



# SPT2023



## **28th SINGAPORE SYMPOSIUM ON PAVEMENT TECHNOLOGY (SPT 2023)**

Holiday Inn Singapore Orchard City Centre  
Tuesday, 03 October 2023  
*Jointly organised by*

**Pavement Engineering Society (Singapore)**  
and  
**Center for Transportation Research**  
**National University of Singapore**

*Supported by:*  
**LTA Academy, Singapore**

*Sponsored by:*



**Engineering Laboratory Electronics (S) Pte Ltd**



**Megastone Holdings Pte Ltd**



**Highway International Private Limited**



**Shell Construction and Road**

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# **The Symposium**

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The Pavement Engineering Society (Singapore) (PES) and the Center for Transportation Research (CTR) of the National University of Singapore are the joint organisers of this annual event, with LTA Academy as a supporting organisation. PES, CTR and LTA Academy are non-profit organisations that have been actively promoting the advancement of pavement technology in road, airfield and other industrial applications. To promote interactions among fellow professionals in the pavement industry, there exists a need for an annual local forum on pavement technology in Singapore.

Such a forum will disseminate useful information and increase the awareness of local professionals of new materials and technology already in use in other parts of the world. It will also provide an effective mechanism for exchange of ideas and a convenient platform for dialogue among pavement professionals from both private and public sectors.

PES, CTR and LTA Academy are pleased to jointly present this important SPT series, and we seek the support of all professionals from the road, airfield, port and building industries who are involved in pavement-related activities.

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## **Symposium Objective**

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The objective of the annual symposium is to promote the advancement of technology in road, airfield and port pavement and industrial floor construction/management/maintenance in Singapore by providing an effective forum for presentation and discussion of new pavement technologies, and for exchange of ideas and experience.

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## **Scope of Symposium**

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The symposium covers all aspects of practice and research on Planning, Design, Materials, Construction, Maintenance, Rehabilitation and Management of Pavement – including flexible pavements, rigid pavements and all other forms of pavement for roads, airfields, ports and industrial floors.

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# PROGRAMME

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08:15 – 09:00 **Registration**

09:00 – 09:20 **Welcome address**

*by Er. Professor Fwa Tien Fang*  
President, Pavement Engineering Society (Singapore)  
Department of Civil and Environmental Engineering,  
National University of Singapore

09:20 – 09:55 **Welcome Reception**

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**Session 1:** **Forum – Sustainable and Low Carbon Pavement Technology**

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09:55 – 12:00 Forum Chair: Dr. Low Boon Hwee  
Highway International Private Limited

**Paving a Greener Future: Partner with LTA for Sustainable Road Pavement Technology Project**

*Dr. Anggraini Zulkati*  
Land Transport Authority, Singapore.

**Carbon Management of Highway: Experience of Taiwan**

*Dr. Lin Yen-Yu*  
National Kaohsiung University of Science and Technology, Taiwan

**Incorporating Climate Change Impacts in Multi Year Pavement Management**

*Prof. HR Pasindu*  
Department of Civil Engineering,  
University of Moratuwa, Sri Lanka

**Advanced Environmental Friendly Road Construction Technologies – Technical Report on Selected Projects in Beijing and XiongAn City, China**

*Dr. Lu Jia*  
Pavement Engineering Society (PES), Singapore

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12:00 – 13:15 **Lunch**

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**Session 2: Forum – Mix Design & Performance Tests of Pavement Material**

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13:15 – 15:15 Forum Chair: Dr. Kelvin Lee  
Samwoh Innovation Centre

**Construction Trial and Implementation of Cement Treated Base at Singapore Changi Airport**

*Mr. Balaji Vontivillu Jeevanbabu,*  
Changi Airport Group, Singapore

**Asphalt Concrete Mixed with Recycled Plastic Based on Dry Mixing Processes: Thailand's Experience**

*Assoc Prof. Peerapong Jitsangaim*  
Chiang Mai University, Thailand

**Application of Highly Polymer Modified Asphalt (HiMA) in SEA Region**

*Dr. Lu Jia*  
Kraton Polymer Singapore Pte. Ltd., Singapore

**Challenges of Performance Testing on Asphalt Mixes**

*Mr. Andrea Carlessi*  
CONTROLS S.p.A

15:15 – 15:30 **Tea Break**

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**Session 3: Forum -- New Technologies and Products**

