

Contents

- 01: IEEE UCT SB holds Opening Event
- 02: Section appoints New Volunteers
- 03: Member appointed as CASS Ambassador
- 04: We are now on LinkedIn!
- 05: DUT successfully hosts ICTAS2024

IEEE UCT SB holds Opening Event

Thuto Luphahla, *IEEE UCT SB Chair* on behalf of the Executive Committee

The IEEE UCT SB held its opening event, signifying the start of its initiatives for the year. The event, which was held on April 12, 2024, at TS3C, University of Cape Town, was organized to introduce the IEEE UCT SB committee and its mission to the students of the Electrical Engineering Department at the University of Cape Town. The goal was to inform students about the various opportunities and resources available to them through the SB and to encourage active participation in upcoming programmes.

The event was graced by notable keynote speakers, including the Vice Chair (Technical Activities & Industry Liaison) of IEEE South Africa Section, Prof Komla Folly, IEEE member and researcher at UCT, Dr Sampath Jayalath, as well as Ritvik Sojen, Aadil Eyasim and Kai Goodall. All speakers gave presentations which were both inspiring and informative. The presentations underscored the importance of community and professional development within the field of electrical engineering.

With a strong turnout and enthusiastic feedback from attendees of over 100 students, the opening event successfully set the stage for a year filled with promising activities and initiatives. This report provides a detailed account of the event's proceedings, objectives, and outcomes, underscoring its significance in promoting the IEEE UCT Society's mission.

The talk presented by Prof Folly highlighted the history, mission, and benefits of IEEE membership. He informed that IEEE is the world's largest technical professional organization dedicated to advancing technology for humanity through publications, conferences and educational activities. His presentation emphasized volunteering, which provides members with opportunities for technical knowledge expansion, leadership skills and career networking. He also mentioned



IEEE UCT SB Opening Event on April 12, 2024: a cross-section of participants.



IEEE UCT SB Opening Event on April 12, 2024: a cross-section of participants.

that membership benefits for students include access to IEEE Spectrum, networking with professionals and attending conferences at reduced rates. He concluded his presentation with an invitation for yet-to-be student members to join IEEE to leverage opportunities for professional and technical growth.

“His presentation emphasized volunteering, which provides members with opportunities for technical knowledge expansion, leadership skills and career networking.”

Dr Jayalath, who also doubles as the current chapter chair of the IEEE IAS/IES/PES Combined South Africa Chapter, been volunteering to the IEEE community since his time as a student (***continued on page 3***)

Appointments

At the last extended Executive Committee meeting held on May 23, 2024, some appointments into vacant Section positions were ratified. Congratulations to the following members and best wishes for their terms:

- Prof Richard Millham (DUT), in his new role as *Conference Coordinator* from 1 January 2024 to 31 December 2025.
- Prof Sunetra Chowdhury (UCT), in her new role as *Coordinator for IEEE Women in Engineering* from 1 June 2024 to 31 May 2025.
- Prof Patience Mthunzi-Kufa (CSIR), in her new role as *Assistant Coordinator for IEEE Women in Engineering* from 1 June 2024 to 31 May 2026.
- Mr Molefi Makhetha (DUT), in his new role as pioneer *Coordinator for IEEE Young Professional* from 1 June 2024 to 31 May 2026.
- Ms Sbusisiwe Madlala (UJ) in her new role as *Student Representative* from 1 January 2024 to 31 December 2025.

5th ANSTT Workshop (ANSTT5)

Dr Pete Jones, MIEEE & Chair NPS05/MAG33/IM09/PC26 South Africa Joint Chapter

NRF-iThemba LABS hosted the Advanced Nuclear Science and Technology Techniques (ANSTT) Workshop in Cape Town from 15-19 April 2024. The fifth instalment of the workshop was offered as a hybrid event and covered topics such as Metrology and Applications, Environmental Measurements, Neutron Physics and Applications, Nuclear Structure Studies, Future Experimental Programmes at NRF-iThemba LABS, and Nuclear Safety and Security. The workshop was attended by 50 in-person participants and 5 via the online ZOOM-platform. A total of 9 countries were represented that included South Africa, Nigeria, Botswana, Canada, Kenya, Tanzania, Zambia, and the United Kingdom. The workshop was officially opened by the Managing Director, Prof Victor Tshivhase on Monday 15 April. “The NRF is celebrating 25-years of research, innovation, impact and partnerships in 2024, and we too are cognizant of the importance of establishing and nurturing research collaborations both locally and internationally. We are therefore extremely excited to host the 5th installment of this workshop that features keynote addresses, interactive lectures, work-

