

IEEE Malaysia Section

2020 Section's Annual Report to Region 10

PART A - SECTION SUMMARY

A.1 Executive Summary

A.1.1 Section Executive Committee Member List

No.	Portfolio	Committee
1.	Chair	Fawnizu Azmadi Hussin
2.	Past Chair / Award and Recognition	Mohammad Faizal Ahmad Fauzi
3.	Chair-Elect / Membership / Chapter Development	Md Pauzi Abdullah
4.	Honorary Secretary	Rosmiwati Mohd Mokhtar
5.	Honorary Treasurer	Chong Yu Zheng
6.	Professional Activities / Industrial Relation	Nordin Ramli
7.	Communication / Newsletter	Haidawati Mohamad Nasir
8.	Educational Activities	Mohd Hafiz Ismail
9.	Student Activities	Alpha Agape Gopalai
10.	Humanitarian Activities	Robiah Ahmad
11.	Strategic Communication	Fakhrul Zaman Rokhani
12.	Section Student Representative	Mohammed Hussein
13.	Auditor	Franklin Joseph
14.	Auditor	Nur Idora Abdul Razak

A.1.2 Section Highlights

A.1.2.1 IEEE Malaysia Section consists of 2 sub-sections, 24 technical chapters, 2 council chapters, 3 affinity groups, 27 student branches, and 19 student branch chapters. In addition to these numbers, in 2020, there were 3 new organizational units (OU) established. Those were Xiamen University Malaysia Student Branch, Multimedia University PES Student Chapter, and University Malaya WIE Student Affinity Group.

A.1.2.2 The year 2020 has evidenced a significant impact on the IEEE Malaysia Section when the Covid-19 pandemic hits Malaysia and the government has announced the movement control order across the country. Most of the activities that initially run in the face-to-face mode required changes to virtual meeting mode.

A.1.2.3 Despite the restrictions and the new normal practices, IEEE Malaysia Section has conducted several activities under each of the portfolios. Details are provided in the portfolio sections (B3 – B10).

A.1.2.4 In 2020, we received several grants and funding to support the activities conducted either by Section or its subsections, chapters, and student branches. Details of the grants received are tabulated in Table A.1.

Table A.1: List of Support and Grant Received from IEEE/Region 10

No	Types of Fund	Description	Recipient	Amount (USD)	Status
1	R10 Incentives Grant	R10 Incentives for Section Activities Organized in 2020	Malaysia Section	3,000.00	Completed
2	R10 SAC MD< Fund	IEEE Malaysia Leadership Training Workshop	Malaysia Section	228.57	Completed
3	R10 Life Members Funding for Student Activities	IEEE x SHRDC Digital Transformation Training Program	Malaysia Section	500.00	Completed
4	WIE Special Funding	WIE Malaysia Congress 2020	WIE Malaysia	400.00	Completed
5	R10 Reaching Locals	Reaching Locals Project	Malaysia Section	300.00	Completed
6	R10 Support Grant	POCO Event	Malaysia Section	250.00	Completed

7	R10 EA New Innovative Challenge	University Category: Winner	UM SB, DEIS Chapter & PES Chapter	500.00	Pending
8		University Category: Runner-up	PES Chapter & CIRED Malaysia	300.00	Completed
9		University Category: Commendation Support	CNAG Chapter & YP Malaysia	150.00	Not Completed
10		University Category: Commendation Support	PES Chapter & CNAG	150.00	Pending
11		Pre-University Category: Commendation Support	Computer Society Chapter	150.00	Completed
12		Pre-University Category: Commendation Support	EDS Chapter & EDS UKM SB	70.00	Completed
13		Pre-University Category: Commendation Support	Sabah Subsection & UMS SB	150.00	Pending

A.1.2.5 Among the sponsored and technically co-sponsored conferences successfully organized in 2020 are listed in Table A.2 and Table A.3.

Table A.2: List of Sponsored Conferences Organized in 2020

No	Name	Venue	Date	Financial Sponsor
1	2020 16th IEEE International Colloquium on Signal Processing & Its Applications (CSPA)	Langkawi	28-29 Feb 2020	Malaysia Section CS Chapter
2	2020 IEEE 10th Symposium on Computer Applications & Industrial Electronics (ISCAIE)	Virtual	18-19 Apr 2020	Malaysia Section IE/IA Joint Chapter
3	2020 IEEE 8th International Conference on Photonics (ICP)	Virtual	12 May 2020 – 30 Jun 2020	IEEE Malaysia Section Photonic Society Chapter
4	2020 IEEE International Conference on Automatic Control and Intelligent Systems (I2CACIS)	Virtual	20 Jun 2020	Malaysia Section CS Chapter
5	2020 IEEE Symposium on Industrial Electronics & Applications (ISIEA)	Virtual	17-18 Jul 2020	Malaysia Section IE/IA Joint Chapter
6	2020 IEEE International Conference on Semiconductor Electronics (ICSE)	Virtual	28-29 Jul 2020	Malaysia Section ED Chapter
7	2020 11th IEEE Control and System Graduate Research Colloquium (ICSGRC)	Virtual	8 Aug 2020	Malaysia Section CS Chapter
8	2020 10th IEEE International Conference on Control System, Computing and Engineering (ICCSCE)	Virtual	21-22 Aug 2020	Malaysia Section CS Chapter
9	2020 IEEE 2nd International Conference on Artificial Intelligence in Engineering and Technology (IICAJET)	Virtual	26-27 Sep 2020	Sabah Subsection
10	2020 IEEE Student Conference on Research and Development (SCORED)	Virtual	27-29 Sep 2020	IEEE Malaysia Section, IEEE UTHM Student Branch
11	2020 International Conference on Computational Intelligence (ICCI)	Virtual	8-9 Oct 2020	UTP, Malaysia Section CIS Chapter
12	2020 IEEE 10th International Conference on System Engineering and Technology (ICSET)	Virtual	9 Nov 2020	Malaysia Section CS Chapter
13	2020 IEEE 5th International Symposium on Telecommunication Technologies (ISTT)	Virtual	9-11 Nov 2020	Malaysia Section VT/COM Joint Chapter
14	2020 IEEE Conference on Big Data and Analytics (ICBDA)	Virtual	17-19 Nov 2020	Malaysia Section C Chapter
15	2020 IEEE Conference on e-Learning, e-Management and e-Services (IC3e)	Virtual	17-19 Nov 2020	Malaysia Section C Chapter
16	2020 IEEE Conference on Open Systems (ICOS)	Virtual	17-19 Nov 2020	Malaysia Section C Chapter
17	2020 IEEE Graphics and Multimedia (GAME)	Virtual	17-19 Nov 2020	Malaysia Section C Chapter
18	2020 IEEE Conference on Application, Information and Network Security (AINS)	Virtual	17-19 Nov 2020	Malaysia Section C Chapter

