

International Seminar on Forensic Engineering

ISoF 2025 Smart Solutions, Sharp Insights: Navigating Engineering Challenges through Forensic Excellence

ISoF 2025 aims to bring together experts in the field of Forensic Engineering, both domestically and internationally, specifically to support the development of forensic competence and capacity across all engineering, architectural, and surveying disciplines.

24 - 25 September 2025
 Dewan Damar Sari Blok F8, Kompleks F Putrajaya, Malaysia

Registration deadline 15 August 2025

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 +60 6-551 2306 (Ir. Nor Azian)
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Engineers | Academicians | Consultants | Contractors | Industry Players

ISoF 2025 is organized by JKR, CREaTE, UTM, and UiTM. Supported by UTM and UiTM.

International Seminar on Forensic Engineering 2025 (ISoF 2025)

24 – 25 September 2025 | Dewan Damar Sari, Blok F8, Kompleks F, Putrajaya

We are pleased to inform that the Centre of Excellence for Engineering and Technology (CREaTE), Public Works Department Malaysia (PWD), will be organising the **International Seminar on Forensic Engineering 2025 (ISoF 2025)** on **24–25 September 2025**, at **Dewan Damar Sari, Blok F8, Kompleks F, Putrajaya**.

This biennial programme will be officiated by **The Honourable Dato’ Sri Alexander Nanta Linggi, Minister of Works**, and will carry the theme: **“Smart Solutions, Sharp Insights: Navigating Engineering Challenges.”**

Objectives of the Seminar:

1. To gather local and international experts in the field of forensic engineering;
2. To serve as a platform for knowledge and experience sharing among researchers, industry players, academics, and government agencies in the field of forensic engineering; and
3. To establish strategic networking opportunities through seminar sessions and related exhibitions.

Accordingly, all **government agencies, local authorities, private sector organisations, consultants, suppliers, contractors, and industry players** involved in forensic engineering, both locally and internationally, are **invited to participate** in this seminar.

In addition, **researchers, lecturers, students from higher learning institutions, technical officers, technology companies, and building material suppliers** seeking the latest updates in forensic engineering are also **highly encouraged to attend**.

For two days, the seminar will feature **10 expert speakers** from the **government, private, industry, and academic sectors**. The programme also targets the participation of **20 exhibiting companies**, who will share their expertise, experiences, and insights with attendees.

Participation Fees:

- **Government / University Participants:** RM500.00
- **Private Sector Participants:** RM1,000.00

Closing date for registration: 15 August 2025

Participation fees may be paid via one of the following methods:

- JomPAY**
- Local Order (Pesanan Tempatan)**
- Electronic Fund Transfer (EFT)**

All payments should be made payable to:
AKAUNTAN NEGARA MALAYSIA-MELAKA-T
Bank Name: Hong Leong Islamic Bank

The original proof of payment must be submitted to the secretariat on the day of the seminar.

The organising committee is pleased to invite Your Honourable **Datuk/Dato'/Datin/Sir/Madam** to participate in ISoF 2025 either as a **participant** or **exhibitor**. Registration can be done via the following links:

- **Participant Registration Link:** <https://forms.gle/ysMmax512cAa87dw9>
- **Exhibitor Registration Link:** <https://forms.gle/PnpwKc1VHQrxJv5m8>

For Inquiries:

Seminar Participants:

- ☎ 06-5512306 (Ir. Nor Azian)
- ☎ 06-5512318 (Ir. Norhaida)
- ☎ 06-5512215 (Mohd Shukri)

Exhibitors:

- ☎ 06-5512374 (Sr Ts. Mohd Adza)

✉ **Email:** isof@jkr.gov.my

International Seminar on Forensic Engineering

ISoF 2025

Intended audience
for this seminar

Engineers
Academicians
Consultants
Contractors
Industry Players

FEES

Government
/ University
RM500

Private
Sector
RM1,000

10 CPD Hours (BEM Malaysia)
CCD Points (CIDB Malaysia) – Applied

Registration deadline
15 August 2025



Scan me
to register

Smart Solutions, Sharp Insights:
Navigating Engineering Challenges
through Forensic Excellence

24 - 25
September 2025

Dewan Damar Sari
Blok F8, Kompleks F
Putrajaya, Malaysia

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ISoF 2025

International Seminar on Forensic Engineering



Official Speech
Dato' Sri Alexander Nanta Linggi
Minister of Works



Keynote Speaker
Profesor Emeritus Dato' Dr. Ibrahim Komoo
Chairman
Board of Directors of Universiti Putra Malaysia (UPM)
"Prolific Scientific and Leadership Figures"

24 | September 2025

01 *Geological and Geo-morphological Mapping in Forensic Investigation*

Ir. Dr. Low Tian Huat
Mohd Asbi Associates Sdn. Bhd., Malaysia

02 *Research & Development and Design for Structural Robustness / Progressive Collapse for Precast Structural Concrete for Buildings*