shops and networking. It is clear that our plans to advance our research, training and technical competence is reliant on the availability of human capital that is young and vibrant. So, thank you for choosing the ANSTT5-workshop as the context within which you grow and develop YOUR skills and abilities”, said Prof Tshivhase. (*continued on page 4*)



ANSTT5 Workshop: a cross-section of participants with Dr Jones on far left.

Technical Chapters and SB Appointments

Here are some recent appointments for Chapter and SB positions. Congratulations to the following members and best wishes for their terms:

- Dr Lutendo Muremi (UJ), in her new role as *PES Women in Power Representative* from 1 June 2024 to 31 May 2026.
- Prof Ajay Mishra (DUT) in his renewed role as *Section Council Chair in IEEE Nanotechnology Council* from 1 June 2024 to 31 December 2025.
- Dr Karen Garner (SU) in her new role as *Counselor for IEEE SU SB* from 1 January 2024 to 31 December 2025.

IEEE South Africa Section e-Newsletter

Editor-in-Chief: Udochukwu B. Akuru

IEEE South Africa ExCom

IEEE ZA website: www.ieee.org.za

Section Chair: Udochukwu Akuru
Vice Chairs: Komla Folly & Richard Millham
Secretary: Joyce Mwangama
Treasurer: Jacques van Wyk
Past Chair: David Oyedokun

Send your news and articles:
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IEEE South Africa e-Newsletter is a quarterly newsletter, published by IEEE South Africa ExCom to keep its members within the Section updated on programmes, initiatives, events, and activities. This publication is here to showcase events, achievements, and news items from across the Section. It is also a medium for reporting on past events, meetings or stories, with the ability to promote future events. We welcome reports, stories and general content, including photos, which can be emailed to us. **The deadline for content submission for September 2023 issue is August 31, 2024.**



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continued from page 1... IEEE UCT SB Event

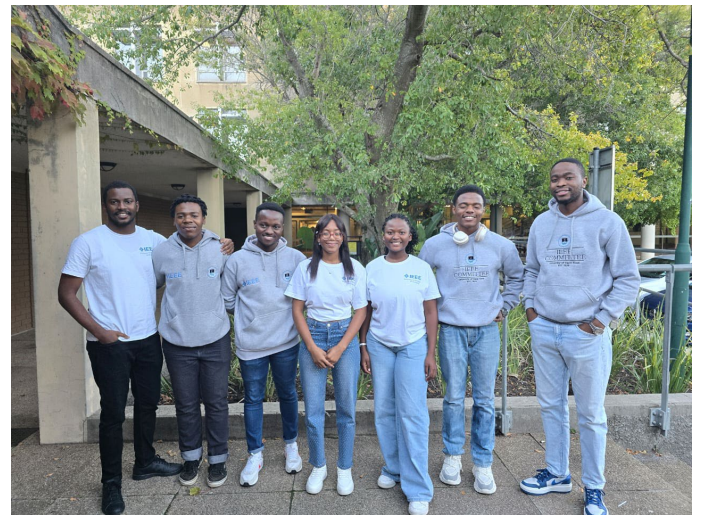
member and secretary. He has been an experienced reviewer for over ten IEEE journals since 2016. His presentation outlined the history of IEEE, highlighting contributions from pioneers like Thomas Edison and Alexander Graham Bell, and the evolution through eras such as AC induction motors, renewable energy integration and AI advancements. Dr Jayalath's spoke about his current work focus on renewable energy systems, including battery storage, grid integration and diagnostics, as well as e-mobility solutions like EV charging. He also highlighted his involvement in cutting-edge projects related to electromagnetism and power electronics, such as wireless charging for drones, e-scooters and EVs, offering opportunities for student projects in these areas.

