

Co-Authorship Form

This form is to accompany the submission of any thesis that contains research reported in co-authored work that has been published, accepted for publication, or submitted for publication. A copy of this form should be included for each co-authored work that is included in the thesis. Completed forms should be included at the front (after the thesis abstract) of each copy of the thesis submitted for examination and library deposit.

This form should be completed by a co-author, not by the student.

Please indicate the chapter/section/pages of this thesis that are extracted from co-authored work and provide details of the publication or submission:

Chapter 5 is based on the published paper:

Mohd Safaai NS. and Pang S. (2021). Pyrolysis kinetics of chemically treated and torrefied radiata pine identified through thermogravimetric analysis. *Renewable Energy* 175: 200-213. <http://dx.doi.org/10.1016/j.renene.2021.04.117>.

Please detail the nature and extent (as a percentage) of contribution by the student:

The above published paper was part of the student's thesis work, and she is the major contributor and prepared the paper draft as well as revision, accounting for about 80%. The co-author is the senior supervisor (Pang, S.) who provided comments and editing.

Certification by Co-authors:

If there is more than one co-author then a single co-author can sign on behalf of all

The undersigned certifies that:

- The above statement correctly reflects the nature and extent of the student's contribution to this co-authored work
- In cases where the student was the lead author of the co-authored work, they wrote the text

Name: Shusheng Pang

Signature:



Date: 31/08/2023