Centre for Power Electronics Annual Conference

Centre for Power Electronics

Annual Conference: 5-6 July 2027
Call for Abstracts from EARLY/MID-CAREER RESEARCHERS

Venue: Teaching and Learning Centre, University of Birmingham

The **Centre for Power Electronics (CPE) Annual Conference** will bring together the Power Electronics, Machines and Drives Community to review the latest Research and Development that will impact the Electric Revolution. This Conference will feature Invited Keynotes and Presentations from Leading Academics and Industrialists, views of the Future Demands for Power Electronics and Drives and Opportunities for Pursuing a Career in this exciting field.

As part of the remit for the continuation of the CPE activities to foster an Active Academic Community, part of the Conference programme will be dedicated to highlighting the work being undertaken by Researchers at an early and mid stage in their career; to increase the visibility of early/mid career academics and their research.

The CPE Conference Organising Team invites **Abstracts** from **Early/Mid-Career Academics** for **Oral Presentations** which describe the latest advancements in **Power Electronics and Drives.** In the 2027 conference, there will be a focus on transportation, including **Aerospace**, **Rail** and **Marine** applications.

Up to 4 Abstracts will be selected for **Oral Presentation** during the CPE 2027 Conference.

Organising Committee

Event Chair:	Pietro Tricoli– University of Birmingham	**CPE Director:** Xibo Yuan **Secretariat:** Steve Riches – IMAPS-UK
Technical Committee:	Layi Alatise – University of Warwick Saeed Jahdi – University of Bristol Andy Bonner – IPP Group Ltd Paul Judge – University of Edinburgh Sebastian Neira – University of Edinburgh Eduardo Sato - UKAEA	Paul Evans – University of Nottingham Martin Wickham – IMAPS-UK Antonio Griffo – University of Sheffield Martin Foster – University of Sheffield Tim Rumney – CIL Calum Phelan – University of Birmingham

We invite submission of **Abstracts** in the following areas from Early/Mid-Career Academics:

Research and Development Topics: These will describe high-impact academic research relating to the conference topics, outlined below:

- Semiconductor and Passive Devices
- Materials, Packaging and Interconnection; including sustainability and circularity
- Converters, Drives and Applications; including Aerospace, Rail and Marine sectors
- Control, Test and Reliability

If you are an early/mid-career academic and interested in giving a plenary talk, please submit an abstract. All abstracts received by the submission deadline will be evaluated by the organising committee. Abstracts covering a balanced range of the main conference topics will then be selected and invited to make a **Plenary Oral Presentation** (25 mins presentation + 5 mins Q&A) during the Conference.

Conference Topics

Semiconductor and Passive Devices	Materials, Packaging and Interconnection	Converters, Drives and Applications	Control, Test and Reliability
• SiC Devices • GaN Devices • Si Devices • Emerging WBG Devices • Capacitors • Inductors • Resistors • Other Passive Devices	• Sustainability and Circularity • Die Attach • Sintering • Wire/Ribbon Bonding • Laser Welding • Encapsulation • Embedding Devices • Novel Materials • Thermal Management	• Electric Drives and Converters • Converter Integration • Wireless Power Transfer • Renewable Power Generation • Energy Storage and Management • Renewables Grid Integration • Aerospace • Rail • Marine • Other PEMD Related Areas and Applications	• Device Characterisation • Environmental Testing • Lifetime and Reliability Prediction • Degradation and Failure Mechanisms • Switching Performance • High Current and Voltage Testing • Converter Topology and Control • Control of Electric Drives

Those wishing to present their work at the CPE Annual Conference 2027 should submit an abstract of no more than 200 words and a biography of up to 150 words, electronically to: office@imaps.org.uk.

Deadlines

Abstract submission (200 words + 150 word bio)	Friday 18th December 2026
Acceptance of Abstracts for Oral Presentation	Friday 15th January 2027
Confirmation of Intent to Submit Oral Presentation	Friday 5th March 2027
Submission of Final Oral Presentation	Friday 25th June 2027