Postgraduate student, Ritvik Sojen, supervised by Dr Paul Amayo, also presented a study on using Neural Radiance Fields (NeRF) for reconstructing large marine environments. He noted that such reconstruction involves retrieving geometric and semantic information to build 3D models from sensor data, which can be applied to shipping container volume estimation, automated inspection and autonomous marine robot navigation. He noted that traditional 3D reconstruction is memory-intensive but NeRF uses a neural network to represent scenes efficiently. He detailed the pipeline to include capturing images with a wheeled robot, using stereo visual odometry to compute camera trajectories and training the NeRF model. He showed some initial outdoor experiments which highlight the complexity of large-scale environments, suggesting improvements in depth information and loss functions for better results.

The event also featured the University of Cape Town's Formula Student Africa Team (FSA UCT), led by Aadil Eyasim and supported by the Electrical Engineering Department under IEEE South Africa Past Chair, Prof David Oyedokun, in terms of its preparation for the Formula Student Competition. This event scores teams on static elements like design, cost and sustainability, as well as dynamic events including acceleration and endurance, with a total of 1000 points available. It was shown that FSA UCT's resources include dedicated design and technical teams, and they manage tasks such as organizing a team launch, securing workshop space and procuring parts. The project timeline encompasses design, procurement, build and testing phases leading up to the competition.



IEEE UCT SB Opening Event (present in picture): Ritvik Sojen on his African Robotics Unit (ARU) Masters Presentation on using Neural Radiance Fields (NeRF) for reconstructing large marine environments during the event.



IEEE UCT SB Executive Committee 2024 (present in picture): Loic Kibambo (Vice-Chairperson), Thuto Luphahla (Chairperson), Piwani Nkomo (Events Co-Ordinator), Tlangelani Tembe (Treasurer), Zinzile Mabuza (Secretary), Morris Nkomo (Marketing and PR) & Bulisani Ngwenya (Industrial Liaison). (From right to left).

Kai Goodall, IEEE Graduate Student Member, made a presentation on EPICS in IEEE (Engineering Projects in Community Service). The EPICS program

engages IEEE members and university students on in service-learning projects that benefit their local communities. Kai mentioned that in South Africa, particularly in Cape Town, there are several notable EPICS projects. One prominent example is the Nyanga Solar Water Heaters project which provides solar hot water systems for the Emasithandane Children's Home. This project not only supplies hot water to the home but also involved local high school students in the design and construction process, giving them practical skills and exposure to renewable energy technologies. This initiative was led by Prof David Oyedokun and funded by an EPICS in IEEE grant along with contributions from local and international sponsors. Additionally, he demonstrated that the IEEE South Africa Section has supported other community-focused projects in the past such as the Oaklands School Computer Lab and Power Supply, and photovoltaic lamp installations. These projects are part of a broader effort by EPICS in IEEE to foster technological innovation and provide educational opportunities while addressing local community needs.

Loic Kibambo, IEEE UCT SB Vice-Chair, on behalf of the IEEE UCT SB executive committee, presented the plan of events that the committee has already set in motion for the second semester. Loic mentioned that they plan to have a site visit to Milko in the second semester. Milko-Aerospace and Defense Company is a leading firm specializing in the design, development, and manufacturing of advanced aerospace and defense systems. There are also plans to have a Bio-Electric Racecar Competition with the electrical engineering department, as well as to partner with Kai Goodall and Prof David Oyedokun on the high school projects they will be engaged in for EPICS IEEE. IEEE UCT SB alongside the Department of Electrical Engineering at the University of Cape Town will be hosting the inaugural Bio-Electric Racer competition. This event targets university students and the public, including high school learners and engineering enthusiasts.

