

## PAPER PRESENTATION

A total of 17 papers are scheduled to be presented at the seminar. There will be 1 theme speech, 4 keynote addresses, and 13 papers based on respective sectional thrusts delivered by distinguished speakers covering the following thrusts:

Topic	Institution/ Agency
<b>THRUST I : MATERIAL &amp; METHODS</b>	
Structural Integrity and Concrete Deterioration: How to Measure, Evaluate and Conclude?	Universiti Teknologi Malaysia
Material Characterization Using Radiation Methods & Equipment	Malaysian Nuclear Agency
Scattering Technique for Nano Characterization	Malaysian Nuclear Agency
Non – Destructive Testing Methods of Composite Material	Malaysian Nuclear Agency
<b>THRUST II: STRUCTURAL AND PLANT INTEGRITY</b>	
Structural Integrity: Inspection and Method in Industries	Malaysian Society for Non - Destructive Testing (MSNT)
Application of Neutron Backscatter for Corrosion Under Insulation (CUI) in Industries	Malaysian Nuclear Agency
Industrial Ground Penetrating Radar Applications	Malaysian Nuclear Agency
Safety Aspect on Materials Degradation in a Research Reactor	Universiti Kebangsaan Malaysia
<b>THRUST III: INSPECTION AND ASSESSMENT</b>	
Materials Failure Resulting from Deficiencies	Petronas Carigali Sdn. Bhd
Bridge and Highway Structure Inspection	IKRAM Sdn. Bhd
Analysis of Composite Aerostructure	Universiti Tun Hussein Onn
Structure Health Monitoring Using Acoustic Emission	Malaysian Nuclear Agency
Application of Non – Destructive Method on Artifacts	Department of Museums Malaysia
<b>THRUST IV: CODE, STANDARD, SAFETY, TRAINING AND EDUCATION</b>	
Safety Factors in Structural Integrity Assessment of Components	Department of Safety and Health
Safety and Regulatory Issues of Thorium Fuel for Generation - IV Reactor	Department of Atomic Energy Malaysia (Atom Malaysia)
Certification and Occupational Analysis on Welding Industry in Malaysia	Department of Skills Developments

## WHO SHOULD ATTEND?

The candidates are those interested and involved in inspection, maintenance research, and education, such as users, producers, service providers, consultants, engineers, scientists, researchers, academicians, technologies, contractors, regulators, inspectors, instructors, equipment suppliers, and other practitioners.

## ANY INQUIRIES:



**Aniza**  
noraniza@nm.gov.my  
**018-6622451**

**Nursyazwani**  
nursyazwani@nm.gov.my  
**017-2040379**

**Hasfazilah**  
secretary@mymars.org  
**011 8888 2021**

**Ahmad Amin**  
ahmadaminisa@gmail.com  
**019 7301696**



## REGISTRATION FEE

<b>SEMINAR PACKAGE ON 17–18 OCT 2023</b>	
<b>A</b> Single Registration	RM 870.00
<b>B</b> Team Registration (2 or more registrations from the same organization)	RM 830.00
<b>C</b> Single Registration (with accommodation)	RM 1680.00
<b>D</b> Team Registration (with accommodation)	RM 1640.00
<b>POSTER PRESENTATION ON 17–18 OCT 2023</b>	
<b>E</b> Poster presentation (student)	RM 300.00
<b>F</b> Poster presentation (others)	RM 350.00
<b>EXHIBITION PACKAGE</b>	
<b>G</b> Exhibition Booth	RM 2,500.00
<b>ACCOMMODATION PACKAGE</b>	
 Check – in : 16 Oct 2023 Check – out : 19 Oct 2023 (Accommodation for 3 nights)	

The fees included Seminar Kit and meals. Payment can be made by cheque/ bank draft/ local order/ online transfer payable to **Persatuan Sainstis Penyelidik Malaysia (MARS)**



ACCOUNT NO. **8603949288** (CIMB BANK)  
Kindly send the bank slip/ statement as an evidence for payment.



<http://trainingcentre.nuclearmalaysia.gov.my/>

# 8<sup>th</sup> National Seminar on Material and Structural Integrity

17-18 OCT 2023

GRAND PARAGON HOTEL,  
Johor Bahru

“Material  
Integrity  
for Reliability  
and Remnant  
Life”

Organised by:



MALAYSIAN ASSOCIATION OF RESEARCH SCIENTISTS

In - Cooperation with:



In - Collaboration with:



12  
CPD POINTS  
(MBOT)

20  
CCD POINTS  
(CIDB)

10  
CPD POINTS  
(BEM)

## PREAMBLE

Structural integrity refers to its capacity to resist a designed structural load without breaking down from fatigue, distortion, or fracture. Good maintenance practises are always the ultimate solution to the above issue. However, in the real industrial environment, many unforeseen circumstances occur. This may lead to unexpectedly, reduction of life-span of many components. Thus, there is a dire need to assess each case to avoid future failures and catastrophes. This is achieved through knowledge of material and structural integrity.

The focus areas cover characterization techniques for materials such as metals, ceramics, and polymers, with the emphasis on the current findings that are conveniently applied to the industry. The techniques extend to the assessment of components non-destructively as deem appropriate and beneficial. With these in hand, a proper evaluation is viable to solve issue related to material and structural integrity. Bridging the gap between industries and laboratories is the pinnacle of the event. The input from laboratories might be enriched in such a way to quickly benefit industries as the result of replicating the real scenario in the plant. The industrial player views are extremely important in this event to gain mutual benefit and advantages. A brief update on the regulation, standards, and code is given to equip the industries with the current changes in implementation.

This 2-day seminar aims to bring together those involved in and interested in material and structural integrity monitoring, whether users, producers, service providers, or consultants, for the dissemination and exchange of information on the state of art, technology, and development in this field.

## OBJECTIVES

- To review the advanced practice, modern techniques in the selection and usage inspection and maintenance to ensure material integrity for industrial application.
- To enhance knowledge in evaluating the structural integrity of failed or damaged equipment, plants, and other installations and assessing their remnant life.
- To enhance knowledge, share thoughts and experiences with other professionals.
- To update information on the existing regulation, standards and code of practice as a way to ensure quality and integrity of material.

## Calling for Poster Presentation

### IMPORTANT DATES

Abstract Submission Deadline

**22 September 2023**

Abstract Acceptance

**29 September 2023**

Payment Deadline

**10 October 2023**

Poster Presentation and Competition

**17 & 18 October 2023**

Full Paper Submission Deadline

**30 October 2023**

### HIGHLIGHTS

- Operations & Maintenance
- Standards, Regulations & Code of Practice
- Forensic Engineering
- Specification and Engineering Designs
- Integrity Management
- Inspection Techniques
- Plants Assessment
- New Technologies, Emerging Issue and R&D
- Education and training
- Safety
- Pattern Recognition (Artificial Intelligence)

Supported by

