for Pavement Milling Material to Frost Heave Mitigation Layers** Junnosuke Tsukahara, Seiji Aoyama, Fuminori Sakata, Hiroyuki Sakagami, Daisuke Matsumoto
C000159	**Climate-Resilient Pavement with a Lateral Inflow System: Experimental Study on Inflow Characteristics via Ditch Openings** Shuntaro Inagaki, Shinichiro Nakashima



Lectern Session

DAY 3 | November 11, 2026

Surface Monitoring and Data Collection 9

Room: Hall 1 | 03:20 p.m. – 04:20 p.m. | Chair: Richard Wix

No.	Title
C000107	**A Syudy on the Measurement Accuracy and Usefulness of Mobile Asphalt Pavement Density Measuring Device** Hiroyasu Nakamura, Xingcheng Chen, Akira Sakuraba, Akira Sasaya, Shuuichi Kameyama
C000204	**Research on the Detection of Moisture within Pavement Using Neutron Beams** Hiromu Furuhata, Shigeki Takahashi, Sohei Imajo, Tomonori Fukuchi, Hiroki Kusano, Maki Mizuta, Yoshie Otake
C000165	**Optimization of Surface Characteristics Considering Personal Mobilities with Vulnerable Road Users** Kazuya Tomiyama, Massimiliano Gastaldi, Riccardo Rossi

Relationship between Functional and Structural Performance 3

Room: Hall 2 | 03:20 p.m. – 04:20 p.m. | Chair: Osamu Kamada

No.	Title
C000127	**Machine Learning Approaches for Predicting Asphalt Pavement Structural Integrity Using PMS Data** Kazutaka Suzuki, Kiyoyuki Kaito, Kotaro Sasai
C000188	**Relationship between Differential Settlement of the Pavement Surface and Stiffness Distribution of Pavement and Ground Estimated by Surface Wave Exploration** Kyosuke Onishi, Atsushi Kajiyama, Ryosuke Hosokawa, Eri Fukada, Yoshinori Yajima, Masahiko Yamaki
C000190	**Curling Effects of Cement Concrete Slabs on Runway Roughness Indices** Yixia Gao, Qiang Wang, Lin Qi, Xuefang Chen



Lectern Session

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Eco-Friendly Surfaces and Recycling Technologies 5

Room: Room 1A | 03:20 p.m. – 04:20 p.m. | Chair: Tatsuya Nagatsuka

No.	Title
C000010	**Rubber Asphalt Chip Seals for Sustainable Pavement Preservation: an Eco-Friendly Surfaces and Recycling Technology** Dongzhao Jin, Lei Yin, Sepehr Mohammadi, Zhanping You
C000030	**Theoretical and Empirical Approaches to Construction Time Reduction Using Warm-Mix Asphalt** Hiroshi Iwabuki, Haruki Aoyama, Mitsuru Yoshida, Yasuhide Takahama
C000134	**Study on the Expansion of Application of Foamed Asphalt** Yoshihisa Komori, Hiromi Murai, Yoshitaka Suzuki, Toshihiro Yoshino

Eco-Friendly Surfaces and Recycling Technologies 6

Room: Room 1B | 03:20 p.m. – 04:20 p.m. | Chair: Takashi Kawamura

No.	Title
C000041	**An Experimental Study on Recycling Method of Polymer Modified Asphalt Mixture by Using Recycled Aggregate from Asphalt Plants** Naoto Yokozawa, Shota Kobayashi, Atsushi Kawakami, Kazuhiro Watanabe, Satoshi Sagawa
C000122	**Laboratory experiments to Characterize Mixture Properties for Establishing a Mix Design Method for Recycled Polymer Modified Asphalt Mixtures** Shota Kobayashi, Naoto Yokozawa, Atsushi Kawakami, Kazuhiro Watanabe, Satoshi Sagawa
C000145	**Field Trial of Asphalt Mixtures Modified with Substandard Nonedible-Rice-Derived Plastic and Verification of their Recyclability** Konatsu Masuda, Mayo Shimodate, Takuya Maeshima, Ryotaro Takahashi, Tsukasa Ichikawa, Shinji Okuda, Tsuyoshi Hyakutake



