

REVIEW
to occupy the academic position:

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

Candidates to occupy the position:

1	Assoc. Prof.	Dr	Andriana	Risk	Surleva	University of Chemical Technology and Metallurgy
№	academic position	scientific degree	name	middle name	last name	workplace

Scientific area:

4.	Natural sciences, mathematics and informatics
code	name

Professional area:

4.2.	Chemical sciences
code	name

Scientific specialty:

Analytical chemistry

The competition has been announced:

64	05.08.2025r.	Analytical chemistry	Faculty of Chemical technologies
in SG issue	date	for the needs of the Department	Faculty

The review was written by:

Professor	Dr	Stefan	Leonidov	Tsakovski	University of Sofia
academic position	scientific degree	name	middle name	last name	workplace

1. Review for the candidate:

Assoc. Prof.	Dr	Andriana	Risk	Surleva
academic position	scientific degree	name	middle name	last name

1.1. Completion of the provided documents:

A) The competition documents are in full compliance with the Regulations	3 points	X
B) The documents are complete but do not fully comply with the requirements of the Regulations	2 points	

C) The documents are not completed in accordance with the requirements of the Regulations	0 points	
		one of the answers given is marked with the sign "X"

Missing documents and violated requirements must be described if response C is marked.

1.2. 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.

The candidate has contributed 35 scientific publications, which are distributed as follows: 10 publications under indicator 4 (carrying 160 points) and 25 publications under indicator 7 (carrying 289 points). At the time of application, 138 citations have been recorded (carrying 276 points). The candidate's publication activity and the impact of the achieved results significantly exceed the minimum requirements for the academic position of "Professor".

1.3. 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)	7 points	X
B) Research is relevant. Results from other authors are known for each of the topics and / or applications studied.	5 points	
C) Most of the research is relevant, but also some results are presented that have no scientific and / or applied value	3 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 research is highly relevant and can be linked to solving significant societal challenges in the field of improving quality of life and creating new materials (geopolymers) as an alternative to traditional construction materials.

1.4. Knowledge of the problems subject of research:

A) The candidate knows in detail the achievements of other authors on the researched topics and/or applications	6 points	X
---	----------	---

B) The candidate is partially familiar with the achieved results on the researched topics and / or applications	4 points	
C) The candidate has no prior knowledge of the status of the researched problems	0 points	
		one of the answers given is marked with the sign "X"

The evaluation must be substantiated if answer C is marked.

1.5. Type of research:

A) Theoretical	4 points	
B) Applied	4 points	X
C) Theoretical with application elements	4 points	
D) It does not correspond to the level specified in the Act for the Development of the Academic Staff in the Republic of Bulgaria and the Regulations	0 points	
		one of the answers given is marked with the sign "X"

The level of research must be substantiated if answer D is marked.

1.6. 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 scientific research objectives set by the candidate are applied and, in accordance with the subjects of study, can be summarized as follows:

1. Development of an analytical methodology for characterizing industrial waste.
2. Optimization and validation of methods for the chemical analysis of environmental objects.
3. Determination of plant-available forms of essential nutrient components in Bulgarian agricultural soils.
4. Development of analytical methodologies for investigating objects of human activity.

1.7. Methods of research:

A) Adequate to research and set scientific objectives and /or applications	8 points	X
B) Partially appropriate, enabling part of the scientific objectives and / or applications to be achieved	4 points	
C) Inappropriate methods	0 points	
		one of the answers given is marked with the sign "X"

Methods must be specified. The type of methods used is justified.

The candidate employs a wide range of modern instrumental analysis techniques (ICP-OES, IC, ICP-SFMS, ICP-QMS, GC-ICP-SFMS, elemental mercury analyzer, flame AES, spectrophotometry, SEM/EDS, UV-Vis, FTIR, IR, LC/MS-MS, etc.). The development and validation of the analytical methodologies take into account both the specifics of the instrumental technique and the subject under study. The instrumental analysis techniques used have been appropriately selected according to the subject of study and the objective of the chemical analysis. In this context, it is worth noting the application of multivariate calibration (PLSR) in publication [7.3].

1.8. Candidate research contributions:

A) With lasting scientific and / or applied response, they form the basis for new research and applications	20 points	X
B) They are of significant scientific and / or applied interest, complete and / or summarize previous research	16 points	
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 contributions in the candidate's areas of work can be defined as scientific applied with significant importance for improving quality of life and can be summarized as follows:

1. Tailings materials have been characterized for the purpose of assessing environmental risk and for their use in producing geopolymers materials.
2. Analytical methodologies have been developed and validated to meet the requirements for pollutant analysis in various environmental phases. Instrumental methods have been combined with appropriate biological tests, enabling a reliable assessment of pollution risk.
3. Accessible methodologies have been developed for determining plant-available forms of essential nutrient components, which aids in selecting fertilizers for different types of arable soils.
4. Analytical methodologies have been developed, validated, and applied in the fields of criminology, waste management, and quality control in the production of food and beverages.

1.9. 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	X
B) The candidate has at least an equal participation in most of the submitted papers	7 points	
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.

1.10. 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	X
B) The candidate has sufficient pedagogical activity at the university. The textbooks issued satisfy the requirements of the Regulations.	6 points	
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.

1.11. Critical notes:

A) Lack of critical notes	8 points	X
B) Critical notes of a technical nature	7 points	
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.

1.12. Conclusion

A) The evaluation of the candidate's activity is POSITIVE	This evaluation is assigned to a total number of at least 65 points	X
B) The evaluation of the candidate's activity is NEGATIVE	This evaluation is assigned to a total number below 65 points	
		one of the answers given is marked with the sign "X"

To be filled in if requested by the reviewer

I assess the research and teaching work of the candidate positively and recommend that the esteemed Scientific Jury propose the conferment of the academic position of "Professor" to Associate Professor Dr. Andriana Risk Surleva in the Field of Higher Education 4. Natural Sciences, Mathematics, and Informatics, Professional Field 4.2. Chemical Sciences (Analytical Chemistry).

04.12.2025	The review was written by:	
date		signature