

Jury Member Report - Doctor of Philosophy thesis

Name of Candidate: Evgenia Gilshteyn

PhD Program: Materials Science and Engineering

Title of Thesis: Components for Stretchable Electronic based on Single-walled Carbon Nanotubes

Supervisor: Prof. Albert Nasibulin

Chair of PhD defense Jury: Prof. Nikolay Gippius,

Email: N.Gippius@skoltech.ru

Date of Thesis Defense: 05 October 2018

Name of the Reviewer: Kerth Stevenson

I confirm the absence of any conflict of interest

Signature and date:

(Alternatively, Reviewer can formulate a possible conflict)

21 sept 2018

I am writing this letter to provide an evaluation of Ms. Evgenia Gilshteyn on her performance in research, original creative work, and teaching as part of her performance during the course of her PhD. In short, Evgenia is an exemplary Skoltech student who is well on track in her studies. Roughly she has contributed as co-author on four publications in international journals such as *Carbon* and *Nanotechnology*. She has also passed her courses with high marks and is a good ambassador in many Skoltech activities including teaching of other students. For me it is a pleasure to see her fast development and contributions in this emerging model of Skoltech to integrate innovative aspects into vigorous and challenging research work.

In her emerging work which is reflected in several manuscripts in preparation, I find it quite insightful to develop stretchable supercapacitors and other electronic components. If fully successful, she will help elucidate very complicated principles of operation and implementation to store energy in wearable electronic and energy harvesting devices. Her work, highlights the essential importance of coupling both fundamental science with pragmatic engineering to establish new proof of concepts in this area.

Her internship and conference participation is also strongly indicative of the importance of her work as she has presented at international meetings and gained worldly experience at places such as MIT and Finland. These meetings and internships have brought her research to a global audience, making it impactful across the world. Overall her work at MIT is very original and forward moving and not merely an incremental extension of her past early works with other coauthors.

Considering her performance in research, education and innovation activities, I wholeheartedly support her PhD defense.

Provisional Recommendation (select one)

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