### **Teaching portfolio**

# 1. Teaching CV: A list of any lecturing and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD) as well as any external examiner tasks.

Student project supervision:

•PhD Thesis: Advanced Management System for Li-Sulfur Batteries

•PhD Thesis: Accurate and Computation Efficient Algorithms for SOC and SOH Estimation of Lithium-ion Batteries in Electrical Vehicle Applications

- •PhD Thesis: Smart Battery Management Systems for EV Drivetrains with Extended Useful Capacity
- •MSc Thesis: Energy Management System for Smart Residential PV Systems with Integrated Storage
- •MSc Thesis: Grid Inertial Response with Lithium-ion Battery Energy Storage Systems
- •MSc Thesis: Grid Support Applications with Li-ion batteries
- •MSc Thesis: Power and energy management of a residential hybrid photovoltaic-wind system with battery storage •MSc Thesis: Diagnostics of Lithium-ion batteries
- •MSc Thesis: Battery lifetime analysis for residential Photovoltaic Systems with integrated Energy Storage •BSc Project: Desulfatering af blybatterier
- Lecturing:

•2014 (PhD) - Storage Systems based on Li-Ion Batteries for Grid Support Applications (1 lecture)

•2015 (PhD) - Storage Systems based on Li-Ion Batteries for Grid Support and Automotive Applications (2 lectures and 1 exercise)

•2016 (PhD) - Storage Systems based on Li-Ion Batteries for Grid Support and Automotive Applications (3 lectures and 1 exercise)

- •2016 (MSc) Energy Conversion and Storage in Future Energy Systems (2 lectures and 1 exercise)
- •2017 (PhD) Modelling of Renewable Energy Generation and Battery Storage Systems (1 lecture and 1 exercise)

•2017 (PhD) - Storage Systems based on Li-Ion Batteries for Grid Support and Automotive Applications (3 lectures and 1 exercise)

- •2017 (MSc) Energy Conversion and Storage in Future Energy Systems (2 lectures and 1 exercise)
- •2018 (PhD) Modelling of Renewable Energy Generation and Battery Storage Systems (3 lectures and 2 exercise)
- •2018 (PhD) Storage Systems based on Li-Ion Batteries for Grid Support and Automotive Applications (5 lectures and 2 exercises)

•2019 (PhD) - Modelling of Renewable Energy Generation and Battery Storage Systems (3 lectures and 2 exercise)

### 2. Study administration: A list of any study administration tasks, e.g. study board membership, head of studies or semester or course coordinator, accreditation, etc.

2014 – 2018 Storage Systems based on Li-Ion Batteries for Grid Support and Automotive Applications – PhD course Between 2014-2017 co-organizer, from 2018 main organizer of the course – development of lecture materials and exercises for different for various Li-ion battery related topics (e.g., testing, performance modeling, lifetime modeling, state estimation etc.)

2017 – 2019 Application-Oriented Modelling of Renewable Energy Sources, Conversion and Energy Storage Systems – PhD course

Involved in the course organization and development of lecture materials and exercises for battery modeling

2016 – 2017 Energy Conversion and Storage in Future Energy Systems – MSc course (elective) Involved in the course organization and development of lecture materials and exercises for battery modeling

## 3. University pedagogy qualifications: A list of any completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc.

•2015 - Seminar for PhD supervisors

- •2016 Enhancing feedback and facilitating student reflections in groups
- •2016 Teaching and learning in Higher Education
- •2016 Bringing principles of PBL into teaching and learning practices in projects and courses

### 4. Other qualifications: Conference attendance, editorials, presentations, etc. relating to education, 'University Teaching Day', etc.

Type your answer here...

5. Teaching activity development and teaching materials: A list of any contributions to the development of new modules, teaching materials, study programmes, e-learning, collaboration with external business partners, etc.

Type your answer here...

#### 6. Teaching awards you may have received or been nominated for.

Nominated for teacher of the year 2017 at the Department of Energy Technology, Aalborg University

7. Personal reflections and initiatives: Here you may state any personal deliberations as regards teaching and supervision, any wishes and plans for further pedagogic development, plans for following up on feedback/evaluations from students, etc.

Type your answer here...

#### 8. Any other information or comments.

Type your answer here...