Poster Session #1

DAY 2 | November 10, 2026

Surface Monitoring and Data Collection

Room: Hall 1 | 12:40 p.m. – 02:00 p.m. (Core Time: 01:15 p.m. – 01:45 p.m.) | Chair: Tatsuya Nagatsuka

No.	Title
C000112	**Development of an Algorithm Based on Residual Deicing Salt on Road Surfaces** Jang Daeseong, Lim Chisu, Kwon Ohsun, Lee Jongsub, Lee Jaejun
C000154	**Riding Quality Evaluation for Large Vehicles by Simplified IRI Measurement Device** Yuta Takahashi, Masayuki Eguchi, Syuhei Tanabe, Kazuhiko Kumada
C000162	**Utilization of Laser Measurement Data for CO Pavement Assessment and Suppression of Imaging Environment Variability** Nobuyuki Oe, Koichi Inoue, Tomonori Aihara, Hisashi Takagi, Junichi Morohashi, Tomoaki Sakai
C000179	**Compaction of the asphalt layers** Damijan Zore, Blaž Jeraj, Nina Kepic
C000187	**Pilot study for the verification of pavement surveying equipment in Mexico** Ricardo Solorio, Agustin Sanchez, Horacio Delgado, Noe Hernandez
C000035	**Citywide Pavement Surface and Grip Monitoring in Madrid Using Connected Vehicle Data** José Carlos Valdecantos, David Llopis-Castelló, Matteo Pettinari
C000040	**Surface State Deterioration of the Cement Concrete Pavement of Airport Movement Areas Due to Introduction of E Code Aircraft** Zsolt Boros, Filip Buček
C000070	**Friction and Reflectance of Various Crosswalk Marking Materials and Colours in Urban Setting subjected to Winter Maintenance** Stephen Goodman
C000072	**Machine Learning-based Modeling of Pavement-Induced Rolling Resistance in a Battery Electric Vehicle** Gerardo Gravante, Joao Santos, Veronique Cerezo
C000073	**A New EU Technical Specification on the Characterization of Acoustic Properties of Road Surfaces** Fabienne Anfosso Ledee



Poster Session #2

DAY 2 | November 10, 2026

Eco-Friendly Surfaces and Recycling Technologies

Room: Hall 2 | 12:40 p.m. – 02:00 p.m. (Core Time: 01:15 p.m. – 01:45 p.m.) |

Chair: Hiroyuki Mashito

No.	Title
C000084	**Investigation of Load-Bearing Characteristics of Layered Soilbag Roadbed Using Pressure Measurement Film** Airu Sato, Shigeru Maruo, Shuuhei Mitsutani, Ryunosuke Kido
C000088	**Optimisation In Texture Grinding: Increased Quality of Grinding Surfaces Through an Automated Parallel Guidance** Tim Alte-Teigeler
C000100	**Solutions for Reduced Microplastic Emissions of Asphalt Pavements** Tim Alte-Teigeler
C000062	**Development of Asphalt Pavement Additives Made from Recycled Waste Plastics** Yuhei Kuroda, Masakazu Iwanaga, Junichi Haga
C000114	**Warm Mix High Modulus Asphalt for Road Replacement on the E17 KAN-ETSU Expressway** Tsutomu Ishigaki, Noriaki Sugawara, Jun Takeuchi, Haruto Tsuneki, Junichi Asaka
C000141	**Effect of Binder Properties of RAP Asphalt on the Physical Performance of Recycled Asphalt Mixtures** Haruhiko Yoneta, Yasuaki Kobayashi, Osamu Takahashi
C000151	**"Bio-ascon" With Plant Lignin for Low Carbon Pavements** Nobuyuki Nakao, Shu Aikawa, Tran Thanh Nhat, Masashige Aoki