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15:30 – 17:30 Forum Chair: Dr. John Yong  
Land Transport Authority

**Highspeed 3D Pavement Condition Assessment Using Laser Crack Measurement System**

*Dr. Nguyen Van Te Ron & Dr. Kelvin Lee Yang Pin*  
Samwoh Innovation Centre

**Application and Challenges of AI Based Pavement Distress Inspection and Management**

*Dr. Liu Chenglong, Dr. Shi Zhongyu & Prof. Du Yuchuan*  
Transportation Research Institute of Tongji University, Shanghai, China

**Different Asphalt Compaction Methods, Measurement and Documentation**

*Mr. Johannes Schroeder*  
BOMAG APAC Pte Ltd

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17:30 **End of Symposium**

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# REGISTRATION FORM

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## 28th SINGAPORE SYMPOSIUM ON PAVEMENT TECHNOLOGY (SPT 2023)

Date: 03 October 2023 (Tuesday)

Time: 8:15 to 17:30.

Venue: Holiday Inn Singapore Orchard City Center,  
11 Cavenagh Rd. Singapore 229616

FEES: PES Members \$ 300.00  
Non-PES Members \$ 350.00

	<u>Name(s) of Participant(s)</u>	<u>Designation</u>	<u>PES Member</u>
1. Mr/Ms	_____	_____	Yes / No *
2. Mr/Ms	_____	_____	Yes / No *
3. Mr/Ms	_____	_____	Yes / No *

\*Please indicate

Name of Organisation: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Person: \_\_\_\_\_  
Tel No.: \_\_\_\_\_  
Signature: \_\_\_\_\_

E-mail: \_\_\_\_\_  
Fax No.: \_\_\_\_\_  
Date: \_\_\_\_\_

### Please forward registration form and payment details to:

Attn: Mr. Ricky Kwek  
c/o Pavement Engineering Society (Singapore)  
190 Middle Road  
#19 – 05, Fortune Centre  
Singapore 188979

Paynow:  
UEN No.: S94SS0072A

Cheque Payable to:  
Pavement Engineering Society  
(Singapore)

Or email to: [Kwek@castlab.com.sg](mailto:Kwek@castlab.com.sg)

\* Prior to initiating any payment via Paynow, kindly ensure that you notify Mr. Kwek through email as specified above.

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# **28th SINGAPORE SYMPOSIUM ON PAVEMENT TECHNOLOGY (SPT 2023)**

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Date: 03 October 2023(Tuesday)

Time: 9:00 to 17:30 (Registration from 8:15)

Venue: Holiday Inn Singapore Orchard City Centre,  
11 Cavenagh Rd. Singapore 229616

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## **Organisers**

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Pavement Engineering Society (Singapore)  
and  
Centre for Transportation Research  
National University of Singapore

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## **Organising Committee**

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<i>Chairman</i>	Er. Professor Fwa Tien Fang
<i>Deputy Chairman</i>	Dr. Low Boon Hwee
<i>Secretary</i>	Dr. Ong Ghim Ping Raymond
	Dr. Lee Yang Pin Kelvin
<i>Treasurer</i>	Mr. Kwek Yeow Seah
	Dr. Jia Lu
<i>Membership Chair</i>	Dr. Chan Chin Loong
<i>Members</i>	
Mr. Chen Gang	Dr. Guwe Vincent
Mr. Lu Jinping	Mr. Koh Hoon Lye
Mr. Tan Hua Soon	Mr. Tan Kim Soon Daniel
Mr. Yoong Chin Chong	Dr. Tan Jun Yew

***Qualified for 7 PDUs by PEB (Pending)***

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