

Jury Member Report – Doctor of Philosophy thesis.

Name of Candidate: Konstantin Gubaev

PhD Program: Materials Science and Engineering

Title of Thesis:

Machine-learning interatomic potentials for multicomponent alloys

Supervisor: Prof. Alexander Shapeev

Date of Thesis Defense: 02 October 2019

Name of the Reviewer: Andriy Zhugayevych

I confirm the absence of any conflict of interest

Signature:

Date: 26-08-2019

The purpose of this report is to obtain an independent review from the members of PhD defense Jury before the thesis defense. The members of PhD defense Jury are asked to submit signed copy of the report at least 30 days prior the thesis defense. The Reviewers are asked to bring a copy of the completed report to the thesis defense and to discuss the contents of each report with each other before the thesis defense.

If the reviewers have any queries about the thesis which they wish to raise in advance, please contact the Chair of the Jury.

Reviewer's Report

Reviewers report should contain the following items:

- Brief evaluation of the thesis quality and overall structure of the dissertation.
- The relevance of the topic of dissertation work to its actual content
- The relevance of the methods used in the dissertation
- The scientific significance of the results obtained and their compliance with the international level and current state of the art
- The relevance of the obtained results to applications (if applicable)
- The quality of publications

The summary of issues to be addressed before/during the thesis defense

1) Brief evaluation of the thesis quality and overall structure of the dissertation:

Excellent quality and overall structure.

2) The relevance of the topic of dissertation work to its actual content:

Fully relevant.

3) The relevance of the methods used in the dissertation:

Fully relevant.

4) The scientific significance of the results obtained and their compliance with the international level and current state of the art:

Significant at the international level and comply with state of the art.

5) The relevance of the obtained results to applications:

Demonstrated (communicated via Supervisor).

6) The quality of publications:

2 Q1 publications – perfect number and quality.

All my comments given in previous report have been fully addressed.

Provisional Recommendation

☒ *I recommend that the candidate should defend the thesis by means of a formal thesis defense*

☐ *I recommend that the candidate should defend the thesis by means of a formal thesis defense only after appropriate changes would be introduced in candidate's thesis according to the recommendations of the present report*

☐ *The thesis is not acceptable and I recommend that the candidate be exempt from the formal thesis defense*