Poster Session #3

DAY 2 | November 10, 2026

Relationship between Functional and Structural Performance

Room: Hall 2 | 12:40 p.m. – 02:00 p.m. (Core Time: 01:15 p.m. – 01:45 p.m.) |
Chair: Hiroyuki Mashito

No.	Title
C000008	**Asphalt Pavement Structural Condition Criteria Based on Deflection Measurement and Its Relationship with Functional Performance** Auckpath Sawangsuriya
C000065	**Rutting Performance of Asphalt Pavements: A Combined Study on Mixture Performance and Bitumen Rheological Behaviour** Luca Colombo, Michel Di Tommaso, Vito Giovanni Gallo, Giuseppe Macaluso, Carmine Rizzato, Misagh Ketabdari, Emanuele Toraldo
C000091	**Correlations Between Surface Condition Parameters and Bearing Capacity Measurements Obtained With the TSD in a Municipal Context in Germany** *Barbara Kristine Esser, Tim Robert Braun, Pahirangan Sivapatham
C000116	**Evaluation of Void Geometry in Asphalt Concrete Using Persistent Homology** Kosei Shibahara, Yuta Ogata, Kotaro Sasai, Kiyoyuki Kaito
C000166	**Reframing Pavement Maintenance Prioritization: Linking Surface Characteristics with Economic Efficiency in Urban Transport Systems** Rakesh Bhattarai
C000125	**Durability of a Rapid Repair Method for Preventing Fragment Scatter and Crack Propagation in Concrete Pavements** Zenan Wu, Tsuyoshi Hara
C000137	**Mechanisms of Pumping Erosion in Granular Base Layer: An Experimental Visualization Study Using Crushed Stone** Kazuki Shigehiro, Shunsuke Tanaka, Kazuhiro Watanabe, Shinichiro Nakashima



Poster Session #4

DAY 3 | November 11, 2026

Eco-Friendly Surfaces and Recycling Technologies

Room: Hall 1 | 12:30 p.m. – 01:30 p.m. (Core Time: 12:45 p.m. – 01:15 p.m.) |

Chair: Takumi Asada

No.	Title
C000026	**Explainable AI-Assisted Experimental Study on Anti-Aging Mechanisms of Lignin-Modified Asphalt** Houzhi Wang, Jiayue Yun, Xinyu Xie, Shinan Liu, Jun Yang
C000029	**Exvaluation of Technologies for Reducing CO_2 Emissions in Exhaust Gases during Asphalt Mixture Production** Yuki Nakagawa, Nami Fukuyama
C000036	**Study on the Practical Use of Cold Mix Asphalt in Japan** Hui Qu, Atsushi Nagahara
C000135	**Development of Asphalt Mixtures that can be Handled at Ambient Temperatures and Exhibit High Durability** Fuka Osaki, Hajime Godenki, Shinya Hayashi, Akitaka Kiuchi
C000155	**Development of Low Carbon Semi-flexible Pavement using CO_2-based Recycled Material** Muhamad Afif Bin Osman, Masahiko Iwama, Kenichi Yasuhisa, Sachiko Hayashiguchi, Yuta Itoh
C000156	**Development of a Warm-Mix Polymer-Modified Asphalt for Recycling with up to 50% Reclaimed Asphalt Pavement** Takehiro Takamoto, Reon Shirasu, Shinsuke Tanaka

