RE: Phd VIVA Xuexiu Jia Preliminary thesis report

Dear Ms Vrbkova,

I, Dr Aoife M. Foley [Staff number 3046491], Reader in the School of Mechanical and Aerospace Engineering, and a permanent wholtime tenured member of Queen’s University Belfast highly recommend this PhD thesis for VIVA. This thesis is up to PhD standard with a number of high impact papers. It is a very solid technical piece of work. I briefly list the following minor structural comments on the thesis, which I received, via email on Saturday, October 24, 2020 9:33 PM;

- Introduce a ‘Nomenclature’ (i.e. Abbreviations, Acronym, Symbols, Units) section before the Table of Contents,
- Introduce a ‘List of Table’ and a ‘List of Figures,’ before the Table of Contents,
- Structure of the thesis, i.e. papers, results in excessive repetition,
- Suggest the repetitive Chapter 1 and Chapter 2 material in Chapters 3 and 4 is removed, and any details specific to that chapter are clarified,
- Suggest the Discussion and Conclusion sections in Chapters 3 and 4 are revised to ‘Results’ and ‘Summary of findings,’
- Suggest that a Chapter 5 Overall Discussion brings Chapters 1 to 4 together to demonstrate the expertise and knowledge,
- Suggest a Chapter 6 Conclusions is added to include a summary and overview of the key findings and their relevance, impact, and contribution to the field, as well as any recommendations and next steps,
- Remove the Appendix listing the papers as it is already at the start of thesis, and a duplication is unnecessary,
- Recommend in the References that they are formatted/aligned these better.

The technical content of the research presented in the thesis will be examined with Xuexiu Jia in the VIVA on the 10th November 2020, as is the tradition of the VIVA’s I have examined in the UK and Ireland. This report and the structural recommendations above are based on the layout of thesis I have examined and supervised previously, but if this is different in Czechia, and not in line with your University Regulations, then these minor structural comments on the thesis can be ignored. Note as I typically receive a letter and an email containing the PhD Examiner forms, University Regulations and thesis in digital and hard copy typically 1 month in advance of VIVA I was got unawares by your procedures and the emails. I appreciate that Czechia is in lockdown due to Covid19, as we are likewise in the UK, so you have challenges arranging these matters.

Finally, I am reissuing the Report after getting some additional guidance from Professor Klemes via WhatsApp this evening on the procedures in Brno.

Kind regards,

Aoife Foley BE MSc PhD CEng FIIE FHEA
Reader

Editor in Chief
Renewable and Sustainable Energy Reviews