19	2020 IEEE 8th R10 Humanitarian Technology Conference (R10-HTC)	Virtual	1-3 Dec 2020	IEEE Sarawak Subsection
20	2020 IEEE MITRANS International Logistics & Transport Conference (MILTC)	Virtual	1-3 Dec 2020	Malaysia Section CS Chapter
21	2020 IEEE International Conference on Power and Energy (PECon)	Virtual	7-8 Dec 2020	PELS Chapter
22	2020 IEEE 8th Conference on Systems, Process and Control (ICSPC)	Virtual	11-12 Dec 2020	Malaysia Section CS Chapter
23	2020 IEEE International RF and Microwave Conference (RFM)	Virtual	14-16 Dec 2020	AP/MTT/EMC Society
24	2020 IEEE 7th International Conference on Engineering Technologies and Applied Sciences (ICETAS)	Virtual	18-19 Dec 2020	Intl Islamic Univ. Malaysia Student Branch; Malaysia Section IM Chapter

Table A.3: List of Technical Co-Sponsored Conferences Organized in 2020

No	Name	Venue	Date	TCS
1	2020 8th International Conference on Information Technology and Multimedia (ICIMU)	Virtual	24-26 Aug 2020	Malaysia Section C Chapter
2	2020 Regional Conference in Engineering Education (RCEE) & 2020 Research in Higher Education (RHED) (RCEE)	Virtual	29-30 Sep 2020	Malaysia Section Women in Engineering Affinity Group
3	2020 International Conference on Smart Grid and Clean Energy Technologies (ICSGCE)	Virtual	4-7 Oct 2020	Malaysia Section PE Chapter

A.1.2.6 IEEE Malaysia Distinguished Lecturer Program (MyDLP) speakers appointed in 2019 continues for the second year. The following are the four MyDLP speakers were appointed for 2019-2020.

			
<p>Mohammed Rawidean Mohd Kassim Senior member MIMOS Bhd dean@mimos.my</p> <p>Topic #1: Applications of WSN in Agricultural Environment Monitoring Systems</p> <p>Topic #2: A 7-Level Smart Home Systems for XY Generations</p>	<p>Prof Dr Saad Mekhilef Senior Member Universiti Malaya saad@um.edu.my</p> <p>Topic #1: Power Electronic Systems for the Grid Integration of Renewable Energy Sources</p> <p>Topic #2: Maximum Power Point Tracking (MPPT) Controllers for Photovoltaic System – current status and future prospects</p>	<p>Prof Ir Dr Mohd Rizal Arshad Senior member Universiti Sains Malaysia eerizal@usm.my</p> <p>Topic #1: Swarm Robotics - Concepts and Its Potentials</p> <p>Topic #2: ASV and AUV Robotics Platform Technology: Advancement and Potentials</p>	<p>Prof Dr Lim Eng Hock Senior Member Universiti Tunku Abdul Rahman limeh@utar.edu.my</p> <p>Topic #1: Design of Miniature Metal-Mountable UHF Tag Antennas</p> <p>Topic #2: Design of Novel Patch-Based Reflectarrays</p>

Figure A.1: MyDLP Speakers

A.2 Financial Report

A.2.1 IEEE Malaysia Section Balance Sheet as at December 31, 2020.

