



12th APTE 2022

Friday, 11 November 2022



8:45 – 9:00	Registration		
9:00 – 9:20	<p style="text-align: center;">WELCOME ADDRESS:</p> <p>Int. APTE Comm.: <i>T. F. Fwa, Chang'an Univ. / National Univ. of Singapore</i> 12th APTE 2023: <i>S Han, Chang'an University</i></p> <p style="text-align: center;">OPENING ADDRESS: <i>Aimin Sha President, Chang'an University</i></p>	14:00 – 15:30	<p style="text-align: center;">Session 2: Environment Impacts Mitigating Measures</p> <p style="text-align: center;">Moderator: <i>H. R. Pasindu, University of Moratuwa, Sri Lanka</i></p>
Keynote Session	<p style="text-align: center;">Moderator: <i>T. F. Fwa, Chang'an Univ. / National Univ. of Singapore</i></p>		<ul style="list-style-type: none"> • A0019: The Emission Reduction Performance of Gaseous Pollutants from Lower-emission and Lower-odor Bitumen (Gong Chunwei) • A0020: Bus Stop Environment Measure Based on Available Facility Usefulness and Passengers' Importance (HD Bhagya, LSD Perera, RMHO Bandara, JSP Perera and AHS Sharic) • A0027: Spatial-temporal Inference of Urban Traffic Emissions using Multi-Source Urban Sensor Data (Jielun LIU and Ghim Ping ONG) • A0046: Numerical evaluation of pavement temperatures (He Lei)
9:20 – 10:20	<p style="text-align: center;">Keynote Lecture 1: Continuum Modeling Approach to Land Use, Transport and the Environment Problems</p> <p style="text-align: center;">S. C. Wong, The University of Hong Kong</p>	Keynote Session	<p style="text-align: center;">Moderator: <i>T. F. Fwa, Chang'an Univ. / National Univ. of Singapore</i></p>
10:25 – 12:30	<p style="text-align: center;">Session 1: Use of Recycled Materials in Road Construction</p> <p style="text-align: center;">Moderator: <i>R. Muniandy, Universiti Putra Malaysia, Malaysia</i></p>	15:30 – 16:30	<p style="text-align: center;">Keynote Lecture 2: Urban Mobility and Citizens: A Complex System</p> <p style="text-align: center;">Paulo Pereira, University of Minho, Portugal</p>
	<ul style="list-style-type: none"> • A0013: Performance Evaluation of Stone Mastic Asphalt with Plastic Waste (Moe A. Lwin, Wang Xuechun, Lee Y. P. Kelvin, Ho N. Y.) • A0022: Enhancing the Properties of Roller Compacted Concrete (RCC) Using the Quality Improvements of Recycled Concrete Aggregate (RCA) (W. R. A. N. Jayantha and W. K. Mamparachchi) • A0023: Recycle Plastics in Road: Case Study in The Philippines (J. Vasudevan, R. Muniandy, F. M. Jakarni, S. Hassim, M. S. A. Razak, J. Marcellana, R. Hanumanthgari, J. Read) • A0026: Recyclability Potential of Asphalt Mixes containing Recycled Plastic Wastes (Sin Mei LIM and Ghim Ping ONG) • A0030: Viscoelastic Behavior of Plastic Waste Modified Binder: A Review (Najua Emelda Hakimi Taib, Ratnasamy Muniandy, Fauzan Jakarni and Salihudin Hassim) • A0031: Rheological Properties of Plastic Modified Binder (Ainul Ashikin Rosdi, Ratnasamy Muniandy, Fauzan Jakarni, Salihudin Hassim) 	16:30 – 18:20	<p style="text-align: center;">Session 3: Local Materials for Pavement Structure</p> <p style="text-align: center;">Moderator: <i>Saravut Jaritngam, Prince of Songkla University, Thailand</i></p>
			<ul style="list-style-type: none"> • A006: Optimization of CPHMA Mixture Composition with Candlenut Oil Modifier (L. Khamelda, L. Djakfar, Wisnumurti, F. Gapsari) • A008: Characterizations of Bio-Asphalt Incorporating Palm Bio-Oil from Waste Empty Fruit Bunches (Tracy L. X. Wong, M. R. M. Hasan, M. T. Han; M. A. Kassim, M. A. Sukiran) • A0012: Use of Recycled Materials in Cement Treated Base (A. N. W. Maung, Tiah G. W., Lee Y. P. Kelvin, Ho N. Y.) • A0034: Short term aged and unaged rheological properties of cup lump rubber modified bitumen incorporating polyphosphoric acid (A. H. Ansari, F. M. Jakarni, R. Muniandy, S. Hassim, Z. Elahi, M. M. B. Zair) • A0036: Utilization of Red Mud for Grouting Materials in Semi-flexible pavement (SFP) (Q. W. TAN, C. S. YE, D. W. WANG and N. XIE)



