

**Annual Online Conference: 13-15 July 2021**  
**Call for VIDEO and POSTER PRESENTATIONS from**  
**EARLY CAREER RESEARCHERS**



**Blended Online Conference – 13-15 July 2021**

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 **Blended Online Conference** will feature **Live Invited Keynotes** and **Presentations** from **Leading Academics** and **Industrialists**, views of the **Future Demands for Power Electronics, Machines 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 stage in their career; giving the opportunity for presenting their research to an international audience and encouraging **Future Collaboration** with other **Universities** and **Industry**.

The **CPE Conference Organising Team** invites **Abstracts** from **Early Career Researchers** for **Video and Poster Presentations** which describe the latest advancements in **Power Electronics, Electric Machines and Drives (PEMD)**.

Abstracts will be selected for **Video Presentation** during the CPE Conference and for **Poster Presentation** available for **Virtual Display**. **Awards** will be made to the **Best Video** and **Poster Presentations**.

**Organising Committee**

<b>Event Chair:</b>	Xibo Yuan - University of Bristol	<b>Secretariat:</b> Steve Riches – IMAPS-UK Sarah Rogers – University of Bristol
<b>Technical Committee:</b>	Martin Wickham - NPL Mark Johnson – University of Nottingham Paul Huggett - KTN Peter Gammon – University of Warwick	Lee Empringham – University of Nottingham Paul Evans – University of Nottingham Layi Alatise – University of Warwick



We invite submission of **Abstracts** in the following areas from Early Career Researchers:

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

- Semiconductor and Passive Devices
- Packaging and Interconnection
- Converters, Electric Machines and Drives
- Control, Test and Reliability
- PEMD Related Applications



All abstracts received by the submission deadline will be evaluated by the technical committee. Abstracts covering a balanced range of the main conference topics will then be selected and invited to a **Video Presentation** (5 mins) which will be streamed during the Online Conference and others will be selected for a **Poster Presentation** (for Virtual Display/Discussion).

## Conference Topics

Semiconductor and Passive Devices	Packaging and Interconnection	Converters, Machines, Drives and Applications	Control, Test and Reliability
<ul style="list-style-type: none"> <li>• SiC Devices</li> <li>• GaN Devices</li> <li>• Si Devices</li> <li>• Emerging WBG Devices</li> <li>• Capacitors</li> <li>• Inductors</li> <li>• Resistors</li> <li>• Other Passive Devices</li> </ul>	<ul style="list-style-type: none"> <li>• Die Attach</li> <li>• Sintering</li> <li>• Wire/Ribbon Bonding</li> <li>• Laser Welding</li> <li>• Encapsulation</li> <li>• Embedding Devices</li> <li>• Novel Materials</li> <li>• Thermal Management</li> </ul>	<ul style="list-style-type: none"> <li>• Power Converters</li> <li>• Electric Machines and Drives</li> <li>• Converter Machine Integration</li> <li>• Wireless Power Transfer</li> <li>• Renewable Power Generation</li> <li>• Energy Storage and Management</li> <li>• Renewables Grid Integration</li> <li>• Super-conducting Machines and Converters</li> <li>• Other PEMD Related Areas and Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Device Characterisation</li> <li>• Environmental Testing</li> <li>• Lifetime and Reliability Prediction</li> <li>• Degradation and Failure Mechanisms</li> <li>• Switching Performance</li> <li>• High Current and Voltage Testing</li> <li>• Converter Topology and Control</li> <li>• Control of Electric Machines</li> </ul>

Those wishing to present their work at the CPE Annual Conference 2021 should submit an abstract of no more than 200 words, electronically to: [office@imaps.org.uk](mailto:office@imaps.org.uk). For further information on the Centre for Power Electronics and its activities, please see: <https://www.powerelectronics.ac.uk>.

### Deadlines

Abstract submission (200 words + images in PDF format)	Friday 26 <sup>th</sup> February 2021
Acceptance of Abstracts for Video and Poster Presentation	Friday 2 <sup>nd</sup> April 2021
Confirmation of Intent to Submit Video or Poster Presentation	Friday 28 <sup>th</sup> May 2021
Submission of Final Video and Poster	Friday 25 <sup>th</sup> June 2021