Dr. Kong Kian Hau
National University of Singapore (NUS)

03 *Forensic Analysis of UPS Battery Pack Failures*

Moon Hyungseok
LG CNS Korea

04 *Sharing Experience in Developing Slope Data Collection Along Federal Roads in Peninsular Malaysia*

Shaipul Shahani bin Abd Wahab
Pintas Utama Sdn. Bhd., Malaysia

05 *Smart Correlation Strategies: Deducing In-Situ Concrete Strength with Minimal Core-Rebound Test Pairs*

Ir. Bernard Toides
Civil and Structural Engineering Branch,
Public Works Department of Malaysia

06 *Digital Evidence in Forensic Investigations: Techniques, Challenges, and Case Applications*

Ts. Dr. Sarah Khadijah Taylor
National Cyber Security Agency, Malaysia

25 | September 2025

07 *Flexible Pavement Forensic Engineering*

Ts. Hj. Mohd Yazip bin Matori
IKRAM Paves Sdn. Bhd., Malaysia

08 *Use of Post-Tensioned Metal Straps as Confinement in Concrete: Recent Research Developments*

Associate Professor Dr. Reyes Garcia
University of Warwick, United Kingdom

09 *Where Evidence Speaks in Forensic Engineering*

Ir. Hafizudin bin Kasim
TNB Labs Sdn. Bhd., Malaysia

10 *Forensic Engineering Investigation vs Quality Assurance*

Associate Professor Dr. Izni Syahrizal bin Ibrahim
Universiti Teknologi Malaysia, Malaysia

10 CPD Hours (BEM Malaysia)
CCD Points (CIDB Malaysia) – Applied

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INTERNATIONAL SEMINAR ON FORENSIC ENGINEERING 2025
“SMART SOLUTIONS, SHARP INSIGHTS: NAVIGATING ENGINEERING CHALLENGES
THROUGH FORENSIC EXCELLENCE”

Programme Itinerary for ISoF 2025

TIME	PROGRAMME
Day 1 24 September 2025 (Wednesday)	Venue: Dewan Damar Sari, Blok F8, Kompleks F, Putrajaya Dress Code: Day 1 - Blazer/Corporate Attire Day 2 - Malaysian Batik
8.00 – 8.50 am	Participant Registration and Breakfast
8.50 – 9.00 am	Welcoming Remarks by Emcee and Safety Briefing Video
9.00 – 10.00 am	Presentation 1 and Q&A Tajuk: Geological and Geo-morphological Mapping in Forensic Investigation Pembentang: Ir. Dr. Low Tian Huat Mohd Asbi Associates Sdn. Bhd., Malaysia
10.00 – 11.00 am	Presentation 2 and Q&A Title: Research & Development and Design for Structural Robustness / Progressive Collapse for Precast Structural Concrete for Buildings Presenter: Dr. Kong Kian Hua National University of Singapore (NUS), Singapore
11.00 – 11.30 am	Refreshments
11.30 – 12.30 pm	Presentation 3 and Q&A Title: Forensic Analysis of UPS Battery Pack Failures Presenter: Moon Hyungseok LG CNS Korea
12.30 – 2.00 pm	Lunch Break
2.00 – 3.00 pm	Presentation 4 and Q&A Title: Sharing Experiences in Developing Slope Data Collection Along Federal Roads in Peninsular Malaysia Presenter: Shaipul Shahani bin Abd Wahab Pintas Utama Sdn. Bhd., Malaysia
3.00 – 4.00 pm	Presentation 5 and Q&A Title: Smart Correlation Strategies: Deducing In-Situ Concrete Strength with Minimal Core-Rebound Test Pairs Presenter: Ir. Bernard Toides Civil and Structural Engineering Branch, Public Works Department of Malaysia
4.00 – 5.00 pm	Presentation 6 and Q&A Title: Digital Evidence in Forensic Investigations: Techniques, Challenges, and Case Applications Presenter: Ts. Dr. Sarah Khadijah Taylor National Cyber Security Agency, Malaysia
5.00 pm	Refreshments and End of Day 1

