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CASS (Malaysia) Newsletter

October 2015

CHAIRMAN'S MESSAGE



Dear Members,

It is great to write this Chairman Message for the first issue of the quarterly Newsletter of our IEEE Circuits and Systems Society Malaysia Chapter (IEEE CASS M) in the year of 2015. Our *CASS (M) Newsletter* goal is to provide information and updates that may help CAS members to be informed and actively participate in academic and industrial

doing on circuits and systems, networking opportunities, career development and many other exclusive benefits. Thanks to IEEE CAS HQ and IEEE CAS Malaysia pro-active initiatives, we are rest assured that our society is very much alive & kicking and accessible to new ideas of creativity and innovative activities for members. For the first *CASS (M) Newsletter* issue, I would like to thank everyone for their contribution to CAS Malaysia in 2015, through membership, through participation at events and through active involvement in organizing committees. We hope that *CASS (M) Newsletter* will keep you informed and connected. We look forward to hearing your feedback.

*Nurul Amziah Md Yunus, PhD.
Chair
IEEE CASS M*

EDITOR'S MESSAGE



Dear IEEE CASS (M) Members,

I'm pleased to bring you the first issue of IEEE CASS (M) Newsletter. I hope you will enjoy reading the articles featured in this issue.

The newsletter will not be possible without great commitment from the associate editors and article writers reaching out to feature informative and interesting stories from every parts of CASS (M)

activities. Special thanks to the artwork designer, ensuring the newsletter at its highest quality possible.

Members are welcome to contribute exciting reports and news article that would help our newsletter noteworthy and reached out to members. For further communications, please contact me via email at fzr@upm.edu.my

So here, the first issue is now in your hand. I hope you will all enjoy it.

*Fakhrul Zaman Rokhani, PhD.
Editor-in-Chief CASS (M) Newsletter*

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News & Highlights

Arduino Workshop

IEEE CASS (M) together with Universiti Putra Malaysia (UPM) Student Branch conducted an Arduino workshop for students from Sekolah Menengah Kebangsaan Seri Indah, Selangor on 28th May 2015 at Microprocessor Laboratory, Faculty of Engineering, UPM. The workshop was conducted by 3 instructors and 19 facilitators from UPM and attended by 40 secondary school students from SMK Seri Indah.

The workshop has successfully provided a platform for the school students to learn and apply microcontroller technology besides being exposed on Electrical and Electronics Engineering field. In fact, such activity increases students' interest as well as confidence level to succeed in engineering field. While feedback from Pn Zaliza Muhammad, a teacher from SMK Seri Indah also mentioned that

such activity is beneficial for the students as many of them who participated in the workshop are majoring in technical engineering stream and it gives a new experience to them outside classroom.

The workshops also benefited the IEEE Student Members where they could learn the technology and at the same time serve the community by teaching the school students. This program had increased their confidence level when delivering technical knowledge in public.

For more information, please visit IEEE CASS (M) website under the [School Program](#).

Written by,
Lim Yang Wei



Students' hand-on during workshop



Instructor, Facilitators and Participants in Arduino Workshop



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News & Highlights

WiCAS 2015

Langkawi, September 2nd 2015, IEEE CAS Society Malaysia Section (IEEE CASS M) has successfully hosted the WiCAS2015 program at Holiday Villa, Langkawi, Malaysia. WiCAS2015 program was funded by the 2015 Outreach Initiative of the IEEE Circuits and Systems Society. It is mainly to build community and networking among all members of the society, researcher, scientist and young engineers from industry, academia, and government sectors.

Five guest speakers of WiCAS2015 have shared their latest ideas about what to do to shift daily engineering work routines and career systems to be more significant and inclusive.

More than 40 participants from all over the world

have participated in the program. The one-day program has offered everything that suited the theme of the program Towards a Successful Profession: Women Engineers Making a Difference For The Future.

Feedback from this program was extremely positive and the report from this program will be on IEEE CAS M website.

Watch out for other programs like this one across the country by IEEE CASS (M)!

Written by,
Nurul Amziah Md Yunus



WiCAS2015 committee members with guest speakers of the day. From left: Jasronita Jasni, Asnor Juraiza Ishak, Azura Che Soh, Eu Poh Ling, Ljiljana Trajkovic, Zuhaina Zakaria, Shaoying Huang, Noor Ain Kamsani and Samsuzana Abd Aziz.



Participants of WiCAS2015



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News & Highlights

Technical Talk #1: The Electrical Key That Unlocks Biology

A technical talk given by Prof. Dr. Michael Pycraft Hughes, Professor and Director of Centre of Biomedical Engineering University of Surrey, UK on “The Electrical Key That Unlocks Biology”. The talk was held on March 13th 2015 at the Faculty of Engineering, UPM, Serdang and attended by 40 participants from academic staffs and students in UPM.

The talk discussed about the life can also be viewed as an electrical process since the chemical reactions within life cells are carrying charge. A new approach to analyzing cells electrically offers to

open entire new vistas of understanding about how cells work. This has enabled the investigation of electrophysiology in areas where none have ever looked – to diagnose cancer, to understand what stem cells will become, and to peer for the first time into an unexpected electrical clock that ticks in all of us.

For more information, please visit IEEE CASS (M) website under the [Technical Talk](#).

Written by,
Lim Yang Wei



Group picture of attendees for Technical Talk by Prof. Michael Pycraft Hughes.



