

Half Day Seminar (Physical) on “Thermal Runaway protection for Lithium Ion Battery Energy Storage Systems”

Organised By:
Mechanical Engineering Technical Division, IEM

Date: 8th December 2022 (Thursday)

Time: 9.00am – 1.00pm

**Venue: Auditorium Chin Fung Kee,
3rd Floor, Wisma IEM, PJ**

BEM APPROVED CPD/PDP: 3 | REF. NO.: IEM22/HQ/467/T (w)



Speaker Profile 1

The seminar will be conducted by Mr. Ashwit Dias from Siemens. Mr. Ashwit Dias holds a degree in Mechanical Engineering and an MBA from INSEAD Business School. He began his career as an R&D Engineer with General Electric. He has several international patents to his name and is also a Six Sigma Black Belt. Over the last 12 years, he has been with Siemens, and has worked with a wide range of engineering businesses from Wind Energy to Transmission Solutions to Building Products. Particularly over the last 7 years he has been actively involved with the Siemens Fire Safety business in ASEAN, India and Korea. With an increasing number of fire incidents related to thermal runaway events from Lithium Ion batteries in the last few years, he is actively involved in educating the industry on addressing this new risk.

Synopsis

Since their market launch in the early 1990s, lithium-ion batteries have found their way into a wide variety of applications. The transition to renewable energy and decentralization of generation in the last few years, have necessitated the use of Energy Storage Systems (ESS). In parallel electric vehicles have also gained in prominence, which often also use Lithium Ion based power sources as also do several other consumer applications. These trends have led to exponential growth in Lithium ion battery production. Driven by this growth in demand, prices for Lithium batteries have dropped exponentially in the last few years and we now increasingly find them in a wider variety of industrial applications – from Energy Storage Systems to UPS rooms to Data Centers. However the industry standards to protect such industrial applications have not kept up with this growth. Lithium Ion fires are increasingly making the news. Just in July 2021, there were multiple fires in the US, Germany and Australia involving ESS applications. The challenge to the industry comes from a phenomenon called thermal runaway, where once initiated, the fire spread to adjacent cells resulting in a cascading series of fires and potentially explosions. Lithium ion batteries combine high energy materials with highly flammable electrolytes most often in conjunction with high power systems. Traditional fire detection methods do not provide early warning, nor are the standard applications of fire extinguishing suitable to suppress Lithium Ion fires. The webinar will focus on building an understanding of the risks involved with Lithium Ion batteries, the detection techniques that can be used and protection strategies to employ to address installations with Lithium Ion batteries.

Speaker Profile 2

Mr. Nirmal Gandhi from Siemens and he holds a degree in Electronics Engineering. He began his career as an Engineer with TATA Group Company in India. Over the last 22 years, he has been with Siemens, and has worked in diverse functions including Sales, Engineering, and Business Development & Strategy. In his current role he is in Building Products Business as Regional Manager for APAC countries & is actively involved in promoting Fire Safety & Comfort Solutions.

	Online Fee	Normal Fee
IEM Student Member	RM75.00	RM100.00
IEM Graduate Member	RM100.00	RM150.00
IEM Corporate Member	RM200.00	RM250.00
Non-IEM Member	RM400.00	RM450.00

0800 to 0830h	Registration
0830 to 0840h	Introduction
0840 to 0940h	Fire protection for lithium ion battery energy storage system
0940 to 1015h	ASD+ presentation
1015 to 1030h	Break & networking
1030 to 1120h	Next Generation inert system
1120 to 1140h	Contest of HAnds-on installation
1140 to 1200h	Questions & Answer Session
1200 to 1215h	Closing & networking

The Institution of Engineers, Malaysia

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Register now at www.myiem.org.my

REGISTRATION FORM

Half Day Seminar (Physical) on

“Thermal Runaway protection for Lithium Ion Battery Energy Storage Systems”

held on 08th December 2022 Thursday at Auditorium Chin Fung Kee,

3rd Floor, Wisma IEM, PJ

organized by

Mechanical Engineering Technical Division (METD)

Closing Date: 3rd December 2022

No	Name(s)	Membership No.	Grade	Fee (RM)
SUB TOTAL				
+ 6% SST				
TOTAL PAYABLE				

PAYMENT DETAILS:

FULL PAYMENT must be settled before commencement of the seminar, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non-refundable. The Registration Fee includes lecture notes, refreshment and lunch. For **ONLINE REGISTRATIONS**, please note that payment **MUST** be made **BEFORE the closing date**. If payment is not received within the stipulated time, the registration automatically cancels.

Contact Person : _____ Designation : _____

Name of Organization : _____

Address : _____

Telephone No. : _____(O) Fax No : _____(O)

Handphone : _____(HP) Email: _____

Signature & Stamp

Date

TERMS & CONDITIONS:

- **ONLINE REGISTRATIONS ONLY through IEM Portal**
- ONLINE PAYMENT is applicable [via RHB and Maybank2u – Personal Saving & Personal Current ; Credit Card -Visa/Master.
- The Organising Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.
- ***IEM reserves the right to postpone, reschedule, allocate or cancel the course**

Cancellation Policy

No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with 7 days prior notification and substitute will be charged according to membership status.

Personal Data Protection Act

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.