Table A.4: 2020 Balance Sheet

Currency : Ringgit Malaysia		
		Notes to Account
Non-Current Assets		
Investment		-
Current Assets		
Cash in Banks	(Note 1)	266,040.44
Total Assets		266,040.44
Current Liability		
Sundry Creditors	(Note 2)	31,006.75
Total Liabilities		31,006.75
Capital Account		
Capital		-
Retained Surplus Account		
Balance B/F		238,747.41
Surplus for the Year 2020		3,985.21
Balance Carried Forward		242,732.62
Total Capital Account		242,732.62
Total Capital & Liabilities		273,739.37
Note 1	MBB Shah Alam Main account closing balance	125,987.55
	MBB Fixed Deposit	100,000.00
	Affinbank - SCORED Account Closing Balance	17,407.51
	Affinbank - STUDENT Account Closing Balance	22,645.38
	IEEE Concentration Banking (Custodian Account) - USD 5,198.69 *Assuming Exchange rate @1USD to RM 3.98 (Maybank TT Rate)	20,690.79
	Total Cash in Bank	266,040.44
Note 2	Sundry Creditors	
	SHDF	8,300.00
	Transfer of Funding to Award Recipients	20,846.75
	POCO 2020	1,560.00
	Selfie Competition	300.00
	Total Sundry Creditors	31,006.75

Table A.5: 2020 Income and Expenses

INCOME			
IEEE MEMBERSHIP REBATES			
		USD	Exchange Rate
			RM
1	Section Allowance	2,000.00	4.2128
2	Member Breakdown	4,356.00	
	Member		18,350.87
	Graduate Student Member	1,227.00	5,169.08
	Student Member	2,325.00	9,794.71
	Associate Member	63.00	265.41
	Affiliate	51.00	214.85
	Senior Member	2,372.00	9,992.71
	Fellow	8.00	33.70
	Total Member Rebate	12,402.00	52,246.91
3	Subsections	1,000.00	4,212.78
4	Chapters	3,800.00	16,008.56
5	Joint Chapters	1,000.00	4,212.78
6	Affinity Groups	600.00	2,527.67
	Subtotal Rebate	18,802.00	79,208.69
7	Reporting Bonus	1,880.20	7,920.87
	Total 2020 Rebate (A1)	20,682.20	87,129.56
8	Section Bonus	200.00	842.56
9	Subsections Bonus	200.00	842.56
10	Chapters Bonus	1,125.00	4,739.38
11	Joint Chapters Bonus	375.00	1,579.79
12	Affinity Groups Bonus	225.00	947.88
	Subtotal Bonus (A2)	2,125.00	8,952.16
	Nett 2020 Rebate (T1)	22,807.20	96,081.73
Income from Activities			
1	AGM Room Rental		1,700.00
2	Advertisement		15,905.50
	Subtotal (T2)		17,605.50
Conference Contribution & Surpluses			
1	Contributions from conferences		13,380.93
Other Receipts			
1	Refunds		13,743.60
2	Incoming TT from HQ		98,115.35
	Subtotal (T3)		111,858.95
	Total Income (T1+T2+T3)		238,927.11

EXPENSES		
Meetings & Social Events		
1	2020 Annual General Meeting	65,535.60
2	Leadership Camp 2019	3,737.00
3	Educational Activities	774.00
4	Membership Development	644.12
5	Humanitarian Activities	425.00
6	IEEE Day 2019	2,550.00
7	STREAM	363.90
8	Professional Activities	2,180.70
9	IEEE Day 2020	12,130.63
10	Student Activities	1,812.90
11	2019 Chapter Chair Meeting Allowance	300.00
12	Website Competition	1,000.00
	Subtotal (E1)	91,453.85
Grants & Rebates		
1	2019 Chapter Grant	2,000.00
2	2020 Chapter Grant	31,000.00
3	2020 Student Branch Grant	15,032.40
4	Member-Get-Member	2,940.00
	Subtotal (E2)	50,972.40
Administration		
	Administration Meetings	8,103.50
	Website Management 2019 & 2020	10,088.20
	Subtotal (E3)	18,191.70
In-Transit Disbursement		
	SAC Grant	1,300.00
	R10 EAC	2,055.00
	UMS SB	624.50
	Sabah SubSection Grants 2019	6,000.00
	Humanitarian Activities Committee Grants	46,151.25
	IEEE SIGHT Grant	16,769.00
	R10 Website Competition	821.20
	Subtotal (E4)	73,720.95
Misc Expenses		
	Refund IEEE Day	600.00
	Bank Charges	3.00
	Subtotal (E5)	603.00
	Total Expenses (E1+E2+E3+E4+E5)	234,941.90
	Surplus/Deficit	3,985.21

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

B.1.1 Total number of active members in the past 5 years.

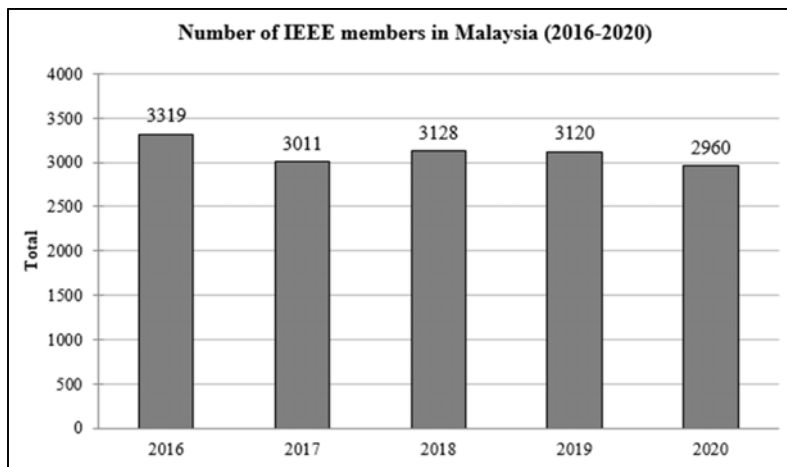


Figure B.1: Total Number of IEEE Malaysia Active Members (2016-2020)

B.1.2 Measures were taken to improve membership recruitment, which include Member-Get-Member (MGM) program where current members are given monetary incentives to recruit new members and membership drive programs.

