

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	Assistant Professor	PhD	Rumyana	Kirilova	Boeva-Spiridonova	UCTM - Sofia, Department "Cellulose, paper and printing"
№	academic position	scientific degree	name	middle name	last name	workplace

Scientific area:

5.	Technical sciences
code	name

Professional area:

5.10	Chemical technologies
code	name

Scientific specialty:

Technology of printing production

The competition has been announced:

74	21.08.2020	„Cellulose, paper and printing“	Faculty of Chemical Technology
in SG issue	date	for the needs of the Department	Faculty

The report was written by:

Professor	PhD	Ginka	Atanasova	Antova	University of Plovdiv "Paisii Hilendarski", Faculty of Chemistry
academic position	scientific degree	name	middle name	last name	workplace

1. Report for the candidate:

Assistant Professor	PhD	Rumyana	Kirilova	Boeva-Spiridonova
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.

According to indicator **A**, the candidate has a thesis, defended in 2004 for the award of PhD degree. Total number of points on indicator A: **50** points.

Indicator **B4** (habilitation work in the form of not less than 10 publications in journals, referred and indexed in world databases (Web of Science and Scopus)) was completed with **128.4** points, with a minimum of **100** points required.

According to indicators **G7** (publications in journals referred to in Web of Science and Scopus) and **G8** (publications in non-referred journals) a total of **240.1** points were fulfilled, respectively **166.4** points from G7 (14 publications, of which 3 in foreign journals, 11 in Bulgarian journals) and **73.7** points from the G8 (10 publications, of which 7 in Bulgarian journals and 3 scientific papers in proceeding international conferences) while a minimum requirement of G7/8 is **200** points.

Indicators **D12** (31 citations), **D13** (1 citation) and **D14** (13 citations) collected a total of **339** points, which exceeds the required minimum of **50** points.

According to indicators from group **E** (22-25) an issued e-textbook is presented and the points are **20**.

The competition materials presented by Assistant Professor Dr. Rumyana Boeva-Spiridonova show that in quantitative terms (**777.5** points) are above the criteria for the academic position of "Associate Professor" set in the national minimum requirements and the requirements of the rules of UCTM for development of academic staff (**400** points).

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 scientific researches in the applicant's publications submitted for the acquisition of the academic position of "Associate Professor" are entirely in the field of scientific specialty for which the competition was announced and relates mainly to research in the field of color reproduction and the science of color, optimization of the printed image quality and color separation parameters, Improving the accuracy of tone and color reproduction, as well as on research and optimization in the field of prepress, and printing technologies and on obtaining, properties and investigations of materials for printing and packaging production. Undoubtedly, the research is current, and the results obtained can be used to enrich 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
<p>The stated objectives of the research are realistic and are distinguished by both significant scientific and scientific applied and applied interest. The research work of the candidate is focused on the following 8 directions: 1. <i>Investigation of color inconstancy</i>; 2. <i>Optimization of the quality of the printed images and increasing the accuracy of the tone and color reproduction</i>; 3. <i>Optimization of the prepress, plate making technologies and influence on the quality of the printing production</i>; 4. <i>Research in the field of digital printing</i>; 5. <i>Surface finishing and Improvement and barrier properties of the printed production</i>; 6. <i>Obtaining, investigation of properties and testing of materials for printing and packaging production</i>; 7. <i>Investigation of the kinetic regularities in the processes of thermal ageing of the printing materials</i>; 8. <i>Research on the changes in the colorimetric, densitometric and optical characteristics in the ageing process of printed images and materials</i>.</p> <p>Well-formulated research objectives lead to results that are relevant to both science and practice. Of considerable interest for the practice is the proposed for the first time original method for research and determination of the influence of the value of the total amount of inks and the degree of color separation on certain parameters of color separation.</p>

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 candidate's contributions are of scientific and, above all applied interest; they significantly enrich the achievements in the scientific field with new knowledge. Research on color inconsistency and optimization of print image quality are directly used in the production of flexible and cardboard packaging and implementations and production tests are performed according to the methodology developed by the team, which achieves an effect of ink savings between 10-30%. Recommendations are derived from the research, which covers all the latest technologies and helps to achieve maximum print quality by optimizing the flexographic printing process. The developed methodology for research of digital printing can serve the specialists for quality assessment and solving specific technological problems. Kinetic studies have been performed to elucidate the mechanism of the aging process in fibrous materials. It is especially important from these researches that by applying the derived models of aging and the color profiles the original colors of a given work of art can be restored, and it is possible to simulate the reverse process.

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.
From the total of 34 publications with which she participates in the competition for "Associate Professor", Assistant Professor Dr. Boeva-Spiridonova is the first author in 17 publications and the second - in 4, i.e. in 62% of the production the candidate is the lead author. The candidate reported the results of the research conducted at scientific forums (11 oral reports).

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.
Assistant Professor Dr. Boeva-Spiridonova has sufficient experience as a teacher. In recent years she has led 18 lecture courses, 10 of which are for students with a bachelor's degree and 8 for master's students. Defended - a total of 19 graduates. Electronic textbook has been issued - UCTM "Printing Materials" - Sofia, 2020, ISBN 978-954-465-110-7.

1.7. Critical notes:

A) Lack of critical notes	8 points	
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	X
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.
I recommend to Assistant Boeva-Spiridonova to continue to work hard and in-depth in the field of printing technology and wider coverage of research in specialized scientific journals abroad, as of 24 publications in journals referred to in Web of Science and Scopus - 14 are in <i>Bulgarian Chemical Communications</i> . The 14 articles in <i>Bulgarian Chemical Communications</i> are from participation in conferences, as they are in Special issue A (2015) and Special issue L (2017), and also 11 articles of these are published in one booklet (Vol. 49, (L), 2017), which I think is not acceptable.

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 (68points)
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 results achieved in the teaching and research activities are in full compliance with and exceed the national minimum quantitative scientometric criteria for occupying the academic position of "Associate Professor" according to Law for the development of the academic staff in the Republic of Bulgaria and the Rules for implementing the development of the academic staff in the Republic of Bulgaria. I recommend that Chief Assistant Professor Dr. Romyana Kirilova Boeva-Spiridonova be elected as an Associate Professor in the professional area 5.10 Chemical Technologies (Technology of printing production), according to a competition announced by the UCTM in SG Issue 74 of August 21. 2020.

7.12.2020	The report was written by:	
date	Prof. Ginka Antova	signature