In closing, the executive committee then informed of their plans to open applications for members to sign-up in next year's committee positions so that they can be efficiently guided on the ropes of running the society. During the event, an online Instagram competition was conducted where stories were posted along with questions from presentations of the different speakers. Attendees with the highest scores were eligible to win a voucher on condition that they are also signed up as

IEEE Members. This was to boost the engagement of members and to encourage them to sign up to society so that they can enjoy the relevant benefits. The event wrapped up with encouragement for attendees to sign up so that they could become registered IEEE Members.

continued from page 2... ANSTT5 Workshop

The workshop combined a programme of talks with an afternoon lecture series and interactive sessions aimed at the development of students and young researchers. The morning programme consisted of 7 keynote addresses, 12 invited talks, 18 contributed talks and 8 poster presentations. The keynote addresses were delivered by Prof Helen Boston (UK), Dr Jacobus Diener (Botswana), Dr Innocent Lugendo (Tanzania), Dr Julian Ogondo (Zambia), Ms Edzani Ratsibi (NECSA), Dr Mojisola Usikalu (Nigeria), and Dr Stepahn Woodborne (NRF-iThemba LABS). Prizes were awarded to next-generation researchers for the best oral and poster presentations. This year's best oral presentations were awarded to Elizabeth Fairall (University of Cape Town) and Ferdie van Niekerk (Stellenbosch University, iThemba LABS), and the best poster presentations were awarded to Sizwe Mhlongo (University of Cape Town) and Lesedi Jafta (University of the Western Cape, iThemba LABS).

The afternoon sessions, which were available virtually and in-person, focused on three main topics, namely Nuclear Data, Environmental Measurements, and Nuclear Safety and Security. The lecturers were eminent experts in their fields and the sessions were attended by 26 young scholars. The sessions included both lectures and hands-on activities that included an introduction to the Geant4 simulation toolkit, and activity calculations for radiocarbon methods linked to environmental measurements.

Chair of South Africa Joint Chapter for Professional Communication, Nuclear Plasma Society, Instrumentation and Measurement, and Magnetics (NPS05/MAG33/IM09/PC26) and co-organizer of the ANSTT5 workshop, Dr Pete Jones, extended an invitation to IEEE South Africa to make a presentation on IEEE activities in the Section. The invited talk entitled, "***Benefits of Membership and Volunteering in IEEE***", was presented virtually by IEEE South Africa Section Chair, Dr Udochukwu Akuru. The presentation which was made to a cross-section of participants attending the workshop both physically and virtually,

highlighted the advantages of membership and volunteering in IEEE, by emphasizing how active participation can empower professionals to make a positive impact within and outside their networks. “We are extremely grateful for the support of our sponsors in assisting us to bring together scientists and researchers from several fields and encouraging valuable discussions on the range of topics”, said Dr Pete Jones

friends/colleagues to do the same. Let’s hit the 500 followers mark by the end of next quarter. Already, **there are many exciting opportunities posted on the page for all grades of members.** Kindly follow us by clicking on the image above.

Newly approved Conference Rubric

IEEE South Africa ExCom approves new rubric for application for Conference Financial/Technical Co-Sponsorship for conference organisers intending to collaborate IEEE South Africa Section and relevant Chapters/Joint Chapters. Kindly use the following link to access the document: <http://ieee.org.za/ieee-south-africa-rubric-conference-fcs-tcs-application>

New IEEE Senior Member Elevations

IEEE South Africa records 4 new Senior Member elevations half-way into 2024 as indicated below. IEEE Senior Membership is an honor bestowed only to those who have made significant contributions to the profession. Congratulations to our 4 colleagues on this well-deserved recognition! Visit the following link to learn more about the benefits and how to become an IEEE Senior Member: <http://www.ieee.org.za/becoming-senior-member-ieee>

Surname	First Name(s)
Botha	Matthys Michael
Fisher	Callen
Garner	Karen
Le Roux	Peet

IEEE South Africa is now on LinkedIn



Hooray IEEE South Africa is now on LinkedIn! The move to create a LinkedIn page is in line with current ExCom’s mandate to promote IEEE South Africa brand, increase visibility, share opportunities and facilitate engagements amongst members and other stakeholders. Kindly follow/like and tag us with your activities, achievements and awards. Also, feel free to invite

