PDRG MEETING JRPUG 2022

OCTOBER 29-30, 2022
SAPPORO, HOKKAIDO, JAPAN

EVOLUTION OF PAVEMENT DIAGNOSIS TO THE NEXT GENERATION

Venue: Hokkaido University of Science

October 29, 2022
Building E, Room 401

Time	Event
8:30 AM	Reception
9:30 AM	Opening Session
9:40 AM	Keynote 1
10:40 AM	Coffee Break
11:00 AM	Keynote 2
12:00 PM	Lunch
1:00 PM	Technical Session 1
2:00 PM	Coffee Break
2:10 PM	Technical Session 2
3:10 PM	Coffee Break
3:30 PM	Panel Discussion 1

October 30, 2022
Building E, Room 401

Time	Event
8:30 AM	Reception
9:00 AM	Panel Discussion 2
10:30 AM	Coffee Break
11:00 AM	ProVAL Workshop including lunch and coffee break
5:00 PM	Closing

October 29-30, 2022
Building E, in front of Room 401

Time	Event
9:00 AM - 5:00 PM	Exhibition (during lunch, coffee break, etc.)

Conference web site: http://pdrg.org/workshop/jrpug2022
For further information, please contact PDRG meeting secretary by email at pdrg.jrpug@gmail.com

AGENDA

October 29, 2022 (JST, UTC+9)

8:30 AM	**Reception Open**
9:30 AM — 9:40 AM	**Opening Session**
9:40 AM — 10:40 AM **Keynote 1**	**Professor Yichang James Tsai**, Georgia Institute of Technology *Next-Generation Pavement Condition Diagnosis and Maintenance Optimization using 3D Laser and AI Technologies: Opportunities and Challenges*
10:40 AM — 11:00 AM	Coffee Break
11:00 AM — 12:00 PM **Keynote 2**	**Mr. Masayuki Yabu**, Public Works Research Institute *Toward Efficient Pavement Management based on Technical Inspection Standards in Japan*
12:00 PM — 1:00 PM	Lunch - Lunch box (bento) will be provided.
1:00 PM — 2:00 PM **Technical Session 1** Moderator: Takumi Asada, Muroran Institute of Technology	**Surface Properties and Human/Vehicle Interaction** ✓ Kenichiro Sasaki, Yuki Kotani, Hayato Nishigai, Kazuya Tomiyama, Yuki Yamaguchi, and Kazushi Moriishi: *Evaluation of Walkability on Walking Surfaces Using Electromyography*. ✓ Marei Inagi, Kazuya Tomiyama, Ryo Kohama, Masayuki Eguchi, and Masakazu Sato: *Human-centered Evaluation of Localized Surface Roughness in Terms of Biosignals*. ✓ Dang Quoc Thuyet, Masakazu Jomoto, Thit Oo Kyaw, Yin Lei Lei Swe, and Shuichi Kameyama: *Analysis of the effect of road surface conditions and rutting on vehicle dynamics using CARSIM*.
2:00 PM — 2:10 PM	Coffee Break
2:10 PM — 3:10 PM **Technical Session 2** Moderator: Hiroyuki Mashito, Toa Road Corporation	**AI and 3D Technologies for Pavement Diagnosis** ✓ Shohei Nunohiro, Takumi Asada, and Shuichi Kameyama: *Estimation of Emergency Transportation Time using Ambulance Probe Data and Pavement Survey Data*. ✓ Kazuya Tomiyama, Yuki Kotani, Yuki Yamaguchi and Kazushi Moriishi: *Application of Dual-tree Complex Wavelet to Three-dimensional Point Clouds of Pavement Surfaces*. ✓ Junki Shinada: *Consideration for Applying Data Acquired for Other Purposes to Pavement Repair Work*.
3:10 PM — 3:30 PM	Coffee Break
3:30 PM — 5:00 PM **Panel Discussion 1** Moderator: Kazuya Tomiyama, Kitami Institute of Technology	**Advancements of 3D and AI Technologies in Pavement Engineering Fields** Panelists: Professor Yichang J. Tsai, Georgia Institute of Technology Dr. Takumi Asada, Muroran Institute of Technology Mr. Hiroaki Fujino, Aisan Technology Co., Ltd.