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News & Highlights

Technical Talk #2: Fundamental of CMOS Image Sensors

A technical talk on “Fundamental of CMOS Image Sensors” was given by Assoc. Prof. Dr. Suhaidi Shafie from Electrical and Electronic Engineering, UPM on 27th May 2015 at Dewan 3, UTHM. Basic knowledge of the image sensor such as charge-coupled devices (CCD’s) and CMOS image sensor were given during the talk. The pros and cons between CCD’s and CMOS image sensor was explained especially on the advantage of CMOS image sensor in lower noise performance over the

CCD’s. Column parallel low-noise readout circuits and analog-to-digital converters contribute the improvement of the noise performance at high frame rates.

For more information, please visit IEEE CASS (M) website under the [Technical Talk](#).

Written by,
Lim Yang Wei



Any contribution in terms of Advertisement and Article/Writing can be made before Dec 15, 2015 for Jan 15, 2016 issue to fzr@eng.upm.edu.my



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Awards & Recognition

WiCAS Program Young Female Award

On 2nd September 2015, two prestigious awards ‘Young Female Leader Professional Development Award’ and ‘Young Female Professional/Postgraduate Student Travel Award’ were presented during the WiCAS Program at Holiday Villa, Langkawi, Malaysia. The awards are part of 2015 CASS Outreach Initiative on WICAS program to celebrate achievement by female IEEE CAS (M) members.

Young Female Leader Professional Development Award



Dr. Samsuzana Abd Aziz from Universiti Putra Malaysia was awarded the Young Female Leader Professional Development Award for the very best at her profession as a dynamic young engineer and leadership at the university. She received an award certificate, momento trophy and cash RM500 travel grant. A video recording of her interview will be uploaded to IEEE CAS (M) website.

Written by,
Che Nur Hamizah

Young Female Professional/Postgraduate Student Travel Award

Student Travel Grant Award worth RM500 was awarded to provide financial support for young professionals or students to attend ICSyS2015 conference.

Each award recipient presented a paper in WiCAS track and received a certificate during WiCAS 2015 program.

List of recipients:

- Siti Salhaillea Sinan (Universiti Putra Malaysia)
- Iffa Sharuddin (Multimedia University)
- Nurul Ashikin Abdul Kadir (Universiti Teknologi Malaysia)

Written by,
Che Nur Hamizah



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Awards & Recognition

FYP Awards

As part of the Development Opportunities initiatives, IEEE CASS (M) society has created an award for undergraduate students' final year design project which started in 2013. This year, we have evaluated students' project related to CAS from two universities – UPM and UKM.

UPM Best FYP Poster Presenter

On 10th June 2015, Faculty of Engineering UPM organized a FYP poster presentation for final year students. Undergraduate student from the Department of Electrical and Electronic Engineering, Ong Kai Sheng was awarded as the winner of IEEE CAS Best FYP Poster Presenter 2015 for his FYP poster titled "Development of Direct Digital Synthesizer on FPGA". His project advisor is Prof Madya Dr. Roslina bt. Mohd. Sidek.

Written by,
Che Nur Hamizah



UKM Best FYP Poster Presenter

On 20th May 2015, Dr. Mohd Amrallah Mustafa was invited to Faculty of Engineering UKM as a evaluator panel for final year students' design project.. Thinal Raj from Department of Electrical, Electronic and Systems Engineering was awarded the IEEE CAS Best FYP Poster Presenter 2015 for his FYP poster titled "Development of an Autonomous Quadrotor with Real-Time Data Transmission".

Written by,
Che Nur Hamizah





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Upcoming Events

2015 IEEE CAS HIGH-TEA NETWORKING EVENT

The IEEE High-Tea Networking event is in its third year this year being organized since its inception in 2013. The event intends to bring engineers, researchers, scientists and others who involved in circuits and systems applications access to the industry's most essential technical information, networking opportunities, career development tools, apart from promote the IEEE CAS society programs and membership. This year event's detail as follows:

Theme: Internet of Things (IoT) for Sustainable Living

Location: Multi Purpose Hall, Universiti Teknologi PETRONAS, Bandar Seri Iskandar

Organizers

- IEEE
- IEEE Circuits and Systems Society Malaysia Chapter (IEEE CAS M)
- Department of Electrical & Electronic Engineering of Universiti Teknologi PETRONAS
- Centre for Student Internship, Mobility and Adjunct Lectureship (CSIMAL) of Universiti Teknologi PETRONAS

Objectives

IEEE CAS High-Tea Networking is a yearly event, which aims

- To be a platform for intellectual interaction between IEEE member, fellows, engineers and academicians
- To share knowledge and opportunities
- To promote the IEEE CAS society programs and membership

- To foster collaboration and cooperation

Target Audience

A total of 100 participants are expected to attend the session representing

- Industries and Research Institutes related to circuits and system.
- Government and Funding bodies
- Academicians from Local and International Institutions.
- Undergraduate and Postgraduate Students of Local and International Institutions.

Tentative Programs

- 13:30 – 14:00 Registration
- 14:00 – 14:10 Opening remarks by UTP Dean of Engineering
- 14:10 – 14:55 Speaker 1: Prof Hiroo Sekiya, Chiba University
- 14:55 – 15:25 Speaker 2: Dr Mazlan Abbas, REDtone IoT
- 15:25 – 15:40 Book launching
- 15:40 – 16:10 Speaker 3: Dr Ku Zilati Ku Shaari, UTP
- 16:10 – 16:25 IEEE CAS Society award ceremony
- 16:25 – 18:00 High-tea and networking
- ** Student Poster Presentation

For more information, please visit IEEE CASS (M) website under the [High Tea 2015](#).

Written by,
Tan Chee Phang