Appointment of IEEE Senior Member as CASS Ambassador for Africa



We are pleased to announce the appointment of Dr Shadrack Mambo as the IEEE Circuits and Systems Society (CASS) Ambassador for Africa. Dr Mambo brings a wealth of expertise and a strong commitment to advancing circuits and systems research across the continent. In this role, he will encourage the increase of CASS membership in Africa, encourage the increase of the Society’s impact in Africa, Cultivate and grow local talent into Society leaders, and encourage the creation of CASS chapters in strategic geographical areas. Further to that he will foster collaboration, promote professional development, and drive innovation among engineers, researchers, and students in Africa. Dr Mambo's leadership will be instrumental in enhancing the technical skills of the community and supporting the integration of advanced technologies in the region. Dr Mambo holds a Doctor of Technology (D'Tech) degree in Electrical Engineering from Tshwane University of Technology and is currently a Senior Lecturer at Walter Sisulu University. Congratulations to Dr Shadrack Mambo on this prestigious appointment!

DUT successfully hosts ICTAS2024

The 8th Annual Information Communication Technology and Society Conference (ICTAS2024) was successfully hosted by the Durban University of Technology (DUT), Faculty of Accounting and Informatics, Department of Information Technology together with the Department of Electrical Power Engineering, from 7th to 8th March 2024, at the prestigious Blue Waters Hotel in Durban. ICTAS brings together experts from the together scholars, professionals, and students to explore the latest trends and innovations in the field of ICT. Prof Richard Millham, IEEE South Africa Section Vice Chair (Membership Development) served as the General Chair for ICTAS2024.

IEEE South Africa remains a technical co-sponsor of the ICTAS legacy of which all reviewed, accepted and presented papers are published as proceedings in IEEE Xplore since 2017. This year's proceedings is already published and available at: <https://ieeexplore.ieee.org/xpl/conhome/10507104/proceeding>

A key highlight of this year's conference included a Student Symposium on the 6th March 2024, providing an opportunity for students from the Department of Information Technology to showcase their research. Esteemed professional bodies such as IEEE, ISACA, and IITPSA SIGCyber were in attendance, with keynote addresses delivered by Prof Krzysztof Cios from Virginia Commonwealth University, USA, Prof Bagula from University of Western Cape, and Prof Honggang Wang from Yeshiva University, USA who delivered his presentation virtually.

The invited talk by IEEE at the Student Symposium entitled, “**Networking, Community Service and Professional Development: The IEEE Story**”, was delivered by IEEE South Africa Section Chair, Dr Udochukwu Akuru. The talk showcased IEEE as an institution through which active participation and knowledge sharing promotes professional development and global impact. Considering good the number of registered IEEE non-student members, the IEEE Section Chair seized the opportunity to encourage student participants to become registered with the Institute and champion the formation of a student branch at DUT, a process which is currently ongoing. The student symposium drew participants not just from Durban University of Technology but also from University of Kwazulu-Natal and Mpumalanga University of Technology.

Other highlights include welcome address from Prof Swanepoel, the Deputy Dean of the Faculty of Accounting and Informatics, insightful keynote addresses



ICTAS2024: Cross-section of participants at the Student Symposium on 6th March 2024.



ICTAS2024: IEEE South Africa Section Chair delivering his talk at the Student Symposium on 6th March 2024

by Prof Cios from Virginia Commonwealth University, USA on “*The Two Faces of Artificial Intelligence*” and Prof Bagula from University of Western Cape on “*Advancements in Artificial Learning: From Deep Learning (DL) to Federated Learning (FL)*” and Prof Honggang Wang from Yeshiva University, USA on “*Towards secure wireless health*”. Plenary sessions ensued, covering diverse topics such as Artificial Intelligence/Machine Learning in health applications, networking/social media and cyber security, to mention a few. The conference also involved industry presentations, a gala dinner and paper awards.

In total, there were there were 99 paper submissions, 86 in the Information Technology track and 13 in the Engineering track. Each submission was re-

viewed by on average 1.9 program committee members. The international committee of experts in the field accepted 43 papers resulting in an overall acceptance rate of 0.43. Of the 43 accepted papers, 10 were in the Engineering track and 33 were in the Information Technology track. Of the 43 accepted papers, 38 papers presented at the conference are included in the conference proceedings. The full conference report can be found here: <https://tinyurl.com/7d5t9cmr>

PES WiP Chapter appoints New Chair

IEEE PES Women in Power (WiP) appoints new Chapter Chair for South Africa. The leadership baton changed hands from Dr Nomzamo Tshemese-Mvandaba of CPUT to Dr Lutendo Baloyi Muremi of UJ. Dr Muremi's term officially commenced on June 1, 2024. Pioneer PES WiP Chair, Prof Omowunmi Mary Longe of UJ, was present to witness the inauguration of the new Chair while praying for long life and progress of the IEEE PES WiP chapter under its new leadership.



