

## 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	<b>Assist. Prof.</b>	<b>PhD</b>	<b>Kameliya</b>	<b>Kirilova</b>	<b>Anichina-Zarkova</b>	<b>UCTM</b>
№	academic position	scientific degree	name	middle name	last name	workplace

## Scientific area:

<b>5.</b>	<b>Technical sciences</b>
code	Name

## Professional area:

<b>5.10.</b>	<b>Chemical technologies</b>
code	Name

## Scientific specialty:

<b>Technology of fine organic and biochemical synthesis</b>
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## The competition has been announced:

<b>108</b>	<b>22.12.2020</b>	<b>Organic synthesis and fuels</b>	<b>Faculty of Chemical Technology</b>
in SG issue	date	for the needs of the Department	Faculty

## The report was written by:

<b>Prof.</b>	<b>PhD</b>	<b>Rositca</b>	<b>Dimitrova</b>	<b>Nikolova</b>	<b>FCF - SU</b>
academic position	scientific degree	name	middle name	last name	workplace

## 1. Report for the candidate:

<b>Assist. Prof.</b>	<b>PhD</b>	<b>Kameliya</b>	<b>Kirilova</b>	<b>Anichina-Zarkova</b>
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	<b>X</b>
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 Assistant Professor Dr. Kamelia Anichina-Zarkova is a co-author of 41 scientific publications, 9 of which are with impact factor or SJR, and 19 of them are referred to in Scopus. Until the submission of the documents, 333 citations were noticed, registered in Scopus, where the h-index of Dr. Anichina-Zarkova is 5.

Dr. Anichina-Zarkova participated in the competition for associate professor with 36 publications, 8 (22%) of which have an impact factor or SJR, and 18 of them are referred to in Scopus (50%), 17 (47%) are published in unreferred journals that have 102 citations in Scopus. 1 recognized application for a registered utility model is also attached. Four of the presented publications, are with IF > 2.5 and two with IF > 2.0. She is also the author of an e-textbook "Biologically active substances".

**According to indicator 1.**

Candidate Kamelia Anichina-Zarkova defended her dissertation on "Synthesis of benzimidazole derivatives as biologically active substances" in 2005, developed in the Department of Technology of Organic Synthesis and Fuels of UCTM (50 points).

**According to indicators 3-4.**

10 scientific publications referred to in Scopus are presented, 8 of which with impact factor. According to this indicator, the candidate meets the minimum requirements of 100 points (104 points).

**According to indicators 5-11.**

25 scientific publications are presented, 8 of which published in journals, referenced and indexed in world-famous databases (103.3 points) and 17 published in non-referenced journals (146.3 points). According to this indicator, the candidate exceeds the minimum requirements of 200 points (249.6 points).

**According to indicators 12-15.**

The minimum requirements for this indicator for UCTM are 50 points. The candidate has submitted 102 citations (1020 points), which many times exceeds the requirements.

**According to indicators 16-**

Dr. Anichina-Zarkova is the author of an electronic textbook. (20 points) and a registered utility model (40 points).

The analysis of the presented scientific results shows that Dr. Kamelia Anichina-Zarkova not only meets, but also in some of the indicators exceeds the minimum requirements for the competition.

**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	<b>X</b>
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"
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The evaluation of the relevance of the research must be substantiated.

The presented scientific publications are entirely in the field of the scientific specialty for which the competition was announced. The candidate's research is related to the targeted synthesis of substances with potential use as pharmaceuticals. They cover the synthesis of new benzimidazole and pyridine derivatives, and easily feasible, efficient and cost-effective synthetic procedures have been developed. Spectral and computational methods were used to characterize the newly obtained substances. Antiparasitic, antioxidant, antibacterial and antiproliferative activity of the substances was studied. A connection between the structure and the biological action of the studied substances has been established.

The studies are up-to-date, with potential for application in terms of their pharmacological activity. The obtained results can be related to the enrichment of the scientific field.

### 1.3. Objectives of the research:

A) Realistic and of scientific and / or applied interest	8 points	<b>X</b>
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

Realistic goals have been set, appropriate methods for their realization have been selected and the achieved results have a scientific contribution and potential for application.

### 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	<b>X</b>
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 main contributions of the candidate are related to:

- Development of new easily feasible, efficient and cost-effective synthetic procedures for the synthesis of new benzimidazole and pyridine derivatives.
- Characterization of the newly obtained substances using spectral and theoretical methods.
- Experimental study of antiparasitic, antioxidant, antibacterial and antiproliferative activity of some substances.
- Demonstration of a relationship between the structure and biological action of test substances.

The candidate's contributions are up-to-date, with potential for application in terms of their pharmacological activity and enrich the achievements in the scientific field.

**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>X</b>
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.

**1.6 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>X</b>
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.

**1.7. Critical notes:**

A) Lack of critical notes	8 points	<b>X</b>
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.

### 1.8. Conclusion

A) The evaluation of the candidate's activity is <b>POSITIVE</b>	This evaluation is assigned to a total number of at least 50 points	<b>74</b>
B) The evaluation of the candidate's activity is <b>NEGATIVE</b>	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
In conclusion, I believe that Assistant Professor Dr. Kamelia Anichina-Zarkova is a scientist and lecturer with the necessary theoretical and experimental training and active teaching activities and is responsible, and in some of the indicators exceeds all requirements of the Law for the academic position Associate Professor in the scientific specialty 5.10 Chemical technologies - scientific achievements and teaching. Based on the attached documents, I strongly suggest the members of the esteemed Scientific Jury and the members of the Scientific Council of the University of Chemical Technology and Metallurgy to award the scientific title "Associate Professor" to Ch. Assistant Professor Dr. Kamelia Kirilova Anichina-Zarkova in professional field 5.10. Chemical technologies (Technology of fine organic and biochemical synthesis).

<b>23.04.2021</b>	The report was written by:	
date	<b>Prof. Dr. Rositca Nikolova</b>	signature