2024 IEEE EPS Malaysia: Activities Update

May 25th, 2024
Thank You

2023 Achievements
- Remarkably active year with 38 activities successfully conducted
- Special thanks to all 2023 EPS Malaysia Exco & Committee, and EPS members for the great support
- **THANK YOU** for the commitment and contribution to the success of IEEE EPS Malaysia Chapter!

2024 Focus
- Build Packaging talent pool for Semiconductor growth in Malaysia:
  1. 1-day training for various universities (e.g. Nottingham, Monash, Taylor’s, etc.)
- Technical talks, career talks, WIE talks & webinars
- Most importantly - the 40\textsuperscript{th} International Electronics Manufacturing Technology Conference in Penang (IEMT 2024) – targeting 500 participants at least!
- Gearing towards Large Chapter Award
IEEE EPS Malaysia
2024 Activities Update

Compiled by: Dr Eu Poh Leng
IEEE EPS Malaysia Chair
IEEE EPS Malaysia – Key Activities Overview

Since 2006…started with IEMT Conference…Technical Workshop…BESA…Technical Sharing….. We continue to grow…

Conference
- **IEMT Biennial**
  - Location: KL → Penang → Melaka → Perak → JB → Penang → Melaka → Putrajaya
  - Short Courses, Keynote Speaker, Invited Speaker, Oral, Poster, Exhibition Booth
  - Attracted more than 400 attendees world wide.

Education
- **Technical Workshop Biennial**
  - Location: Penang and Putrajaya
  - 1 day event
  - 2 leading edge topics

University Engagement
- **BESA annual**
  - Best Engineering Student Award
  - Open to selected University
  - Award RM 3000 per winner

Communication
- **Newsletter quarterly**
  - Summarize quarterly activity
  - Share other EPS chapter activities
  - Award winner

Technical Sharing Ad-hoc
- Speaker from Industry and Academia
- Webinar
- University Technical Event (e.g. Taylor, UM, UniMAP and etc)

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URL: [https://ieee-epsmalaysia.org/](https://ieee-epsmalaysia.org/)
IEEE EPS Malaysia

Jan - May 2024 Activities
IEEE EPS Malaysia Chapter 2024 AGM
20th Jan 2023

• Meeting was held through online Webex from 9.00am to 11.00am. 24 EPS members attended the AGM.

• Key items presented as follows:
  - Welcome address by IEEE-EPS Chapter Chair 2023
  - 2023 AGM meeting minutes
  - Summary of 38 activities that were successfully conducted and documented in vTools,
  - Treasurer’s finance report
  - Official dissolution of 2023 committee
  - Election of 2024 committee
  - 2024 planned activities
  - Any other matters

• Meeting ended at 11am with a group photo
2024-2025 New Committee Elected:

Immediate Past Chair: Dr YY Tan (Yole)
Chair: Dr Poh Leng Eu (NXP)
Vice Chair (Academic): Prof Cheong (USM)
Vice Chair (Industry): KC Tan (onsemi)
Secretary: Dr Asmah (Unimap)
Vice Secretary: Sze Pei Lim (Indium)
Treasurer: Faiz Zuhairy Redzuan (onsemi)
Vice Treasurer: TB Lau (NXP)
ExComm – Edu & Tech Talk Dr YH Wong (UM)
ExComm – Edu & Tech Talk Mohd Azham Sukemi (NXP)
ExComm – Newsletter Vanessa Tan (NXP)
ExComm – Newsletter Dr Banu (Unimap)
ExComm – Membership Dr Bernard Lim (Appscard)
ExComm – Membership Sueann Lim (TI)
ExComm – Webmaster Dr John Tan Teng Hwang (Intel)
ExComm – Webmaster Damian Santhanasamy (Indium)
ExComm – Industry-Aca Dr Noraini Othman (Unimap)
ExComm – Industry-Aca Dr Goh Ying Xin (UM)
ExComm – Auditor Dr Shaw Fong Wong (Intel)
ExComm – Auditor Kian Chuan Tan (Nexperia)
Industry Visit to Malaysian Institute of Microelectronic Systems (MIMOS)

1st Mar 2024

- IEEE EPS Malaysia coordinated with IEEE Malaysia Section PAIR, EDS Chapter and MIMOS to host a successful industry visit for a diverse group of attendees. This engaging event was attended by > 60 participants including delegates from IEEE R10 region, local Malaysia Section’s IEEE members, industry representatives, and university researchers.

- The primary focus of the visit was to showcase MIMOS’ capabilities in silicon processing and advanced packaging technologies.