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9:00 – 10:40	<p>Session 4: Improved Techniques for Transport Infrastructure Moderator: <i>Ludfi Djakfar, Brawijaya University, Indonesia</i></p> <ul style="list-style-type: none"> • A004: Elastoplastic Analysis of Long-Span Composite Beam Cable-Stayed Bridge Seismic Response (Al-Sebaeai Maged, Shi-Xiong Zhen, and Khalil Al-Bukhaiti) • A009: Evaluation of the Sampling Techniques on Asphalt Pavements. (J.M.G.V. Jayasundara, W.K. Mampearachchi) • A0021: Development of an image-based evaluation method for quantifying aggregate morphology changes after vibratory compaction (Cheng Li) • A0029: Elastic Recovery of Plastic Waste Modified Asphalt: A Review (Nur Alya Qistina Mohd Zaidi, Ratnasamy Muniandy, Fauzan Jakarni and Salihudin Hassim) • A0050: Optimization of Grooving Parameters of Grooved Grouted Surface Treatment Asphalt Pavement Based on Ice-Breaking Performance" (Han Sen and Yao Pengfei) 	14:00 – 15:40	<p>Session 6: Efficient Traffic and Highway Operations Moderator: <i>Bagus H. Setiadji, Diponegoro University, Indonesia</i></p> <ul style="list-style-type: none"> • A0010: Development of Modal Choice Model from Indirect Travel Survey Using Mobile Data (J. Phetcharavut; P. Bunditsakulchai) • A0011: Factors Influencing the Choice of Mode for Commuters - Evidence from Commuters between Gampaha and Colombo (NAAH Nissanka and AHS Sharic) • A0014: A Novel Network Level Maintenance Planning System for Low Volume Rural Roads (R.M.K. Sandamal, H.R. Pasindu) • A0015: Pavement Condition Monitoring Framework for Multi-Year Asset Management in Low-Volume Roads (H.R. Pasindu & K.W.A. Kariyawasam)
10:50 – 12:30	<p>Session 5: Advanced Techniques for Paving Mixture Design Moderator: <i>Kelvin Lee, Samwoh Innovation Centre Pte Ltd, Singapore</i></p> <ul style="list-style-type: none"> • A005: Hybrid recycled polymer-modified bitumen for a resilient and sustainable asphalt pavement (Ilya Binti Joohari) • A0017: Analysis of bitumen test methods and bitumen surface phase characteristics via atomic force microscopy-based infrared spectroscopy (Chengwei Xing) • A0018: Molecular dynamics study of modification assessments between asphalt binder and different oxidative degrees of polyethylene (Yujing Chen, Jiawang Zhou, Yan Chen, Min Liu, Xiaotong Du, Kui Hu) • A0033: Phase Separation of Recycled Plastic Waste Modified Binder: A Review (Farah Syasya Zukrina Ahmad Nazmi, Ratnasamy Muniandy, Fauzan Jakarni and Salihudin Hassim) • A0035: Rheological characteristics of waste cooking oil-modified bitumen (Z. Elahi, F. M. Jakarni, R. Muniandy, S. Hassim, M. S. A. Razak, A. H. Ansari) 	15:50 – 17:30	<p>Session 7: Vehicle and Human Safety Moderator: <i>G. P. Ong, National Univ. of Singapore</i></p> <ul style="list-style-type: none"> • A0016: Analysis of Vehicle Skidding Potential on Wet Horizontal Curves (Jia Peng, L. Ciu, Tangjie Wang and T. F. Fwa) • A0032: Investigating the impact of pavement roughness on highway safety using propensity score matching techniques (Mohit Batola, Aditya Medury) • A0042: Dynamic abuse testing of airbag system for passenger car under vehicle-road conditions and identification method for high-risk triggering items. (Z. Li, G. She, W. Zuo) • A0045: Pedestrian safety analysis on walkways. (CUI Xing, Guo Weiwei)
		17:30 – 17:45	<p>Announcement of 13th APTE 2024 <i>G. P. Ong, National Univ. of Singapore</i></p>
		17:45 – 18:00	<p>Closing Address <i>S. Han, Chang'an Univ.</i></p>