TIME	PROGRAMME
<p align="center">Day 2 25 September 2025 (Thursday)</p>	<p>Venue: Dewan Damar Sari, Blok F8, Kompleks F, Putrajaya Dress Code: Day 1 - Blazer/Corporate Attire Day 2 - Malaysian Batik</p>
8.00 – 9.00 am	Participant Registration and Breakfast
9.00 – 10.00 am	Presentation 7 and Q&A Title: Flexible Pavement Forensic Engineering Presenter: Ts. Hj. Mohd Yazip bin Matori IKRAM Paves Sdn. Bhd., Malaysia
	<p><u>Official Launch Ceremony</u></p>
10.00 – 10.05 am	- Arrival of the Honourable Minister of Works
10.05 – 10.20 am	- Singing of the National Anthem “Negaraku”, recitation of the Rukun Negara pledge, safety briefing video, and opening prayer
10.20 – 10.40 am	- Welcoming Address by Datuk Wira Ir. Roslan bin Ismail, Director General of Public Works
10.40 – 10.55 am	- Official Speech by the Honourable Dato’ Sri Alexander Nanta Linggi, Minister of Works
10.55 – 11.00 am	- Montage Video Presentation
11.00 – 12.00 noon	- Keynote Speech by Professor Emeritus Dato’ Dr. Ibrahim Komoo
12.00 – 1.00 pm	VIP Visit to Exhibition Booths, Press Conference, and Refreshments
12.00– 1.00 pm	Presentation 8 and Q&A Title: Use of Post-Tensioned Metal Straps as Confinement in Concrete: Recent Research Developments Presenter: Associate Professor Dr. Reyes Garcia University of Warwick, United Kingdom
1.00 – 2.30 pm	Lunch and Break
2.30 – 3.30 pm	Presentation 9 and Q&A Title: Where Evidence Speaks in Forensic Engineering Presenter: Ir. Hafizzudin Bin Kasim TNB Labs Sdn. Bhd., Malaysia
3.30 – 4.30 pm	Presentation 10 and Q&A Title: Forensic Engineering Investigation Vs. Quality Assurance Presenter: Associate Professor Dr. Izni Syahrizal bin Ibrahim Universiti Teknologi Malaysia
4.30 – 4.45 pm	Closing Remarks by Ir. Dr. Abdul Murad bin Zainal Abidin, Director of Innovation, Research and Engineering Development, Centre of Excellence for Engineering and Technology (CREaTE), Public Works Department of Malaysia
4.45 pm	Refreshments and End of Programme

Introduction

Forensic engineering is a rapidly growing field of expertise that plays a crucial role in ensuring the safety, resilience, and reliability of modern infrastructure and engineering systems. In an era marked by rapid development and increasingly complex technical challenges, a forensic-based analytical approach has become more relevant than ever in identifying structural failures, improving design, and enhancing operational efficiency and maintenance.

In line with this, the **Centre of Excellence for Engineering and Technology (CREaTE), Public Works Department Malaysia (PWD)**, is pleased to host the **International Seminar on Forensic Engineering 2025 (ISoF 2025)** from **24 to 25 September 2025** at **Dewan Damar Sari, Blok F8, Kompleks F, Putrajaya**. This biennial seminar serves as a premier platform that brings together experts, researchers, industry professionals, and government representatives from Malaysia and abroad to exchange knowledge, share experiences, and explore innovative solutions in the field of forensic engineering.

Held under the theme **“Smart Solutions, Sharp Insights: Navigating Engineering Challenges”**, ISoF 2025 focuses on strategic thinking and smart technologies in addressing current engineering issues, aligned with the nation's goals to strengthen a safe and sustainable infrastructure system.

Programme Objectives

- 1. To bring together experts in forensic engineering from local and international domains**

The primary objective of this initiative is to unify various stakeholders with high-level expertise who are directly involved in technical investigations of failures in structures, systems, and engineering components. The seminar gathers professionals from diverse backgrounds—including engineers, researchers, material specialists, and safety consultants—thereby creating a strong intellectual platform for dialogue and exchange.

Through in-depth discussions, participants will have the opportunity to share problem-solving approaches, risk assessment methods, and techniques for validating forensic engineering data. The participation of international experts further enables local participants to gain exposure to global practices and international standards in forensic engineering.

- 2. To serve as a platform for knowledge and experience sharing among researchers, industry players, academics, and government agencies**

This seminar provides an interdisciplinary platform connecting the academic community, industrial sectors, and government agencies to share the latest research findings, best practices, case studies, and new technological applications. Among the technologies featured are computer-based structural modelling, artificial intelligence (AI), real-time structural health monitoring, and non-destructive testing techniques.

Additionally, the seminar encourages open dialogue among stakeholders, stimulating innovative solutions to address technical, legal, and safety-related issues in the management of engineering assets across both public and private sectors.

3. To establish strategic collaborations through seminar sessions and related forensic engineering exhibitions

By concurrently hosting the seminar and a technical exhibition, the event offers participants the opportunity to foster long-term collaborative relationships involving research institutions, higher education bodies, industry players, and regulatory agencies. These collaborations may include technology transfer, research and development (R&D), development of technical guidelines, as well as expert training and professional certification in the field of forensic engineering.

The exhibition will also showcase the latest technologies, equipment, and software relevant to structural investigation. This provides participants with direct access to innovative solutions and the opportunity to engage with leading service providers in the industry.