- Overall, the visit fostered a strong connection between MIMOS and the visiting audience, creating a platform for potential collaborations within the IEEE, industry, and academic communities.
IEEE EPS Malaysia & NXP Semiconductors Malaysia had jointly organized an event in NXP Semiconductors Malaysia, with the presence of Inv. Cheah Bok Eng as the honorable speaker, expounding on “Innovation Unleased”.

Mr Cheah Bok Eng is a senior staff engineer from Intel Microelectronics. He has 190+ issued patents in the technical subject of signal integrity, advanced packaging, and system form-factor solutions. Bok Eng is a 5-time recipient of the prestigious Intel Top Inventor Awards. He was also recognized by the Malaysia Book of Records (MBR) in 2022 as the Inventor with the Most Worldwide Patent Grants. He is a senior member of IEEE (SMIEEE), an EXCO member of the Malaysia TRIZ Innovation Association (MyTRIZ) and the Malaysian Invention and Design Society (MINDS). He is also the author of a book titled “Innovation Unleashed... a 10-day journey with an inventor”. His unwavering dedication in promoting innovation has impacted more than 4,000 students and professionals at both national and international levels.

Event attracted ~100 engineers with many good questions and vibrant engagement.
Career Aspiration Talk in University of Malaya, Mechanical Engineering Dept, Celebration of International Women’s Day

8th Mar 2024

- The Mechanical Engineering Department of University Malaya has invited Dr Eu Poh Leng to share her career aspiration in Semiconductor Packaging, in conjunction with the celebration of International Women’s Day.

- It’s a small group sharing with ~35 students. Dr Eu shared her secret of success throughout the 27 years of working in Semiconductors Packaging Industry.

- Students were very engaged and asked many questions. Dr Eu has provided many examples of life experiences to encourage and inspire the students in order to be a good engineer and to be a blessing to the world, making the world a better place.
A full-day Short Course on Introduction to Flip Chip Assembly to IEEE EPS Student Chapter of Nottingham University Malaysia

9th Mar 2024

- With the main purpose of building Semiconductor Packaging Talent Pool in Malaysia, IEEE EPS Malaysia took an initiative to provide exposure about IC packaging specifically on Flip Chip assembly to engineering students from IEEE Student Chapter of Nottingham University Malaysia. A one-day short course was designed to suit at least 2nd year students in introduction of semiconductor packaging.

- Total of 26 students attended the short course, with lunch sponsored by IEEE EPS Malaysia. Besides the topic, students were also introduced to working environment in semiconductor packaging such as clean room environment, smock (attire), and roles & responsibility of process engineers. At the end of the course, students were given questions to test their understanding on the topics.

- Before ending the course, promotion slides inclusive the benefits of joining IEEE EPS and upcoming IEMT conference were presented to the students. Overall, the short course met the objective and was well received by the students judging from the online feedback given.
Career Talk Webinar with Engineering Students from Nottingham University Malaysia, Celebrating International Women’s Day

22nd Mar 2024

- In conjunction with International Women’s Day in the month of March, IEEE EPS Student Chapter in Nottingham University Malaysia has also invited Dr Eu Poh Leng, Chairlady of IEEE EPS Malaysia & Senior Director of External Package Innovation, NXP Semiconductors Malaysia to give a webinar on career opportunities in Semiconductors Packaging in Malaysia.

- Dr Eu shared the growing trend of Semiconductors which is driven by Autonomy, Electrification and Connectivity as well as the rise of Secure Connected Edge, including smart house, smart factory, smart connected devices, smart connected cars. In view of the bright future in Semiconductors Packaging, there are ample opportunities for career growth.

- > 80 students attended the online session and were very excited about the bright future in Semiconductors Packaging.
Monash Women in Engineering & IT Committee and IEEE EPS Malaysia: Celebrate Women’s Achievement

3rd April 2024

• Monash Women in Engineering & IT Committee, in collaboration with IEEE EPS Malaysia had successfully organized a Lunchtime Talk on Wednesday, 3rd April, from 11:30 am - 1:00 pm to celebrate International Women's Day.

• The theme of this lunchtime talk is “Celebrate Women’s Achievement”, which is aligned with International Women’s Day's theme "Inspire Inclusion".

• The event was attended by > 50 participants who are mostly female academic staff, professional staff and female postgraduate students in the School of Engineering and IT.

• Dr Eu from IEEE EPS Malaysia & NXP Semiconductor Malaysia was invited to share on her career aspiration to inspire all the women in engineering and IT to achieve their dreams as Nothing is Impossible if you believe!
IEEE EPS & Malaysia Semiconductor Industry Association (MSIA) Briefing on Advanced Packaging

29th April 2024

Briefing on Advanced Packaging

MSIA together with IEEE EPS is organising a Briefing to members on Advanced Packaging.

