

REPORT

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.	PhD	Ivo	Vladimirov	Valchev	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, mechanization and automation of the pulp and paper industry
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The competition has been announced:

101	27.12.2019	„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:

Assoc. Prof.	PhD	Ivo	Vladimirov	Valchev
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 1989, for the award of the PhD degree. Total number of points in indicator A: 50 points.

Indicator B4 (habilitation work in the form of no less than 10 publications in journals, summarized and indexed in world databases (Web of Science and Scopus)) was completed with 159 points, with a minimum of 100 points required.

In terms of indicators G7 (publications in journals referenced in Web of Science and Scopus), G8 (publications in non-refereed journals) and G9 (published chapter of a collective monograph), a total of 652 points were fulfilled, 492 points from G7 (43 publications, 18 of them in foreign journals, 19 in Bulgarian and 6 papers in conference proceeding), 150 points from the G8 (24 publications, 7 of them in Bulgarian journals, 16 scientific papers in proceeding international conferences and 1 in Bulgaria) and 10 points (self-published chapter of the monograph) while the minimum requirement of G7/8/9 is 200 points.

Indicators D12 (157 citations), D13 (13 citations) and D14 (1 citation) totaled 1611 points, far exceeding the required minimum of 100 points.

According to the indicators from group E (from 16 to the end) the candidate has independent leadership of 5 successfully defended PhD students (200 points) and for one PhD student is a supervisor (20 points), i.e. 220 points in total. Assoc. Prof. Valchev was the head of 2 international (80 points) and 18 national projects (360 points) and has 600 150 BGN attracted funds for projects managed by him (120 points), which makes a total of 780 points at a minimum requirement of 150 points.

The documents also have one international patent (Publication number WO / 2019/095024, Publication date 23.05.2019, Method for production of microcrystalline cellulose), which is not included in the group E indicators.

The competition materials presented by Assoc. Prof. Ivo Valchev show a high level of scientific achievements and far exceed the criteria for the academic position of "professor",

set out in the national minimum requirements and requirements of the rules of the UCTM for development of academic staff.

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 "Professor" is entirely in the field of the scientific specialty in which the competition is announced and relates mainly to the study of the kinetics, mechanism and factors of the processes in obtaining, bleaching and hydrolysis of pulp and lignocellulosic raw materials and in the modernization and perfection of the respective technologies with use of ecologically clean methods. Good scientific results have also been obtained from studies on the production of sugars from agricultural lignocellulosic biomass and from fast-growing tree species, as well as on the utilization of residual products from pulp and hydrolytic production. Undoubtedly, the research is current, and the results obtained can be used to enrich 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"
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Objectives must be specified. The type of the set objectives must be justified
The stated objectives of the research are realistic and are distinguished by their considerable scientific as well as with scientific applied and applied interest. The applicant's research is focused on the following 5 areas: 1. Pulp bleaching; 2. Pulp production; 3. Pulp refinement; 4. Production of sugars from lignocellulosic biomass; and 5. Utilization of residual products from pulp and hydrolytic production. Well-formulated research objectives lead to results that are relevant to both science and practice. Of considerable interest in the practice area is the research on the perfection of the pulp bleaching technologies with use of ecologically clean methods, as well as the proposals made to utilization of residual products from pulp and hydrolytic production.

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 applicant's contributions represent a significant scientific and, above all, applied interest, greatly enrich the scientific knowledge with new knowledge. Theoretical studies on the clarification of the mechanism of the ongoing processes in the production, bleaching and hydrolysis of pulp are not only of scientific interest but also of real relevance to the practical area. Based on these, recommendations can be made for the most optimal and efficient way of carrying out the processes. Also of interest is the research on the modernization of some processes in the technology of pulp production and bleaching using ecologically clean methods.

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.

From the total of 77 publications, with which he participates in the competition for "professor", Assoc. Prof. Valchev is the first author in 18 publications and the second - in 30, i.e. in over 62% of the production the candidate is the lead author. His personal involvement is also highlighted in the self-published chapter of the refereed and indexed collective monograph with editor V. I. Popa. The results of the conducted research mainly in international scientific forums (16 in number) that Assoc. Prof. Valtchev reported, leave a very good impression.

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	
Assoc. Prof. Valchev has considerable experience as a teacher. In the last five years he has been a leading lecturer in 9 academic disciplines, 5 of them with students with bachelor's degree and 4 with master's degree. He was the supervisor of 11 PhD students, 6 of whom received a PhD		one of the answers given is marked with the sign "X"

degree and 81 defended their thesis under his leadership. The chapter published in the book covers the training course of "Whitening and refining cellulose". Assoc. Prof. Valchev has made an indisputable contribution to the training of highly qualified specialists in the pulp and paper industry.		
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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.
I have no critical notes; it even made a very good impression on me with the well-prepared and arranged documents and materials for the competition for the academic position of "Professor". I recommend Assoc. Prof. Valchev to continue to work ever so hard and in depth in the field of the chemistry and technology of pulp and paper production.

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 (74 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
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 "Professor" according to the 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 strongly recommend that Assoc. Prof. Ivo Vladimirov Valchev be elected as a professor in the professional area 5.10. Chemical technologies (Technology, mechanization and automation of the pulp and paper industry), according to a competition announced by the UCTM in SG Issue 101 of December 27, 2019.

2. Report for the candidate:

academic position	scientific degree	name	middle name	last name

The structure of the report under the previous point 1 shall be respected.

3. Report for the candidate:

academic position	scientific degree	name	middle name	last name

The structure of the report under the previous point 1 shall be respected.

Candidate ranking (in case of more than one candidate who has received a positive evaluation to occupy the academic position):

Based on the assigned points, the candidates who have received a **positive** evaluation are ranked as follows:

1						
place	academic position	scientific degree	name	middle name	last name	points
2						
place	academic position	scientific degree	name	middle name	last name	points
3						
place	academic position	scientific degree	name	middle name	last name	points

25.03.2020	The report was written by:	
date	Prof. Ginka Antova	signature