IEEE PES WiP Chapter Chair Inauguration Event (present in picture from left to right): Dr Lutendo Muremi (newly appointed Chair), Dr Nomzamo Tshemese-Mvandaba (immediate past Chair) and Prof Omowunmi Longe (pioneer Chair).

Conferences/Workshops

The following IEEE sponsored conferences/workshops will be held in South Africa:

- The **11th IEEE PES & IAS PowerAfrica Conference (PAC 2024)** will be hosted in Johannesburg, South Africa from October 7 to 11, 2024. The conference theme is “*Towards Ensuring Energy Security in Africa*”. PAC is the leading conference on the African continent focused on addressing its power and energy challenges. The conference provides a forum for researchers, engineers, policy makers and practitioners from Africa and beyond to share and discuss research findings, innovative ideas, emerging technologies and solutions to pressing challenges in Africa's energy sector. The conference is accredited by ECSA for 3.0 CPD points and registration is now open. More information can be found here: <https://ieee-powerafrica.org/>
- **IEEE Global Communications Conference (GLOBECOM)** is one of the IEEE Communications Society's two flagship conferences dedicated to driving innovation in nearly every aspect of communications. Each year, more than 3000 scientific researchers and their management submit proposals for program sessions to be held at the annual conference. GLOBECOM 2024 will be held in the city of Cape Town, South Africa, from 8 to 12 December 2024. Themed “*Intelligent Communications for Shared Prosperity*” this flagship conference of the IEEE Communications Society will feature a comprehensive high-quality technical program including 13 symposia and a variety of tutorials and workshops. IEEE GLOBECOM 2024 will also include an attractive Industry program, with keynotes and panels from prominent research, industry and government leaders, business and industry panels, and vendor exhibits. More information can be found here: <https://globecom2024.ieee-globecom.org/>
- The **33rd Southern African Universities Power Engineering Conference (SAUPEC 2025)** will be hosted by Tshwane University of Technology from 29 to 30 January 2025. SAUPEC is a flagship Southern Africa regional conference will be hosted by the Department of Electrical Engineering, Tshwane University of Technology in conjunction

with the South African Institute of Electrical Engineers (SAIEE). SAUPEC brings together experts from the industry, academics and students in engineering, computer science and information technology to present research papers, network and expand the fraternity that has been built as part of the SAUPEC legacy. Full papers will be assessed by at least two reviewers in a peer double-blind review. Papers accepted will be published in the conference proceedings. Papers not accepted by the review panel may be presented as posters but will not be included in the proceedings. The full review policy is available on the conference website. Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE's scope and quality requirements. The paper submission portal will be opened soon. More information can be found here: <https://www.saiee.org.za/displaycus-tomlink.aspx?name=SAUPEC2025>

Call for Proposals: IEEE Milestones

The IEEE Milestones program honors significant technical achievements in all areas associated with IEEE. It is a program of the IEEE History Committee, administered through the IEEE History Center. Milestones recognize the technological innovation and excellence for the benefit of humanity found in unique products, services, seminal papers and patents. Milestones are proposed by any IEEE member, and are sponsored by an IEEE Organizational Unit (OU), such as an IEEE Section, Society, Chapter or Student Branch. After recommendation by the IEEE History Committee and approval by the IEEE Board of Directors, a bronze plaque commemorating the achievement is placed at an appropriate site with an accompanying dedication ceremony. Members are encouraged to propose Milestones for significant achievements that took place in our Section. A list of suitable Milestones are available here: <https://tinyurl.com/3szd27cc> IEEE South Africa has achieved one milestone in the past: <https://tinyurl.com/4ntn2rsu> Follow this link for more info on how to propose a Milestone: <https://tinyurl.com/jn5fjocr>

