

Activity & Progress Reporting

Section Spring Meeting - 28th April 2023

1. Chapter/Affinity Group:	IEEE UK & Ireland Chapter, Power Electronics Society - PEL35 CH08113
2. Committee Members	Bing Ji (Chair, Leicester University), Sheng Wang (Vice Chair, Cardiff University), Gerard Hurley (Ireland National University), Peter Wilson (Bath University), Patrick Wheeler (Nottingham University), Patrick Luk (Cranfield University), Sarath Tennakoon (Stafford University), Ahmed Zobaa (Brunel University), Aris Karcanias (FTI Consulting), and Jun Liang (Past Chair, Cardiff University)
3. Reporting Officer:	Sheng Wang, Bing Ji and Jun Liang
4. Overview of current plan and activities:	 i. Supported the IEEE Workshop on Wide Bandgap Power Devices and Applications in Europe (WiPDA-Europe 2022) (Track 5 Reliability and Robustness (including implications of using WBG materials - windings, EMI, passive components, harsh environments), (IEEE Attended: 30, Guests Attended: 90) – 19-20 Sep 2022 ii. Supported the 11th International Conference on Power Electronics, Machines and Drives (PEMD 2022) (IEEE Attended: 25, Guests Attended: 200+) – 21-23 Jun 2022. Dr. Ji attended the PEMD 2022 (11th International Conference on Power Electronics, Machines and Drives) in Newcastle upon Tyne, UK, to promote IEEE PELS which is supported by the co-chairs, Dr. Nick Baker and Dr. Helen Pollock (see Fig.1) and many attendees.) iii. Hosted the IEEE PELS Day Activity and Introduction of IEEE (IEEE Attended: 6, Guests Attended: 100+) – 29-Jun 2022 (The UK&I PELS Day event took place on 29/06/2022 and more than 80 people joined the Zoom online meeting for a series talks on professional developments with IEEE (See Fig. 2). Dr. Bing Ji gave the welcome opening speech and presented the vision and mission of the PELS UK&I Chapter. He also explained some of the importance and benefits of joining the IEEE PELS DL (Distinguished lecturers, best thesis awards, and the establishment of new Student Branches) iv. Hosted the IEEE PELS DL (Distinguished Lecturer) speech at Oxford University – 10-Jun-2022. v. Hosted the IEEE PELS DL at Cambridge University 31-May- 2022. vi. Hosted the IEEE PELS DL at Cambridge University 31-May- 2022. vi. Hosted the IEEE PELS DL at Cambridge University 31-May- 2022. vi. Hosted the IEEE VK&I PELS Chapter Committee Meetings vii. Hosted the IEEE Order and Reliability of Large-Scale Power Systems. Attendee: 45. Prof. Jun gave a welcome speech for this event and Dr. Wang gave a introduction to promote this PELS UK&I Chapter. iii. Co-sponsored the IEEE Conference on Power Electronics and Renewable Energy (CPERE 2023),



United Kingdom and Ireland Section

	ix. To recruit a new Chapter Secretary for helping organising events with the Chapter, as the demand is increasing.
5. Key Achievements and member value/services to date:	 Published a IEEE Power Electronics Magazine News Report (Vol 9, Iss 3, Sep 2022) Actively engaged with technical supporting, sponsoring and hosting power electronics events as listed in section 4.
6. Key Challenges:	 Continuous effort for networking with leading organizations/universities/companies will be needed to actively promote and organise Chapter events. More Sectional financial support, and registrations of student PELS members would be required to establish a Student Branch Chapter. Effort will be needed to build a review panel and to promote the Best Thesis Award in Power Electronics.
7. Deficits/Required Resources:	•
8. Actions/Support requested from the Section:	• Sectional or society financial support for food and drinks
9. Action Plan:	To continue sponsor and contribute to conferences, workshops, and webinars, potential flagship events might include PEMD 2023 and CPE2023.
	To promote chapter via Distinguished Lecturer speech, webinars and other events. Two more Distinguished Lecturer speeches will be arranged through webinar, detailed dates to be announced.
	To explore new SBC opportunities. Efforts will be made to establish a new SBC in the UK.
	To organise the Best Thesis Award for the PhD candidates in power electronics. A review panel will be established, efforts will be made to promote this Award within different universities to encourage PhD students who will have finished their thesis to apply for this award.