Appendix 12d

REPORT

to occupy the academic position:

"Professor"	
"Associate Professor"	X
	one of the academic positions indicated shall be marked with the sign "X"

Candidates to occupy the position:

1	Ass. Prof.	Dr.	Tina	Radmilova	Tasheva	UCTM
№	academic position	scientific degree	name	middle name	last name	workplace

Scientific area:

5	Technical sciences
code	name

Professional area:

5.6	Materials and material science
code	name

Scientific specialty:

Silicate materials

The competition has been announced:

64	05.08.2025	Technology of Silicates	Faculty of Metallurgy and Materials Science
in SG issue	date	for the needs of the Department	Faculty

The report was written by:

Prof.	Dr.	Alexander	Jivkov	Karamanov	IPC=BAS
academic position	scientific degree	name	middle name	last name	workplace

1. Report for the candidate:

Ass. Prof.	Dr.	Tina	Radmilova	Tasheva
academic position	scientific degree	name	middle name	last name

1.1. Meeting the minimum requirements under the Regulations:

A) The candidate meets the minimum requirements	20 points	X
B) The candidate doesn't meet the minimum requirements	0 points	
		one of the answers given is marked with the sign "X"

It must be filled in if answer B is marked. The publication activity of the candidate is analyzed. The response of the results achieved (quoted) is analyzed.
Eighteen publications included in the Scopus and/or Web of Science databases are presented, ten of which are related to the habilitation report (group of indicators B) and eight are related to a group of indicators G. Information is also provided on 17 citations of the publications used in the competition, a published university textbook and references to participation in scientific projects. The total number of points is 761, which meets the legal requirements.

1.2. Relevance of scientific and / or applied research:

A) The research is relevant. Part of the research is pioneering (no results are known on the topic by other authors)	8 points	
B) Research is relevant. Results from other authors are known for each of the topics and / or applications studied.	6 points	X
C) Most of the research is relevant, but also some results are presented that have no scientific and / or applied value	4 points	
D) The smaller part of the research is relevant	2 points	
E) Research is not relevant	0 points	
		one of the answers given is marked with the sign "X"

The evaluation of the relevance of the research must be substantiated.
The main part of the candidate's research is related to serious experimental work and its analysis. Glasses and glass-ceramics with new compositions (both non-silicate and silicate) have been synthesized and characterized, and the focus of the research can be linked to determining their optical properties and clarifying the composition-structure-properties relationship. Therefore, it can be assumed that this scientific research activity is mainly related to enriching and supplementing existing knowledge in promising and modern scientific fields.

1.3. Objectives of the research:

A) Realistic and of scientific and / or applied interest	8 points	X
B) Realistic, but not of scientific and / or applied interest	4 points	
C) Unattainable (unrealistic)	0 points	
		one of the answers given is marked with the sign "X"

Objectives must be specified. The type of the set objectives must be justified
The main objectives of the research of Dr. Tasheva are related to obtaining various, mostly "non-traditional" glass-forming compositions, determining their properties (mainly electronic polarizability and optical properties), and explaining them through analysis of the structure and composition of the starting glasses or glass-ceramics obtained. Glasses based on bismuth oxide (Bi_2O_3), from the TeO_2-V_2O_5-MoO_3, TeO2-BaO-V2O5 systems, compositions from Nb_2O_5-SiO_2, silicate compositions with high iron oxide content, borate glasses, etc. have been studied. , For this purpose, various scientific methods are used, such as UV-Vis, infrared, Raman, XPS, and Mössbauer spectroscopy, electron microscopy, DTA, pycnometry and others. These complex studies are result of successful collaboration with colleagues from the UCTM and other scientific institutions in Bulgaria, as well as with some leading scientists from Japan and Germany. In addition, the candidate participates in other studies on the synthesis of new materials (glazes, carbonization of cement kiln dust, etc.), where her participation is mainly related to the analysis of results obtained by spectroscopic methods.

1.4. Candidate research contributions:

A) With lasting scientific and / or applied response, they form the basis for new research and applications	20 points	
B) They are of significant scientific and / or applied interest, complete and / or summarize previous research	16 points	X
C) They are of scientific and / or applied interest	12 points	
D) Lack of significant contributions	8 points	
E) Lack of contributions	0 points	
		one of the answers given is marked with the sign "X"

Contributions must be specified. The type of results achieved must be justified.

The studies made are typical of some of the research conducted at the Department of Technology of Silicates in recent decades, and Dr. Tasheva's work contributes to its preservation and further development. Her work is mainly devoted to the study of the relationships between the chemical composition, structure, electronic polarizability, and optical properties of simple oxides, oxide glasses, and multicomponent glassy systems, as well as to the development of new functional glassy, glass-crystalline, and ceramic materials.

1.5. Participation of the candidate in the achievement of the presented results:

A) The candidate has at least an equal participation in the submitted papers	8 points	
B) The candidate has at least an equal participation in most of the submitted papers	7 points	X
C) The candidate has a secondary participation in most of the submitted papers	4 points	
D) The candidate participation is unnoticeable	0 points	
		one of the answers given is marked with the sign "X"

Critical notes must be provided if one of the items C or D is marked. 10 publications are used in group C and Dr. Tasheva is the first author in 4 of them and the second author in 2. 8 publications are used in group G and Dr. Tasheva is the first author in 6 of them. These data do not cast doubt on the candidate's contributions to these studies.

1.6 Pedagogical activity:

A) The candidate has effective and sufficient pedagogical activity at the university. The textbooks issued are modern and useful (they meet the requirements of the Regulations). The work with undergraduate and doctoral students is at a high professional level.	8 points	
B) The candidate has sufficient pedagogical activity at the university. The textbooks issued satisfy the requirements of the Regulations.	6 points	X
C) The pedagogical activity and / or textbooks issued are insufficient (do not meet the requirements of the Regulations)	0 points	

		one of the answers given is marked with the sign "X"

Critical notes must be provided if one of the items B or C is marked.

1.7. Critical notes:

A) Lack of critical notes	8 points	
B) Critical notes of a technical nature	7 points	X
C) Critical notes that would partially improve the results achieved in a small part of the research	5 points	
D) Critical notes that would partially improve the results achieved in most of the research	3 points	
E) Significant critical notes	0 points	
		one of the answers given is marked with the sign "X"

Critical notes must be provided if one of the answers C, D or E is marked.
It is desirable to conduct more in-depth research when transition metals may be present in different degrees of oxidation. In cases of compositions with a high content of iron oxides, it is necessary to take into account the possibility of "spontaneous" liquid-liquid separation during the cooling of the glass, as well as the occurrence of surface oxidation during annealing or crystallization heat treatments. It is possible that some of the results obtained are subject to alternative explanations.

1.8. Conclusion

A) The evaluation of the candidate's activity is **POSITIVE**	This evaluation is assigned to a total number of at least 50 points	X
B) The evaluation of the candidate's activity is **NEGATIVE**	This evaluation is assigned to a total number below 50 points	
		one of the answers given is marked with the sign "X"

To be filled in if requested by the member of the scientific jury
The materials presented are in accordance with the Regulations for the Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria and the Regulations on the Conditions and Procedures for Acquiring Academic Degrees at UCTM-Sofia. The candidate in the competition has submitted scientific publications and additional information that meet the legal requirements. Therefore, I propose that the Scientific Jury recommend her for the academic position of "associate professor" at UCTM-Sofia in the professional field 5.6 Technical Sciences, Scientific specialty: Materials and Materials Science.

07.12.2025	The report was written by: Alexander Karamanov	
date		signature