B.1.3 Also, to increase the number of senior members in Malaysia, hands-on workshops were conducted to facilitate members' application process. In 2020, Malaysia section has co-organized 1 Senior Membership elevation workshop with PES Chapter on 2 May 2020. Due to Movement Control Order (MCO), the workshop is conducted virtually. A total of 76 members were successfully elevated to Senior Member grade in 2020.

B.2 Chapter Activities

B.2.1 Total number of Chapters in the Section = 31 (2 subsections, 24 technical chapters, 2 council chapters and 3 affinity groups)

B.2.2 Summary of Chapter activities.

Table B.1: Summary of Chapter Activities in Year 2020

	Adm. meeting	Professionals	Technical	Non-Technical	Humanitarian	Pre-U STEM Program	Total
Sabah Sub-Section	11		16	2			29
Sarawak Sub-Section	12	3	2		3		20
AP03/MTT17/EMC27		1	5				6
C16	4	5					9
CAS04	6		8				14
CE08			1				1

CIS11	2		7				9
COM19/VT06	19	13	29	12	2	4	79
CS23	3		4				7
DEI32	3		3	1			7
E25	3		2	2			7
ED15	19		25	10	5	2	61
ED15/MTT17/SSC37 (PENANG)	3		6				9
EMB18	2	1	6				9
EP21	7	2	8				17
GRS29		1	5				6
IE13/IA34	2	1	14				17
IM09	5	2	10				17
OE22	7	3	12	3	5		30
PE31	7	11	20	7	1		46
PEL35	4		11	12			27
PHO36	1	1	10		1		13
RA24			4				4
SMC28	4	2	8				14
SP01	17	8	25	17			67
TEM14	2		4				6
RFID741	3		3				6
SEN39/NANO42	5	1	9				15
CNAG	3	4	1				8
WIE	4	3	5	6			18
YP	3	3	10	2			18

B.3 Professional and Continuing Education Activities

B.3.1 Professional Activities

- POCO2020, 30 November 2020, 100 participants.
- IEEE MY Tech Insights with Bernama Radio

B.3.2 Education Activities

- IEEE MY STREAM @ SMK Baling 2020, 6th and 7th February 2020, 5 teachers and 32 students.
- IEEE MY STREAM @ SMK Hutan Kampong 2020, 26th February 2020, 7 teachers and 20 students.
- IEEE Malaysia Section 1st Chapter Chair Meeting and Virtual Leadership Camp 2020 (IEEE MY CC & VLC 2020), 11th April 2020, 65 participants.
- IEEE Region 10 Educational Activities New Innovative Challenge 2020, 17th April 2020, 7 proposal submitted.

Pre-University Education Program

1. Commendation Support: IEEE iCARE e-Tuition for Humanity among Rural Learners during COVID-19 Pandemic Period in Malaysia (e-THRiL) – IEEE Computer Society (CS) Malaysia Chapter
2. Commendation Support: Bringing STEM to life (STEM for Learning Disabled Students) – IEEE Electron Devices (EDS) Malaysia Chapter & IEEE EDS UKM Student Branch
3. Commendation Support: Virtual STEM Outreach to Secondary Schools in Sabah: Design-Thinking with Arduino Programming – IEEE Sabah Subsection & IEEE UMS Student Branch

University Education Program

1. Winner: Smart Hybrid Solar Energy Harvesting and Storage System Design Challenge – IEEE UM Student Branch, IEEE Dielectrics and Electrical Insulation Society (DEIS) and Power and Energy Society (PES) Malaysia Chapter
2. Runner-Up: Electrical Power System Simulation Competition 2020 (EPSSCom) - IEEE Power Energy Society (PES) Malaysia Chapter & CIRED Malaysia
3. Commendation Support: Elevator Pitch Workshop for Engineers / Technopreneurs - IEEE Malaysia Section Consultants Network Affinity Group (CNAG) & IEEE Young Professional (YP) Malaysia.

4. Commendation Support: 1st IEEE Five Minutes Final Year Project (5MFYP) Competition 2020 - IEEE Young Professional (YP) Malaysia, IEEE Power Energy Society (PES) Malaysia Chapter & IEEE Malaysia Section Consultants Network Affinity Group (CNAG).
- IEEE Region 10 Educational Activities Project Reaching Locals 2020, 22 June 2020, IEEE MY EA has submitted the report on 31st Oct 2020 and has been awarded with Certificate of Appreciation and funding support of USD300 from IEEE Region 10 Educational Activities on 2nd Dec 2020 for the contribution in:
 1. conducting activities reaching out to non-English speaking communities with Malay language.
 2. developing Malay language translation of IEEE TryEngineering Lesson Plans for STEM workshops and exhibitions.
 - International COVID19 Congress (ICC-2020), IEEE MY EA Chair 2019-2020 has involved as a judge for ICC-2020, a full virtual event on 9th and 10th August 2020 organized by IEEE Bangladesh Section.
 - Innovate Malaysia Design Competition 2020 (IMDC 2020), IEEE Malaysia Section continued to support IMDC 2020 with IEEE Social Innovation Award.
 - IEEE TryEngineering Translation Pilot Project, started on 14th October 2020, IEEE Malaysia Section involves in translation of IEEE TryEngineering into Malay Language.
 - Pandemic Remote Online Teaching, Learning and Assessment, A series of Best Sharing Session has been conducted by IEEE Malaysia Section Educational Activities on Pandemic Remote Online Teaching, Learning and Assessment during this COVID-19 pandemic with Centre for Sustainable Academic Leadership Development (LEAD UniMAP), IEEE UniMAP Student Branch and Faculty of Electronic Engineering Technology, Universiti Malaysia Perlis (FTKEN UniMAP).
 - 60 Seconds MEMS, an annual project challenge on Micro-Electro-Mechanical Systems which involved undergraduate students and postgraduate researchers.
 - Internet-of-Things in Recycle Management (IoRe), IoRe is an undergraduate educational project by IEEE Malaysia Section Educational Activities and Faculty of Electronic Engineering Technology, Universiti Malaysia Perlis (FTKEN UniMAP), funded by Green Resource Recovery Sdn. Bhd. (GRRSB), a subsidiary company of Environment Idaman Sdn. Bhd. and supported by Center for Energy Management and Sustainable Campus, UniMAP.