Title: Advanced Packaging Market and Technology Trends
Date: Monday, 29 April 2024
Time: 3.00pm to 4.30pm
Virtual Call thru Zoom Platform
Presenter: Dr Tan Yik-Yee
Senior Technology & Market Analyst, Semiconductor Packaging from Yole Group

Please register here https://shorturl.at/vKT05

• The Malaysia Semiconductor Industry Association collaborated with IEEE EPS Malaysia to organize a briefing on Advanced Packaging by Dr YY Tan from Yole Intelligence, who is also the past chair of IEEE EPS Malaysia. Total 121 participants attended the online meeting.

• Dr YY Tan gave a very clear and informative sharing about Advanced Packaging Market and Technology Trends which is a very timely sharing to help Semiconductor companies in Malaysia move forward with Advanced Packaging growth.
IEEE EPS Malaysia has successfully organized a Technical Webinar with Dr Goh Ying Xin from University Malaya, on the topic of Advancements in Lead-Free Solder Electrodeposition and Joint Behavior for Electronic Packaging Applications.

Dr Goh expounded on the advancements of lead-free solder alloys and associated technical challenges, and a good sharing on the scientific principles governing the successful electrodeposition of these alloys.

> 40 participants joined the webinar with strong engagement from the audience.
2024 EPS Msia:- Upcoming Events

June:  Webinar or Technical Talk by DL - Prof Cheong

July:  Invited Speaker for Taiwan-Malaysia Semiconductor Forum – Dr Eu
       Technical Talk in Taylor’s University - Dr Eu
       Semiconductors Packaging Training in NXP for Monash University – Azham

Aug:   Besa Award – Nottingham University
       Semiconductors Packaging Training in Taylor’s University – Azham
       Vietnam EPS Day – Dr YY, Sze Pei, Dr Bernard, Prof Kim Shyong, Dr Eu

Sept:  Mimos Technical Day

Oct:   **IEMT 2024, Penang**
       Invited Speaker for IMPACT Taiwan – Sze Pei & Dr Eu

Nov:   Career Talk for local universities (Shaw Fong/Dr Bernard/Prof Cheong/Dr Eu)

Dec:   BESA Award - UTAR
40th International Electronics Manufacturing Technology (IEMT 2024)
Date: Oct 16-18, 2024
Venue: G Hotel Gurney, Penang, Malaysia
Conference Topics

IEMT 2024 brings together academic researchers and industry leaders to present and discuss state-of-art and future trends in packaging and integration technologies. Topics to be covered as follows but not limited to:

- Advanced Packaging – 2D, 2.5D, 3.0D, Chiplets, WLCSP, FOWLP, FOPLP & Hi
- Thermal/Mechanical/Electrical Simulation & Characterization
- Material & Processing
- Emerging Packaging – Opto, Medical, Wide Bandgap Electronics, Nano Technology, Wearable Electronics
- Interconnections Technologies – TSV, μ-bump, hybrid bond, FC and embedded
- LED, MEMS, NEMS & Sensor Packaging & IoT
- IC Testing Technology
- Surface Mount Technology
- Quality, Reliability & Failure Analysis
- High-Speed, Wireless & Components
- Cyrogenic and High Temperature Packaging Technology

Accepted contributions comply with publication requirements and standard will be included in the conference proceedings and archived in IEEE Xplore. IEMT papers can be searched through IEEE, Google scholar and other search engines.

Conference Program

The technical program of the conference includes oral talks, poster presentations, special sessions and invited keynote speakers.

Paper Submission

IEEE IEMT 2024 has attracted > 150 abstracts. All Oral and Poster papers have been down selected with high quality content. All authors and co-authors have been notified. Full paper submission is expected by 15th July 2024.

Exhibitors and Sponsors

IEMT 2024 provides very attractive sponsorship and exhibition opportunities. The conference is the best place for you to present your products, services and solutions which allows you to give strong visibility to your company or institution and access to more than 300 engineers, managers and decision makers from all over the microelectronics and system-integration community. These includes material, equipment, software tools, design and simulation, processes and services for semiconductor assembly, interconnect, packaging, test, process control and analysis technologies as well as market research.

Abstract Submission
29th February 2024

Abstract Acceptance Notification
1st May 2024

Full Paper Submission
15th July 2024

Note: Abstracts and Full Papers must be submitted electronically through the following link: https://www.conftool.pro/iemt2024/
Things to do in Penang

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Thank You