

Mauritius Section

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Section Vitality

Please provide information about the date of last Section elections, date of next elections, and do you have the practice of Vice-Chair becoming the next Section Chair. Section ExCom meetings (list them and provide brief summary if appropriate). List the activities carried out to retain and recruit members and the results obtained.

The last Section elections have been carried out on 24 September 2021 for the term 2022-2023. A new team of volunteers have been elected. The next elections will be organized within 2023 and carried out by the end of the year 2023.

The new team has planned a number of events for the year. The Mauritius Section has been active during the past year with a number of events organised together with the two SBs and two Chapters.

ExCom meetings were held for the following matters: R8 Meeting, Section Rebate, Budget allocation to Std Branches and PES and APS Chapters, Financial procedure, AGM planning, Treasurer's Report, MDO Report, Student Branch Activities, Chapter Activities, PES Call for Nominations, ExCom Election Process, Awards PES Chapter Election / Nomination Committee, Appointment of new officers, Finalise Budgets for Student Branches, SYP and Chapter, EoY Event

To retain and recruit members, one new SB (IEEE Middlesex University Mauritius Campus SB) and one new Chapter (Mauritius Chapter for IEEE Antennas and Propagation Society) have been created and the Section will also increase the number of activities so as to sensitize potential members to join. Compared to where we started 10 years back (about 40 members), the Section currently has 118 members. We look forward to getting more members in the coming year.

Students

List of Student Branches (SB) in your Section, the newly formed or dissolved SBs, if any since the last meeting reporting. List the student meetings held and Section activities addressed to Students and Young Professionals.

We have three active SBs, namely the University of Mauritius SB, University of Technology Mauritius SB, and Mid-dlesex University Mauritius Campus SB.

The list of the student events is given below.

List of events of UoM SB

Event 1: PES Day Webinar1 Topic: "The Contribution of Gen-Z Engineers in The Realization Of Power System Transformation"

Event 2: Talk on IoT and Smart Home organized by UoM Oracle Club in collaboration with IEEE UoM SB and IMechE UOM Students' Chapter Topic: "Internet of Things and Smart home"

Event 3: Remote Sensing in Agriculture organized by UoM Oracle Club in collaboration with IEEE UoM SB and Faculty of Agriculture Topic: "Remote Sensing on Agriculture"

Event 4: PES Day Webinar Topic: Renewable Energy in the Clean Energy Revolution

Event 5: PES Day Webinar 3 organised by IEEE UoM SB Topic: The growing importance of power system flexibility in the Clean Energy Revolution

Event 6: PES Day- Article Writing Competition Topic: "Challenges Faced by the Clean Energy Sector in Mauritius Further to Covid-19 Impacts"

Event 7: PES Day- Photography Contest The theme is "Use of clean Energy and being sustainable at home during lock-down".

Event 8: EEE E-Open Day

Event 9: Promoting of entrepreneurial spirit at the Faculty of Engineering

Event 10: IEEE Day 2021

Event 11: PES DAY 2021 AWARD CEREMONY

Event 12: Mass Recruitment Event

Event 13: Celebration of International Women in Engineering Day

Science/Engineering show



Women's day Celebration

WomenTech Network

- Event 14: FoE Community App
- Event 15: Circular Economy Principles and Applications
- Event 16: Occupational Health and Safety Awareness for Engineering Students
- Event 17: FoE Community App
- Event 18: Introduction to AI and its Applications
- Event 19: Design and implement a smart farming system-Internet of things
- Event 20: Design and Implement A Smart Farming System-Learn about Arduino
- Event 21: 24-Hour Web Development Hackathon
- Event 22: Open Day at the University of Mauritius
- Event 23: International Women's Day
- Event 24: Site Visit at Mauritius Radio Telescope (MRT)
- Event 25: Team building hike at Piton de la Petite Rivière Noire
- Event 26: IEEE PES for Kids: Empowering Young Minds with Electrical Wonders

List of events of UTM SB

- · Dissertation Workshop
- · IoT Festival session 8- IoT & Cloud edge computing
- · IoT Festival session 7 IoT in Industries
- · IoT Festival session 5
- · IoT Festival session 4
- · IoT Festival session 3
- · Meeting for Planning
- · IoT Festival session 2
- · IoT Festival
- · Java Coding Session 3
- · Java Coding Session2
- · Java Coding Session 1
- · Python
- · From Dark Web To Crypto
- · Traditional vs Agile software Development
- · Virtual ICT Campus Recrupment
- · Article Writing Competition
- · EEE E-Open Day
- · Introduction of IEEE
- · Green computing with virtualizing technologies
- · 24-Hour Web Development Hackathon

