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# 30TH SOUTHERN AFRICAN UNIVERSITIES POWER ENGINEERING CONFERENCE (SAUPEC 2022)

25 - 27 JANUARY 2022

HOSTED BY DURBAN UNIVERSITY OF TECHNOLOGY, SOUTH AFRICA

[IEEE ACCREDITATION AND REGISTRATION SUBMITTED] TO BE OFFICIALLY CONFIRMED ]

It is with great pleasure that we announce the 30th Southern African Universities Power Engineering Conference (SAUPEC 2022). This flagship Southern Africa regional conference will be hosted by Department of Electrical Power Engineering, Durban 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. The conference will incorporate the Eskom Tertiary Education Support Programme (TESP) report-back meeting.

Authors of Papers must submit their papers via the paper submissions website, EasyChair:



## KEYNOTE SPEAKERS:

Prof Ilhami Colak  
Nisantasi University, Turkey

Prof Ganesh K Venayagamoorthy  
Clemson University, SC, USA

## TECHNICAL TRACKS AND TOPICS

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

### TOPIC 1: POWER SYSTEMS AND SMART GRIDS

- Power Generation, Large-scale Power Projects and Financing
- Super-Grid, Power Pools, Smart Grids, Microgrids and Nanogrids
- Transmission, Distribution and Reticulation Networks
- Power System Control, Stability, Modeling, Computation, and Optimization
- Power Systems Communication
- Load Modelling and Demand Side Management
- Protection, Relaying and System Automation

### TOPIC 2: MACHINE DRIVES, ADVANCED ELECTRONICS AND MATERIALS

- Electrical Machines and Drives
- High Power Electronics
- Advanced Electrical Materials and Nanotechnology
- Electromagnetic Compatibility (EMC) and Electromagnetic Interference (EMI)
- Geomagnetically Induced Currents and Space Phenomena on Power Systems
- HVDC and High Voltage Engineering

### TOPIC 3: ARTIFICIAL INTELLIGENCE, AUTOMATION AND CYBER-PHYSICAL SYSTEMS

- Artificial Intelligence Applications in Power System
- Industrial Automation, Mechatronics and Robotics
- Advanced Metering Infrastructure and Control Center Applications
- Cyber-physical Systems, Cyber-security and Power System Security
- Quality of Supply, Reliability and Condition Monitoring

### TOPIC 4: RENEWABLE ENERGY AND ELECTRICITY MARKETS

- Renewable Energy Systems
- Energy Storage, Devices and Systems
- Distributed and Embedded Generation
- Energy Markets, Economics, Tariffs, Grid Codes and Policies
- Energy Harvesting, Management, Conversion, Consumption and Efficiency
- Power Engineering Education, Super Learning, Distance Learning

The conference website is at



[www.dut.ac.za](http://www.dut.ac.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:



## 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 PROGRAMME

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

## ORGANISING COMITY

Chairs: Prof Inno Davidson (General), Dr Musasa Kabeya (Technical), Dr Elutunji Buraimoh (Publication).

Conference secretariat: Mrs. Gerda Geyer [geyerg@saiee.org.za](mailto:geyerg@saiee.org.za)

## VENUE

International Convention Centre, (ICC) Durban.

The registration fee includes the following:

- Conference proceedings in electronic format.

The registration form will be made available on the conference website and available from secretariat.

16 August 2021:	1st Call for papers
06 October 2021:	2nd Call for papers
01 November 2021:	Full Paper Submission Closes
9 December 2021:	Notification of acceptance
15 December 2021:	Camera-ready papers due and registration opens
27 January 2022:	TESP report-back meeting
25-27 January 2022:	Main conference