IEEE 140th Anniversary

To celebrate IEEE's 140th anniversary, Saifur Rahman, IEEE Life Fellow and 2024 IEEE Past President invites you to visit to read the eBook – Inspiring

Technology: 34 Breakthroughs – which offers just a selection of the milestones to which the past nearly century and a half have been witnessed. The link to the eBook, which can be downloaded for free, is available here: <https://online.flippingbook.com/view/689251980/>



On 23 June we celebrated “International Women in Engineering Day”, and the amazing work being done by women engineers around the world! The International Women in Engineering Day spotlights the innovative and impactful contributions women worldwide make to the field of engineering. Even though the day has come and gone, we wish to still put out a word of celebration in this month's Issue since it coincides with the celebrations. Happy International Women in Engineering Day to all our amazing women engineers in our Section! This is cheers to more accomplishments. You're always celebrated! Learn more about the celebrations here: <http://www.inwed.org.uk/about/>

Opportunities for Members

Please visit our newly created [LinkedIn](#) page to view a list of current opportunities for all grades of members, with highlights on eligibility criteria and application procedures. Also, remember to follow and tag us on LinkedIn to receive regular updates on new opportunities. Members and local volunteers can also share relevant opportunities, activities, events and achievements to be published for the benefit of our members and followers.

Call for Volunteers

There are still various vacant officer positions in the Section as follows:

- *Student Activities Chair*
- *Educational Activities Coordinator*
- *Industry Relations Coordinator*
- *Member Development Coordinator*
- *SIGHT Section Chair*
- *Student Branch Officers are vacant in Wits, UP, SU, NWU, UKZN and UWC*

We are therefore requesting volunteer(s) to fill these positions. To be considered, please send your CV to: udochukwu.akuru@ieee.org.

Call for Activities/Events

If you have other ideas of how IEEE South Africa Section can get involved in events and activities to facilitate and increase industry engagement, visibility, membership drive and community impact within our OU, please contact the ExCom. The Section will be happy to support these kinds of activities under existing technical chapters, affinity groups or student branches as long as it is properly articulated to promote our current mandate for attracting and retaining members of all grades.



IEEE New Initiatives Program

Big ideas lead to brilliant solutions

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The IEEE New Initiatives program helps bring great ideas to light. If you have an idea for a particular program, product, or service offering that can make a significant impact on IEEE members, the public, or a technical community, please share your vision with the IEEE New Initiatives Committee (NIC). The New Initiatives program can provide seed funding or higher levels of funding for innovative ideas. Proposals may be submitted any time throughout the year; there are no

deadlines for submissions. All proposals must be submitted online. To learn more about IEEE NIC, visit: <https://tinyurl.com/4x922u2e>.

122nd R8 Committee Meeting

The 122nd IEEE Region 8 Committee Meeting held in Vienna, Austria, from 2nd to 3rd of March 2024. The meeting served as a forum for networking, feedback, socializing and planning of members of IEEE Region 8 Committee which involves OpCom members and Section Chairs. The meeting was chaired by the Region 8 Director, Vincenzo Piuri. Also, in attendance were some region directors and the IEEE President & CEO, Tom Coughlin. IEEE South Africa Section was duly represented by its Section Chair, Dr Udochukwu Akuru, at the meeting. The IEEE President gave a talk titled “*Imagined the Future of IEEE*” which culminated in a charge to IEEE volunteers attending the meeting to maintain leadership in technological advancements, create standards and innovative research platforms,



122nd IEEE R8 Committee Meeting held in Vienna, Austria from 2-3 March 2024: a cross-section of delegates.

provide opportunities to tackle technical challenges creatively, and empower today's innovators to enhance quality of life in the future. During the meeting, the various OpCom Chairs and Ad Hoc committees gave their reports as well as made presentations on different matters involving leadership, technical activities, Section vitality and future directions, among others. More information from the meeting can be sourced here: <https://ieeer8.org/category/committee/meetings/2024-march-vienna/>



SAUPEC 2025

29 -30 January 2025, Hosted by the Tshwane University of Technology, South Africa

ANNOUNCEMENT AND CALL FOR PAPERS

It is with great pleasure that we announce the 33rd Southern African Universities Power Engineering Conference (SAUPEC 2025). This flagship Southern Africa regional conference will be hosted by the Department of Electrical Engineering, Tshwane University of Technology in conjunction with the South African Institute of Electrical Engineers (SAIEE). SAUPEC brings together experts from the industry, academics and students in engineering, computer science and information technology to present research papers, network, and expand the fraternity that has been built as part of the SAUPEC legacy.