Poster Session #5

DAY 3 | November 11, 2026

AI-enabled Data-driven Decision Support

Room: Hall 1 | 12:30 p.m. – 01:30 p.m. (Core Time: 12:45 p.m. – 01:15 p.m.) |

Chair: Takumi Asada

No.	Title
C000096	**Multimodal AI–Based Pavement Inspection with an Action Camera: Wide-Area Deployment Impact Assessment in Hokkaido, Japan** Yuri Konno, Takumi Asada, Hiroyuki Oikawa, Shuichi Kameyama
C000093	**Will AI-enhanced Solid State LiDAR Technology Disrupt the Pavement Management Efficiency?** Filip Geuens, Liesbet Conings
C000157	**Study on Aggregate Gradation Estimation Using Image Recognition AI and Accuracy Enhancement** Mika Serita, Maiko Hirano, Saki Endo
C000163	**Proposal of Quantitative Deterioration Assessment Method for Pavement Markings using Semantic Segmentation** Nobuyuki Oe, Tomonori Aihara, Hisashi Takagi, Tomoki Tajima, Tomoaki Sakai
C000067	**IRI Prediction Modelling for Brun-Way: Statistical and Machine Learning Approaches for Forecasting Pavement Roughness** Hunter Song, Jean-Sébastien Lacombe
C000225	**AI-Based Enhancement of Traditional Condition Index Frameworks for Road Management in Argentina** Gustavo Mezzelani, Franco Piazza, Lucas Bresciani

Poster Session #6

DAY 3 | November 11, 2026

Surface Monitoring and Data Collection

Room: Hall 2 | 12:30 p.m. – 01:30 p.m. (Core Time: 12:45 p.m. – 01:15 p.m.) | Chair: Takashi Kawamura

No.	Title
C000032	**An On-road Methodology for the Assessment of the Performance of Friction Test Devices** Peter Sanders, Håkan Frank, Björn Zachrisson, Johan Petersson
C000033	**Vehicles Can Talk Road Safety; We Should Be Listening** Björn Zachrisson, Peter Sanders, Johan Hägg
C000043	**Surface Texture Indices for Evaluating the Skid Resistance of Rigid Pavements Worn and Polished by Vehicle Tire** Hidefumi Izuo, Taiju Endo, Atushi Ueno, Chigusa Ueno
C000199	**Integrating Vehicle Sensor Data into Safety and Maintenance Management on a Municipal Road Network** João Cardoso, Carlos Roque, Simona Fontul, Katia Paglé, Isabela Erdelean, Dario Babić, Masha Odijk, Nathan Harpham, Steve Lawson
C000120	**Considerations on the Overseas Deployment of Japan's Pavement Condition Survey Technologies** Sakai Kohei, Kaneko Ryusuke, Uno Tetsuo
C000132	**Development of a Multi-Point Local Vibration Method for Non-Destructive Evaluation of RC Bridge Decks** Shinichi Watanabe, Hideki Naito, Takuya Maeshima, Kohko Inaba, Muhamad Afif Bin Osman
C000149	**Potential Application of Physiopsychological Response to the Human-Centered Surface Evaluation in Indonesia** Arthika Putri Syahfani, Kazuya Tomiyama

Poster Session #7

DAY 3 | November 11, 2026

Surface Improvement with Innovative Materials 3

Room: Hall 2 | 12:30 p.m. – 01:30 p.m. (Core Time: 12:45 p.m. – 01:15 p.m.) | Chair: Takashi Kawamura

No.	Title
C000053	**The BASt Test Facility (duraBASt)-From Idea to Successful Operation** Stefan Hoeller
C000129	**Development of an All-weather, Highly Durable Cold Asphalt Mixture for Pavement Repair** Yuuta Okuzawa, Takeru Tsutsumi, Hiromi Murai
C000138	**The New Pavement Surface Treatment Material Worked by Neighbors for Small Roads** Yoshifumi Misawa, Ryota Maekawa, Tomio Hiraoka
C000152	**Performance Evaluation of SBS-Modified Asphalt for Rutting Resistance Considering Traffic and Weather Conditions in Ethiopia** Mastewal Shumet Messele, Naorari Shitara, Toshiaki Hirato, Kazuya Tomiyama
C000185	**Friction Performance of Hot Mix Asphalt with Limestone and Silicious Aggregates after 1-Million Laboratory Polishing Cycles** Phillip B Blankenship, Stephen Goodman