List of events of Middlesex SB

- · 24-Hour Web Development Hackathon
- · Dark Web

2nd edition of IEEEMDXTHON 2023, 24-Hour Web Development Hackathon

May Frontend Meetup

Affinity Groups

List of Affinity Groups (YP, LM, WiE, SIGHT, etc.), list of SB AGs, newly formed or dissolved AGs/SB AGs, if any since the last meeting reporting. List the activities intended to support affinity groups.



IEEE Mauritius Section Students and Young Professionals Affinity Group

Chapters

List of Chapters and SB Chapters in your Section, the newly formed or dissolved Chapters, if any since the last meeting reporting. Indicate how many have reported on time and received rebate. Highlight some of the activities.

Mauritius Joint Chapter for IEEE Power and Energy Society & Systems Council

Mauritius Chapter for IEEE Antennas and Propagation Society formed on 26 June 2022.

Webinar by Prof. Bikash Pal of Imperial College London on "Dynamic Model for Analysis of Wind Farm and Grid Interaction"

Date: 10 February 2023

Electrical generation, transmission and distribution systems all over the world have entered a period of significant renewal and technological change. There have been phenomenal changes/deployments in technology of generation driven by the worldwide emphasis on energy from wind and solar as a sustainable solution to our energy need. Increasingly energy demand from heating and transportation will be met by electricity. So, to accommodate changes in either end the transmission grid is required to operate in more responsive manner. This is the most credible challenge in smart transmission grid operation today. Some of the recent wind farm operations have grabbed media headlines of not being connectable to the grid. While the debate is on whether it is the wind farm or the grid is the cause, the balance of the debate is shifting towards the integration and control aspect of these two technologies. This keynote will briefly mention the recent major problems in connecting big wind farms to the grid. It will then identify few possible specific technical reasons supported by the general technical insights gathered from detailed technical study conducted at Bikash Pal's research group at Imperial College London. Future research challenges and opportunities will be highlighted.

The webinar was organised by IEEE Power and Energy Society & Systems Council Mauritius Joint Chapter.

8th edition of the IEEE RADIO International Conference was held at The Ravenala Attitude Hotel in Balaclava, Mauritius.

Date: 1st to 4th May 2023

The aim of the conference is to discuss recent developments, theories and practical applications covering the whole scope of radio frequency engineering, including radio waves, antennas, propagation and electromagnetic compatibility.

Members of the IEEE Antennas and Propagation Society Mauritius Chapter participated in the conference.

Industry

List the activities carried out to foster relations with Industry and the results obtained.

The Section has worked in close collaboration with industry and has invited professionals from industry to deliver talks and webinars and participate in workshops as listed in the above Students and Chapters sections of this report. We look forward to strengthen the collaboration with industry for future activities.

Diversity, Equity and Inclusion

Highlight any diversity metrics (gender, age, religion, geographical, employment, etc.), new initiatives, best practices and progress around diversity and inclusion happening in your Section. Link to IEEE DEI statement <u>link</u>.

Activities since the last report

Highlight some of the activities in your Section, with special attention to the things that work well, and things that don't, so that your acquired know-how can be used by other Sections.

Several activities have been carried out by the IEEE Mauritius Section, as well as the UoM, UTM and Middlesex University Mauritius Campus Student Branches.

Planned activities



Highlight some of the future activities and initiatives in your Section.

http://august-2023.ieeer8.org/ Ottawa, Canada, 11 August 2023

IEEE Mauritius Section will be sponsoring the IEEE Electrical Design of Advanced Packaging and Systems (EDAPS) symposium, a flagship event in the Asia-Pacific region, which has consistently served as a platform for dissemmination of latest research in the areas of electrical design of chip, package and system. EDAPS 2023 will be held in the paradise island of Mauritius on 12-14 December 2023.

How Region 8 can be of help to your Section, members, and activities

List any challenges you Section is facing and what support is required from the Region 8. Please, also, give us your suggestions for agenda items that you want to be discussed during the R8 Committee meeting.

A main challenge faced by graduate members of the Section is the membership fees. This has to be reduced to maintain the membership of student members when they graduate.

Any other issues of interest