

OPINION

on a dissertation for **Doctor of Philosophy** Degree

Professional field 5.13 "General Engineering"

Doctoral program: "Ergonomics and Industrial Design" at the
Department of "Industrial Design", Faculty of Shipbuilding, Technical University - Varna

Author of the dissertation: **Galina Doncheva Stefanova, MSc. Eng.**

Title of the dissertation: "**Contemporary Ergonomic and Design Aspects
in the Design of Special Purpose Clothing**"

Scientific jury member: **Assoc. Prof. Sofia Nikolaeva Anguelova, PhD,**
Department of Engineering Design, Faculty of Mechanical Engineering,
Technical University of Sofia

I am writing this opinion in my capacity of Scientific Jury member, appointed by Rector's order № 3 / 05.01.2026, Technical University of Varna and protocol from the first meeting of the Scientific Jury, held on January 14, 2026.

1. Relevance of the problem developed in the dissertation

The dissertation presented here, respectively the methodology developed in it, concerning the system "man - workwear - work environment" are up-to-date and significant both in terms of applied ergonomics and design practice. The methodology includes a quantitative and qualitative assessment of the functional characteristics of special purpose clothing in the restaurant industry, an analysis of the kinematics during typical work operations, a study of typical textile materials according to the criteria of wear and thermoregulation, as well as an assessment of the constructive solutions of clothing according to the criteria of comfort and productivity. The developed complex methodology, the conducted analyses and assessments are useful and wide range applicable. The object of the dissertation research is clearly and accurately defined and developed, as are its associated research tasks.

2. Knowledge about the state of the problem

The dissertation is in the field of modern ergonomics and the design of special purpose clothing and shows knowledge and skills in the field of ergonomic design. In this regard, the literature review is detailed and in-depth, and the critical comparative analysis is conducted in detail and systematically. In the list of literary sources, which includes a total of 125 titles, of which 88 in Cyrillic and 37 in English, with a large number of electronic (online) sources. The most of the resources cited in References section are published within the last decade. Therefore, we can conclude that Eng. Galina Stefanova has detailed knowledge in the researched area; on this basis she builds her methodology for ergonomic design and validates it in real working conditions.

3. Consistency of the selected research methodology with the dissertation aim and objectives

The candidate Galina Stefanova has correctly and thoroughly justified the aim and specific objectives, i.e. tasks of her research. A justified choice of methods and means has been made to solve the task of conducting a comprehensive study of specialized workwear. The approach for conducting the research which was chosen is based on the initial systematic comparative analysis. The proposed

methodology and the resulting design are theoretically justified and ultimately evaluated and verified experimentally. The dissertation presents in a logical sequence analysis of samples, planning, conducting experiments with users and verification of the methodology.

4. Scientific and applied contributions of the dissertation

I accept the scientific-applied and applied contributions, resulting from the conducted studies and experiments, in the form in which they are formulated in the dissertation by the candidate herself. The nature of the contributions can be defined as enrichment of existing scientific knowledge, as well as scientific achievements in the research field with application in practice.

5. Author's publications on the dissertation topic

Distinct aspects of the dissertation were presented in four (4) publications on the topic of the dissertation work. In two publications, the candidate is the single author, and in the other two, in co-authorship with one co-author. The publications were made in the period 2021-2025 and presented at forums in Sofia and Varna.

6. Comments, recommendations and remarks on the dissertation

I recommend that the candidate continue with her studies on the topic of the dissertation, with the assumption that there is remaining data, as a result of the research so far, that can be published in international scientific forums abroad.

7. Conclusion

I believe that the dissertation aim and objectives have been fulfilled and the dissertation as volume and content meets the requirements of the Act on the Academic Staff Development in Republic of Bulgaria and the Regulations for its application, as well as the Regulations on the Conditions and Order for Acquiring Scientific Degrees at Technical University of Varna.

I give a positive assessment of the presented dissertation, which gives me the reason to vote positively **MSc. Eng. Galina Doncheva Stefanova** to be awarded a **“Doctor of Philosophy” degree** in the professional field 5.13. General Engineering, specialty "Ergonomics and Industrial Design".

Sofia, 13.02.2026

Scientific jury member:

/ Assoc. Prof. Sofia Anguelova, PhD /