TECHNICAL TOPICS

We invite you to submit original research papers in any area of power engineering, including but not limited to:

Topics of Interest:

- Power System Analysis, Planning, Operation, and Control
- Industry 4.0 and Sustainable Energy Power System
- Data Science Applications to Power System
- Internet of Things (IoT) in Power System
- Smart Grids, Microgrids, Utility Applications and Virtual Power Plants
- Business Model for Smart Grids and Microgrids
- Power System Dynamics, Stability and Modeling
- Industrial Automation, Mechatronics and Robotics
- Advanced Metering Infrastructure and Control Center Applications
- Electrical Machines and Drives
- Power Electronics and Energy Conversion
- Emerging Technologies in Power Systems
- Transmission, Distribution and Reticulation Networks
- HVDC and High Voltage Engineering
- Protection, Relaying and System Automation
- Lightning Protection of Power and Transportation Systems
- Power System Security and Risk Analysis
- Cyber-physical Energy Systems and Cyber-security
- Power Assets and Risk Management
- Power Quality, Reliability and Condition Monitoring
- Load Modelling and Demand Side Management
- Energy Efficiency, Conservation and Savings
- Renewable Energy Sources, Energy Storage, Devices and Systems
- Electric Vehicles and Transportation Electrification
- Distributed and Embedded Generation
- Electromagnetic Compatibility (EMC) and Electromagnetic Interference (EMI)
- Power Systems Communication
- Energy Markets, Economics, Tariffs, Grid Codes and Policies
- Power Engineering Education

WEBSITE

The conference website is at <https://www.saiee.org.za>

PAPER FORMAT

Prospective authors are invited to submit high-quality papers in the above research fields. Papers, with maximum length of six pages, are to be prepared in accordance with the IEEE format available on the conference website. Authors must upload their papers to the Paper Submission website: EasyChair. Papers will go through a “double-blind review”, please note that no author(s) name should appear on the paper submitted for review.

The paper template is available at <https://www.ieee.org/conferences/publishing/templates.html>

The paper submission website: EasyChair

REVIEW POLICY

Full papers will be assessed by at least two reviewers. Papers accepted by the review panel will be published in the conference proceedings. Papers not accepted by the review panel may be presented as posters but will not be included in the proceedings. The full review policy is available on the conference website. Papers will be submitted to IEEE to be uploaded on IEEE Xplore after IEEE has approved the conference.

CONFERENCE PROGRAM

The full conference program will be made available on the conference website.

ORGANISING COMMITTEE

- General Chair : Dr Udochukwu Akuru
- Program Chairs : Prof Jaco Jordaan and Dr Coneth Richards
- Technical Chairs : Dr Peet Le Roux, Dr Agha Nnachi, Dr Aloys Akumu, and Prof Olawale Popoola
- Publication Chairs : Dr Bolanle Abe and Dr Mukwanga Siti
- Publicity Chairs : Mr Louwrence Ngoma, Mr Tshwarelo Mathebula, Dr Gideon Nnachi and Prof Josiah Munda

Conference secretariat: Mrs. Gerda Geyer (geverg@saiee.org.za)

VENUE

REGISTRATION

The registration fee includes the following:

- Conference proceedings in electronic format.
- Lunch and break refreshments.
- Gala dinner on 29 January 2025.
- The registration form will be made available on the conference website and available from the secretariat.

IMPORTANT DATES

- 01 June 2024** : 1st Call for papers
- 16 October 2024** : Paper submission closes
- 17 November 2024** : Notification of acceptance
- 01 December 2024** : Camera-ready papers due and registration opens
- 29-30 January 2025** : Main conference

