

## Brief Profile of Dr. Huai Wang

### Current Position

- Associate Professor, Aalborg University (AAU), Denmark, (since July, 2015)

### Work Experience

- Europe - Aalborg University, Denmark; ETH Zurich, ABB, Switzerland
- USA – Massachusetts Institute of Technology (MIT), MA, USA
- Asia - City University of Hong Kong, Hong Kong, China

### Education

- PhD – City University of Hong Kong (CityU), Hong Kong, 2012 (Direct Bachelor-PhD Program)
- Bachelor – Huazhong University of Science and Technology, China, 2007

### Area of Expertise

- Reliability of power electronic components and systems
- Condition monitoring of capacitors and IGBT modules
- Multi-physics modeling and virtual prototyping in power electronics
- Life-cycle performance optimization of power electronic converters and systems
- DC-DC converters, inverters for motor drive, PV and wind power applications

### Publications

- **25+** papers in top-tier journals and **50+** papers in leading international conferences (**3 of the published papers are top 10 downloaded** papers in the respective journals in IEEE Xplore)
- 3 co-authored book chapter and 1 co-authored book (to be published in December 2015)

### Patents

- 4 patent applications are filed (with 50% contribution to each of them)

### Experience in Handling Projects

- Principal Investigator - Reliability of Capacitors in Power Electronic Systems (2013-2014), DFF
- Co-Investigator - REST - Reliability ESTimation of hydrogen and fuel cell systems (2014-2017)
- Work Package Leader – Center of Reliable Power Electronics (CORPE)

### Industry Collaborations

- Initiation of research collaboration with Vestas Wind Systems, Denmark, and Danfoss Power Electronics A/S, Denmark

### Experience in Teaching

- Lecturer of 2 Master courses and 1 PhD course
- Development of course plans and course materials.
- Participation in university pedagogical training for Assistant Professors on teaching, supervision, and problem based learning and education model 2013-2014

### Experience in Supervision

- Supervisor/co-supervisor of junior researchers (4 PhD students and 2 Master students)

### Professional Services

- Associate Editor, IEEE Transactions on Power Electronics (SCI impact factor 6.008), since 2015
- Guest Editor-in-Chief, IEEE Journal of Emerging and Selected Topics in Power Electronics, 2015
- Guest Associate Editor, IEEE Transactions on Power Electronics, 2013-2014
- Guest Editorial Board, Journal of Microelectronics Reliability, 2014-2015
- Member of IEEE, PSMA, IEEE PELS, IAS, IES, and Reliability Society, since 2007
- Session chair, topic chair, special session organizer at leading power electronics conferences
- Lecturer of conference tutorials (e.g., ECCE, PEAC), ECPE workshops, and invited seminars and 5 tutorials at leading power electronic conferences.