AGENDA

October 30, 2022 (JST, UTC+9)	
9:00 AM — 10:30 AM **Panel Discussion 2** Moderator: Kazuya Tomiyama, Kitami Institute of Technology	**Potential Application of 3D Data for Pavement Construction and Management** Panelists: Dr. George K. Chang, The Transtec Group, Inc. Dr. Jean-François Hébert, Pavemetrics Systems inc. Dr. Kazushi Moriishi, Obayashi Road Corporation Mr. Akira Sakuraba, Tairiku Kensetsu, Co., Ltd.
10:30 AM — 11:00 AM	Coffee Break
11:00 AM — 5:00 PM **Workshop** Trainer: George K. Chang Please bring your Windows® laptop for **hands on exercise**!!	**ProVAL Workshop** George K. Chang, The Transtec Group, Inc. ✓ Session 1 (11:00 AM – 12:30 PM): Basic Topics • Profile data collection (45 min.) • Ride quality assessment (45 min.) Lunch (12:30 PM – 1:30 PM) - Lunch box (bento) will be provided. ✓ Session 2 (1:30 PM – 5:00 PM): Advanced Topics • Profile Filtering (40 min.) • Smoothness Assurance Module (SAM) (60 min.) • Break (15 min.) • Grinding simulation and field operations (40 min.) • Profile comparison and Profiler Certification (40 min.) • Qs and As (15 min.)

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(in alphabetical order)

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ペイブメトリックス   https://www.pavemetrics.com/

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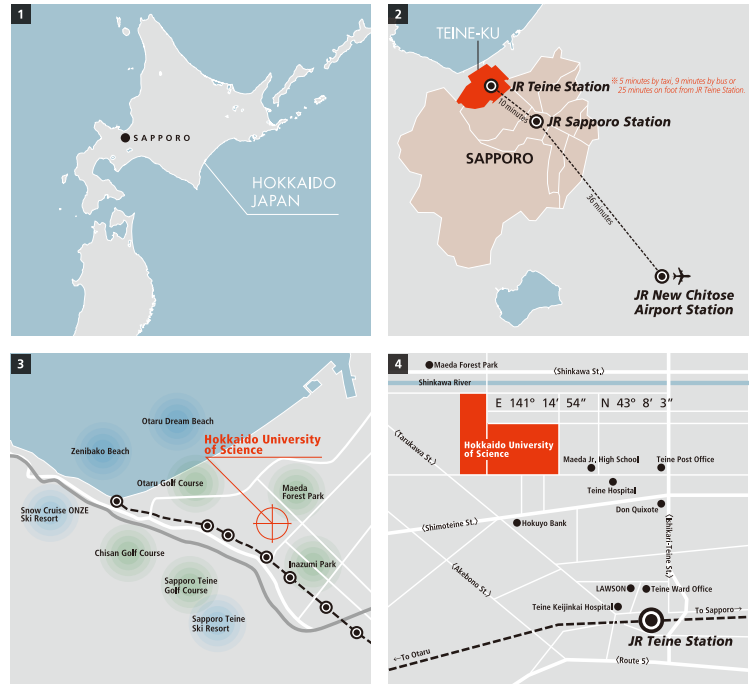北海道土木技術会舗装研究委員会   http://www.hscet.com/

VENUE

Hokkaido University of Science

7-Jo 15-4-1 Maeda, Teine, Sapporo,
Hokkaido, Japan 006-8585 (https://www.hus.ac.jp)

JOIN PDRG

Non-profit organization Pavement Diagnosis Researchers Group (PDRG) welcomes researchers, engineers and vendors in pavement engineering fields to joining us at any time.

Membership categories are
- **Regular member** (3,000 JPY/yr): individuals who are interested in pavement structural and functional measurement, diagnosis, and data analysis as well as the corresponding information.
- **Corporate member** (200,000 JPY/yr): industries and communities who approve our activities and support us.

The details can be seen in our website: http://pdrg.org/. We are looking forward to having you in our community.

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