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	**Assoc. Prof.**	**PhD**	**Petar**	**Todorov**	**Todorov**	**UCTM**
№	academic position	scientific degree	name	middle name	last name	workplace

Scientific area:

4	**Natural science, mathematics and informatics**
code	name

Professional area:

4.2	**Chemical science**
code	name

Scientific specialty:

Organic Chemistry

The competition has been announced:

67	**13.08.2021**	**Organic Chemistry**	**Department of chemical sciences**
in SG issue	date	for the needs of the Department	Faculty

The report was written by:

Prof.	**PhD**	**Rositca**	**Dimitrova**	**Nikolova**	**FCF - SU**
academic position	scientific degree	name	middle name	last name	workplace

1. Report for the candidate:

Assoc. Prof.	**PhD**	**Petar**	**Todorov**	**Todorov**
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.
The candidate Assoc. Prof. Dr. Petar Todorov is a co-author of 55 scientific publications, 43 of which have an impact factor or SJR, and are referred to Scopus. Until the submission of the documents, 327 citations were noticed, registered by Scopus, where the h-index of Assoc. Prof. Todorov is 7. Assoc. Prof. Todorov participated in the competition for professor with 26 publications, of which 6 were from Q1, 7 from Q2, 10 from Q3 and 3 from Q4 and two chapters from books. Ten of the presented publications are with IF> 3.0. He is also the author of two electronic textbooks: 1) Petar Todorov Todorov, Daniela Simeonova Tsekova, Development of an electronic form of a bachelor's degree course: Organic Chemistry. Module: laboratory exercises, 2014 ISBN 978-954-465-125-1. 2) Emilia Dimitrova Naidenova, Petar Todorov Todorov, Daniela Simeonova Tsekova, Development of an electronic form of a bachelor's degree course: Organic Chemistry. Module: lectures on Organic Chemistry, 2014. ISBN 978-954-465-126-8. **According to indicator A1.** Candidate Petar Todorov defended his dissertation on "Synthesis, characterization and biological activity of new derivatives of N-phosphonomethylglycine" in 2007, developed in the Department of Organic Chemistry of UCTM. (**50 points**) **According to indicator B4.** 10 scientific publications are presented, of which 5 from Q1 and 1 from Q2, 3 from Q3 and 1 from Q4. According to this indicator, the candidate exceeds twice the minimum requirements of 100 points. (**202 points**) **According to indicators G7 and G8.** There are 15 scientific publications, of which 1 from Q1, 6 from Q2, 6 from Q3 and 2 from Q4 (259 points) and a chapter in a book (15 points). And on this indicator the candidate exceeds the minimum requirements of 200 points. (**274 points**) **According to indicator D11.** The minimum requirements for this indicator for UCTM are 100 points, the candidate has submitted 248 citations, which are five times higher than the requirements. (**496 points**) **According to indicator E13.** Assoc. Prof. Dr. Todorov was a supervisor of a successfully defended doctoral student, thus fulfilling the minimum requirements for this indicator of UCTM. (**50 points**) **According to indicators E14, 15, 16 and 18.** The candidate is the leader of one scientific project and is a member of the working teams of 5 scientific projects, funded by the Research Fund, as well as one international project. And on these indicators it exceeds the minimum requirements. (**114 points**) **According to indicator E20.** Assoc. Prof. Todorov is a co-author of two electronic textbooks. (16.67 points). The analysis of the presented scientific results shows that Assoc. Prof. Dr. Eng. Todorov not only performs, but on most indicators far exceeds the minimum requirements of the competition.

1.2. Relevance of scientific and / or applied research:

A) The research is relevant. Part of the research is pioneering (no results	8 points	**X**

are known on the topic by other authors)		
B) Research is relevant. Results from other authors are known for each of the topics and / or applications studied.	6 points	
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 presented scientific publications are entirely in the field of the scientific specialty in which the competition was announced. The candidate's research is related to targeted synthesis and characterization of biologically active substances, proving their biological activity and establishing a relationship between structure and activity. They cover the synthesis of new peptide analogues of bioactive hemorphins using solid-phase peptide synthesis, new analogues of opioid peptides such as nociceptin and endomorphine, as well as some new hydantoin derivatives. The obtained derivatives were spectrally characterized, satisfactory antinociceptive, anticulvulsive and analgesic activity of some of the newly obtained compounds was established. An additional advantage is the fact that the tested compounds do not show neurotoxicity. Based on docking studies, assumptions have been made about the probable mechanism of action of some peptide derivatives with anticonvulsant action. The research is current and significant, with high potential for application in the field of medicine and high technology. The obtained results can be related to the enrichment of the scientific field with new knowledge.

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
Realistic goals have been set and appropriate methods for their realization have been selected. Planning and implementing them requires good theoretical training and excellent practical skills in various fields of knowledge. The achieved results have a significant scientific contribution and good 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	**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 main contributions of the candidate are related to: - Synthesis, spectral characterization and study of the antinociceptive activity of a series of analogs of VV-hemorphin-5, modified with non-proteinogenic and / or natural amino acids, as well as with an aminophosphonic substituent; - Synthesis, spectral characterization and study of the anticonvulsant activity of a series of analogs of VV-hemorphin-5, containing azobenzene and aminophosphone residue; - Synthesis, spectral characterization and study of the analgesic properties of new opioid peptide analogues such as nociceptin and endomorphine - Synthesis and spectral characterization of new hydantoin derivatives and study of their antitumor activity, as well as preparation of their metal complexes - Exploring the possibilities of application of some hydantoin derivatives as photochromic switches

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	**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.

1.6 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	**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.

1.7. 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.

1.8. 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(80 points)**
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
In conclusion, I believe that Assoc. Prof. Dr. Petar Todorov is a scientist and lecturer with excellent theoretical and experimental training and active teaching and not only meets but also exceeds all the requirements of the Law for the academic position of Professor of Organic Chemistry - scientific achievements and teaching

activity.
Based on the attached documents, I strongly suggest to the members of the esteemed Scientific Jury and to the members of the Scientific Council of the University of Chemical Technology and Metallurgy to award the scientific title " Professor" to Assoc. Prof. Dr. Petar Todorov Todorov in the professional field 4.2. Chemical sciences (Organic chemistry).

26.11.2021	The report was written by:	
date	**Prof. Dr. Rositca Nikolova**	signature