B.4 Students Activities

B.4.1 Total number of Student Branches in the Section = 28

B.4.2 Number of Student Branches formed in the current year = 1

B.4.3 Section level student activities

- Section Student Representatives (SSR) and SAC representatives were appointed through a call for an expression of interest. SSR and SAC student committee function to assist student branches in voicing up common problems faced by STB/SB/SBA while ensuring activities proposed/organized at the section level continues to be relevant and beneficial to the students.
- IEEE Malaysia Final Year Project Competition, 15th January 2020, 300 submissions, 16 technical tracks.
- IEEE Malaysia Section Student Congress, 3rd and 4th October 2020, 90 participants.
- IEEEExtreme 14.0 Programming Competition, 27th October 2020.
- 18th IEEE Student Conference on Research & Development (SCoREd2020), 27th to 29th October 2020.
- IEEE MY Student Icon.

B.4.4 Number of active Student Branches

Table B.2: List of Student Branches

No	University / Institution Name	Student Branch Counsellor
1	Universiti Teknologi Malaysia (UTM), STB18561	Mohamad Kamal A Rahim
2	Universiti Teknologi Mara (UiTM), STB61561	Nur Ashida Salim
3	Universiti Kebangsaan Malaysia (UKM), STB33471	Norhana Arsad
4	Universiti Putra Malaysia (UPM), STB61821	Hafiz Rashidi Harun@Ramli
5	Universiti Teknologi Petronas (UTP), STB64401	Irraivan Elamvazuthi
6	Universiti Islam Antarabangsa Malaysia (UIAM), STB65011	Siti Noorjannah Ibrahim
7	Monash University- Sunway Campus, STB65871	Alpha Agape Gopalai
8	Universiti Malaysia Sabah (UMS), STB65461	Kenneth Teo
9	Universiti Multimedia (MMU), STB65471	Mohamad Yusoff Alias
10	Universiti Malaya (UM), STB02611	Hazlee Azil Illias
11	Universiti Sains Malaysia (USM), STB03001	Mohd Tafir Mustaffa
12	Universiti Tunku Abdul Rahman (UTAR), STB03271	Chong Yu Zheng
13	Universiti Tenaga Nasional (UNITEN), STB07451	Zaipatimah Ali
14	Curtin University Sarawak, STB66611	Lim King Hann
15	Universiti Selangor – Bestari Jaya Campus (UniSel), STB13321	-
16	Universiti Utara Malaysia (UUM), STB14801	-
17	University of Nottingham Malaysia Campus, STB13111	Kamyara Mehranzamir
18	Asia Pacific Univ of Tech and Innovation, STB15571	R. Logeswaran
19	INTI International University, STB16101	-
20	Nilai University, STB17681	-
21	Universiti Malaysia Perlis (UNIMAP), STB18921	Saidatul Norlyana Azemi
22	Universiti Teknikal Malaysia Melaka (UTeM), STB01004	Shin Horng Chong
23	Universiti Tun Hussein Onn Malaysia (UTHM), STB64293	Nafarizal Nayan
24	Universiti Kuala Lumpur (UNIKL), STB20231	Izanoordina Ahmad
25	Swinburne University of Technology - Kuching, STB10075	Lau Bee Theng
26	UCSI University, STB 10144	Afthab Khan
27	Universiti Pendidikan Sultan Idris Shah (UPSI), (STB11745)	Nazre Abdul Rashid
28	Xiamen University Malaysia, STB99064	Chia Chao Kang

B.5 Affinity Group Activities

B.5.1 Young Professional (YP)

Young Professional Affinity Group has conducted several technical, professional and non-technical activities in 2020. Some of the events were webinars on leading through crisis, powering a sustainable future in Malaysia, electric vehicle charging, embracing digital world as technopreneur, e-learning tools for T&L during pandemic, advances control of fault tolerant induction motor drive and few others.

B.5.2 Women In Engineering (WIE)

Women in Engineering Affinity Group is dedicated to promoting women engineers and scientists and inspiring girls around the world to follow their academic interests to a career in engineering. This year, WIE Malaysia is focusing their activities by supporting the International Women’s Day, technical talk and webinars. Continuous education and STEM empowerment activities with primary and secondary school were also held. The MY WIE Congress was organized on 18th December 2020. WIE Malaysia also become a technical co-sponsor to the 2020 Regional Conference on Engineering Education.

B.5.3 Consultant Network (CN)

IEEE Consultants Network Affinity Group (CNAG) provides IEEE members with the option of subscribing to a global consultants’ network. It also provides networking opportunities with other IEEE consultants. Members will be provided with informational updates on consulting activities and will be eligible to join the IEEE Consultants Exchange online community in IEEE Collabratec™. IEEE Consultants Network Membership is available to new and existing IEEE members at no additional charge. This year, CNAG Malaysia is focusing their activities on membership drive, conducting talks and workshops on designing your own path after graduation, writing research papers, reskill and upskill for the digital transformed workforce, and research and innovation on emerging technologies to support sustainable development.

B.6 Awards & Recognition Activities

B.6.1 Awards received from IEEE Member and Geographic Activities (MGA)

- **IEEE Regional Exemplary Student Branch Award 2020**
 - Universiti Tenaga Nasional (UNITEN) SB
 - Monash University Malaysia SB
 - Universiti Teknikal Malaysia Melaka (UTEM) SB
 - Multimedia University (MMU) SB
 - Universiti Teknologi Malaysia (UTM) SB
 - University of Malaya (UM) SB
 - Universiti Putra Malaysia (UPM) SB
 - Curtin University Sarawak SB
 - Universiti Malaysia Perlis (UNIMAP) SB
- **IEEE Outstanding Branch Counselor and Chapter Advisor Award 2020**
 - Mohamad Yusoff Alias, Multimedia University SB
- **IEEE Darrel Chong Student Activity Awards 2020**
 - Curtin University SB (Gold) - STEM Challenge Tech and Science Tracks
 - University of Nottingham, Malaysia SB (Bronze) – InternEXP
- **Larry K. Wilson Regional Student Activities Award 2020**
 - Mohammed Hussein Saleh Mohammed Haram (Honorable Mention)

B.6.2 Awards received from IEEE Women in Engineering (WIE)

- **IEEE Women in Engineering Inspiring Member of the Year Award 2020**
 - Yoot Khuan Lee (Winner)
- **IEEE Women in Engineering Affinity Group of the Year Award 2020**
 - IEEE WIE Malaysia (Honorable Mention)

B.6.3 Awards received from IEEE Region 10

- **R10 Education Activities Outstanding Volunteer Award 2020**
 - Mohd Hafiz Ismail (Winner)

B.6.4 Contests and challenges won from IEEE Member and Geographic Activities (MGA)

- **IEEE Global Student Branch Website Contest 2020**
 - Universiti Teknikal Malaysia Melaka SB (Winner)

B.6.5 Contests and challenges won from IEEE Region 10

- **R10 SB Website Contest 2020**
 - Universiti Teknikal Malaysia Melaka SB (2nd Place)
- **R10 EA Challenge 2020**
 - University of Malaya Student Branch (Winner - University Category) - “Smart Hybrid Solar Energy Harvesting and Storage System Design Challenge”
 - Power Energy Society Malaysia Chapter (Runner-up - University Category) “Electrical Power System Simulation Competition 2020 (EPSSCom)”
- **R10 PG Research Paper Contest 2020**
 - Charissa Phua Han Ming, Swinburne University of Technology Sarawak (1st Prize) – “Semiconductor Wafer Surface: Automatic Defect Classification with Deep CNN”

B.6.6 Awards constituted by the Section

- **Outstanding Volunteer**
 - Winner: Mohd Hafiz Ismail
 - Runner-Up: Mohd Norzali Hj Mohd
- **Outstanding WIE Volunteer**
 - Winner: Rosmiwati Mohd Mokhtar
 - Runner-Up: Tan Yik Yee
- **Outstanding YP Volunteer**
 - No Winner
- **Outstanding Student Volunteer**
 - Winner: Mohammed Hussein Saleh Mohammed Haram
 - 1st Runner Up: Tay Chuan Zhi
 - 2nd Runner-Up: Alvin Lau Siew Nam
- **Outstanding Large Chapter**
 - IEEE Communication/Vehicular Technology Society (Comm/VT) Chapter
- **Outstanding Medium Chapter**
 - IEEE Robotics & Automation Society (RAS) Chapter
- **Outstanding Small Chapter**
 - IEEE Electronics Packaging Society (EPS) Chapter
- **Outstanding Student Branch**
 - Winner: IEEE Curtin University Malaysia Student Branch
 - 1st Runner-Up: IEEE Multimedia University Student Branch
 - 2nd Runner-Up: IEEE Universiti Sains Malaysia Student Branch

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

B.7.1 Newsletter

IEEE Malaysia Section Newsletter published 4 times a year.

B.7.2 Home Page of the Section

Website: <http://www.ieeemy.org>.

B.7.3 Other means of contacts with Section members including social media

Facebook: <https://www.facebook.com/IEEE.my/>

Twitter: @IEEEMalaysia

LinkedIn: IEEE Malaysia Section

Email: ieeemy@listserv.ieee.org

WhatsApp Group

B.8 Industry Relations

- Industry collaboration with Selangor Human Resource Development Center (SHRDC), 14 August 2020.
- Industry collaboration with Skymind Holdings Bhd, 1 September 2020.
- Industry collaboration with KL Convention Centre, 6 October 2020.

B.9 Humanitarian Technology Activities

- IEEE Malaysia Section HAC Subcommittees in collaboration with Universiti Kuala Lumpur BMI and IEEE IMS Malaysia Chapter has organized the IEEE HAC Project Proposal Workshop on 21st February 2020.
- IEEE MySIGHT, March – July 2020, Foot-pressed hand sanitizers to Covid-19 Front-liners.
- SIGHT Project conducted by the Sarawak SIGHT Group that received funding in 2019, but concluded in 2020.
- IEEE SIGHT Week, 12 October 2020, Ring-Fencing the Malaysian Construction Industry.
- 4 HAC/SIGHT projects were awarded to IEEE members from Malaysia

Table B.3: 2020 IEEE HAC & SIGHT Projects Funded (Malaysia) - Response to COVID-19

No.	Title of Projects	Amount Funded (USD)	Project Leader
1	Designing an IoT-based disinfectant gate for analyzing the role of novel coronavirus	1,469	Ghulam E Mustafa Abro
2	On-site communication standard operating procedure for construction project during Covid-19	5,000	Syuhaida Ismail
3	Dental aerosol containment equipment for the prevention of Covid-19 in Malaysia	4,398	Fatanah Mohamad Suhaimi
4	Covid-19 children awareness and support materials for childcare center	4,000	Nur Idora Abdul Razak

B.10 Community Activities

- IEEE Day 2020, 6 October 2020. 15 IEEE Day events have been successfully organized in hybrid platforms in Malaysia Section throughout the IEEE Day 2020 celebration from 1st October until 17th October 2020 by various IEEE Organizational Units.
- Award and Appreciation Lunch, 10 October 2020.
- IEEE MY Stay-at-Home Contest, 5 April 2020 – 13 May 2020.
- Techie Season Greetings.

Table B.4: Technology theme highlights for each festive season and its social media interaction measurements

No	Festive Season	Technology Theme	Engagement	Reach
1	Chinese New Year	Game technology	22	484
2	Aidilfitri	Antenna	53	1442
3	Merdeka & Malaysia Day	Satellite	10	173
4	Deepavali	Arts	8	199
5	Christmas	Power Grid	3	152

PART C - OTHERS

C.1 Special Events

- C.1.1 This year, IEEE Malaysia Section conducted the IEEE Open Day together with the Award Ceremony on 10th October. Due to the pandemic, the event was conducted as a hybrid program. Other programs conducted during the open day include award ceremony, HAC talks by HAC coordinator and special HAC talks by four special HAC Covid-19 special project grant.
- C.1.2 The IEEE Malaysia Section continues to host its annual Student Conference in Research and Development (SCORED) for the local undergraduate and postgraduate students to showcase their work. Together with the IEEE UTHM Student Branch, SCORED2020 was held virtually on from 27th to 29th October 2020 at Universiti Tun Hussein Onn Malaysia attracting more than 100 participants.

- C.1.3 IEEE Malaysia Section organized its 8th IEEE Malaysia Section Student Congress on 3rd to 4th October 2020 virtually. A total of approximately 90 student participants joined the event to gain knowledge pertaining IEEE leadership and networking opportunities.
- C.1.4 IEEE Malaysia Section organized its annual Final Year Project competition from August to December 2020 in collaboration with the 16 chapters in Malaysia. There were 16 technical tracks, each supported by one of the IEEE chapters in Malaysia provided technical support to review more than 210 submissions and monetary prizes to the winners.
- C.1.5 IEEE Malaysia successfully organized the Panel of Conference Organizers (POCO 2020) and secured partial financial support from R10 (USD250).

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- C.2.1 In 2020, IEEE Malaysia and IEM Electrical Engineering Technical Division (EETD) have successfully collaborated in several events. Malaysia Section provided technical support to IEM's IECEX National Virtual Conference.
- C.2.2 IEEE Malaysia also work closely with IET Malaysia Network. IEEE Malaysia Section supported innovation competition during the International Automation and Control Enhancing Innovation (ACEiC) 2020 on 14th to 15th October 2020, by providing the IEEE Special Award: Best Project Innovation.
- C.2.3 IEEE Malaysia also supported the annual Innovate Malaysia Design Competition 2020 under IEEE Social Innovation Award for the most innovative projects.

C3. Collaboration with other IEEE Sections

- C.3.1 Malaysia Section supported Bangladesh section in their virtual events including the Virtual conference Organizers' Panel on 1st to 2nd July 2020.

C.4 Support extended to Sub-sections & Society Chapters within the Section

- C.4.1 IEEE Malaysia Section distributed grants in the amount of RM1,000 to each chapter and affinity group, which were disbursed in two installments in 2020.
- C.4.2 For Sarawak Subsection and Sabah Subsection, IEEE Malaysia also provided grants in the amount of RM2000 each, which were disbursed in two installments in 2020.
- C.4.3 For the student branches, Malaysia section provided grants of RM500 each, which were disbursed in two installments in 2020.
- C.4.4 Section also Sarawak subsection in the organization of the R10 HTC2020 as the local host of the event.
- C.4.5 For the chapters and subsections, IEEE Malaysia conducted a virtual leadership camp for all the 2020 volunteers including the chairs, treasurers, and secretaries.
- C.4.6 In addition, Malaysia section conducted 2 chapter chairs meetings (similar to R10 AGM), which were held on 11th April 2020 and 7th November 2020.
- C.4.7 Malaysia section supported the Curtin Malaysia student branch in organizing the IEEE Innovation Nation competition by providing mentors and judges.

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

- C.5.1 Each year, IEEE Malaysia organized a leadership camp for new chapter/AG/Subsection chairs, secretaries, and treasurers. In this camp, the volunteers were given training on section management, vtools, OU analytics, and other key information to assist them in organizing their activities. Similar camp was also organized each year for student branch volunteers with the content tailored to running student branches and student branch chapters. For 2020, both programs were conducted virtually.
- C.5.2 IEEE Malaysia section conducted two meetings with the chapter chairs annually. The first one was held on 11th April 2020 mainly to discuss best practices and activities planning for the year. The first half of the grants to the chapters are disbursed after the meeting, based on the activities plan submitted by the chapters. The second meeting was held on 7th November 2020 to discuss important matters such as quality of conferences and reporting requirements and status of submissions in vTools and NetSuite. Important matters pertaining to the operations of IEEE Malaysia section were discussed in these meetings. In both meetings in 2020, we also discussed revisions to section constitution due to the challenges faced by chapters on banking matters. The revised constitution was approved by members in the recently concluded general meeting on 6th February 2021.
- C.5.3 Senior member elevation workshops have also been organized by IEEE Malaysia Section to assist members to elevate their grade to Senior Member. In 2020 we have organized 1 such workshop virtually, which resulted in the elevation of 76 members in 2020. Due to these initiatives, Malaysia has a high percentage of senior members (22%).
- C.5.4 To improve our membership recruitment, the Section has, since 2016, carried out the Member-Get-Member (MGM) reward program. This program is similar to the MGM program practiced at the HQ level, but to attract more members to participate, the Section has doubled up the reward by giving our own reward at the Section level.

C.6 Problems anticipated and suggestions for solutions, if any

- C.6.1 The main problem faced by the section is to attract industry members. The number of industry members in Malaysia is relatively small compared to the members from academia and student members.
- C.6.2 One of the plans this year was to conduct a targeted engagement with industry members to understand their issues and come up with targeted initiatives. This was done by appointing a member from the industry to lead the industry relations portfolio. However, due to the pandemic, it was decided that the targeted engagement needed to be postponed due to the inability to have face-to-face meetings and workshops. Hopefully, the pandemic situation would improve soon so that we can revive the initiative in 2021.

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

- D.1.1 The Section will continue to support all activities that are already in the pipeline from the previous years. Established annual activities such as the leadership camp, senior member elevation workshop, member-get-member rewards, SCORed conference, and FYP competition will be continued. At the same time the Section will continue with activities that will nurture the IEEE Malaysia Student Branch so that they remain active and relevant to their community. Section will encourage more participation from Student Branches in embarking community work and social responsibility especially to the underserved community.
- D.1.2 In 2020, the new portfolio on HAC (which is part of the 2-year portfolio introduced in 2019) managed to increase awareness on HAC activities. We managed to secure 4 Covid-19 projects under HAC.

D.1.3 IEEE Malaysia Distinguished Lecturer Program (MyDLP) was initiated in 2019 will continue in 2021 with new approach- conducted virtually (webinar) due to Covid-19 pandemic.

D.2 Goals and Future Plans

D.2.1 To improve member retentions and new membership.

D.2.2 To further improve IEEE brand visibility among corporate sectors, industries and community in Malaysia.

D.2.3 To improve social media engagement, IEEE Malaysia facebook, instagram, youtube channel.

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

D.3.1 To improve our visibility, the Section introduced a new portfolio of “Strategic Communication”. Under this new portfolio, two new programs were introduced—IEEE Malaysia Tech Insights and IEEE Malaysia Student Icon, where we partnered with a local radio station to provide opportunities to our member to showcase their innovations that benefit the society through radio. The initiative also supported the Reaching Locals program with the contents produced in local language. The Student Icon program featured two student leaders who shared their leadership and personality, thus showcasing how IEEE benefited their development. In addition, the subcommittee also produced infographics with technology theme for each festive season for social media and website as well as several video montages for special events such as IEEE Day and General Meeting.

D.3.2. Malaysia section also introduced the Student Branch adoption program since 2019 where we recommended voluntary pair up of student branches with the relevant chapters that are geographically close to each other. The objective is to improve sustainability of the student branches which are also helping the chapters to conduct their activities by leveraging on the student branch members. That way, both student branches and the chapters win in this arrangement.

D.3.3 Engage more IEEE members in sub-committees/working committee for Malaysia section. Appointment letter and certificate of appreciation will be given. Not only more members will be involved at section’s level, section will also be utilizing members’ expertise.

D.4 Business Plan for Sustainable Growth and Financial Stability.

D.4.1. Starting from 2019, Malaysia section started receiving interests from companies to advertise on our electronic platform including website, emails, and newsletters. In 2020, the program expanded with two companies taking up the advertisement packages worth a total of almost RM16,000. For 2021, one of the companies has committed to place several advertisements, which would generate good revenue to section.

D.4.2. Malaysia Section’s flagship annual student conference which is hosted by different student branches every year since 2001, continues to provide revenue which help section to support student activities. With proper financial management of this conference, we project that it would continue to be a good revenue source.

D.4.3 Bid for IEEE flagship conferences. In the past, Malaysia section had organized TENSYP2014 and TENCON2017, which helped generating revenue to section.

D.4.4 Donation/contribution from IEEE technical chapters in Malaysia from their conference surplus.

D.4.5 Invest in fixed deposit.

.....**End of Report**.....