

PROF. DR. ASSEN ZLATAROV UNIVERSITY

Department Pedagogy of Teaching

OPINION

on the competition for the academic position of "Associate Professor"

Field of Higher Education: 1. Pedagogical Sciences

Professional Field: 1.3. Pedagogy of Teaching in ..., Scientific specialty

"Methodology of Teaching in Chemistry and Environmental Protection"

Candidate: Senior Assistant, Dr. Eng. Hristivelina Kostadinova Zhecheva, Chemistry Department, Faculty of Natural Sciencies, Prof. Dr. Assen Zlatarov University, Burgas

Author of the opinion: Assoc. Prof. Dr. Hrisula Atanas Nedyalkova, Prof. Dr.

Assen Zlatarov University, Burgas (retired)

(Order No. RD - 341 / 22.10.2024 of the Rector of the Prof. Dr. Assen Zlatarov University)

1. Description of the Competition Procedure

In the announced competition for the academic position of "Associate Professor" in the professional field 1.3. Pedagogy of Education in ..., scientific specialty "Methodology of Education in Chemistry and Environmental Protection", for the needs of the Department Chemistry, announced in the "State Gazette", issue 70/20.08.2024), one candidate participated: Senior Assoc. Prof. Dr. Eng. Hristivelina Kostadinova Zhecheva.

The analysis of the documents of Senior Assoc. Prof. Dr. Eng. Hristivelina Kostadinova Zhecheva, submitted for participation in the competition, show that the procedure for its disclosure and announcement has been complied with and they are in accordance with the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for its implementation, as well as with the Regulations on the terms and conditions for acquiring scientific degrees and for occupying academic positions at the University "Prof. Dr. Assen Zlatarov", Burgas.

2. Scientometric Indicators

According to the Rules on the terms and conditions for acquiring scientific degrees and for occupying academic positions at the Prof. Dr. Assen Zlatarov University, Burgas, the scientometric indicators of the candidate Chief Asst. Dr.

Eng. Hristivelina Kostadinova Zhecheva for occupying the academic position "associate professor" are the following:

The indicator from group "A" - 50 points (fulfilled)

The indicator from group "B" is not required for this position.

The indicator from group C – monograph presented as a habilitation thesis – 100 points (completed)

Total number of points under indicator "D": 401.6, with 400 points required Total number of points under indicator "E": 100, with 100 points required Total number of points under indicator "E": 55, with 50 points required

Total number under all indicators: 706.6 with 700 points required

The scientific production presented by Dr. Hristivelina Kostadinova Zhecheva complies with the scientometric requirements set out in the Regulations on the conditions and procedure for acquiring scientific degrees and for occupying academic positions at the Prof. Dr. Assen Zlatarov University, Burgas.

3. Main Directions of the Candidate's Research Work and Most Important Scientific Contributions

The entire production of Dr. Hristivelina Kostadinova Zhecheva reflects her teaching and scientific interests, which can be combined in the field of chemistry and environmental protection teaching methodology. It includes 1 habilitation thesis (independent monograph), 45 articles and reports published in scientific publications, non-refereed journals with scientific review or published in edited collective volumes, of which 36 are independent and 9 are co-authored, 7 abstracts from participation in scientific conferences, 1 published university textbook or textbook used in the school network, participation in 8 projects, of which 1 is a national educational project.

A total of 12 citations were noted: 1 - in scientific publications, referenced and indexed in world-renowned databases of scientific information, 6 - in monographs and 5 - in non-refereed journals with scientific review.

The monograph "Design of Education – from General Models to Specific Pedagogical Practices in Chemistry" is a work in which the author, based on the results of a theoretical study, preceded by an empirical study on the topic of educational design and the application of specific models in the design of chemistry and environmental education, develops and offers an educational design for planning a chemistry lesson. The framework of this design is a methodological concept, including variants of design technological solutions for chemistry education on the topic "Oxidation-reduction processes in solutions" (HOOS – 10th grade), based on the models of R. Gagné and M. Merrill. The empirical study was conducted in the period 2014-2019. with 322 respondents (including 281 students

from 7-11 grades and 41 intern teachers - students at the Prof. Dr. Assen Zlatarov University).

Along with the scientific and theoretical, I can highlight the scientific and applied contributions of the scientific production of Senior Assistant Professor Dr. Eng. Zhecheva. They are in the direction of adapting to specific pedagogical practice two general models of educational design, in combination with the proposed theoretical framework of educational design. The described possibilities for adapting the theoretical framework to experimental study of chemical objects at the university and at school in a real and virtual environment give a multiplying and promising effect to the candidate's work in this context.

The teaching activity of the candidate in the Department Chemistry at the Faculty of Natural Sciences at the Prof. Dr. Assen Zlatarov University, Burgas started in 2013, currently teaching 17 compulsory and elective subjects.

4. Critical Remarks, Recommendations, Questions

Refining the formulation of the empirical study – in terms of formatting and highlighting its main elements (p. 14...) – would contribute to increasing the value of the monograph.

I also have a recommendation for subsequent research on the issue of the candidate's creative role, taking into account the dynamics in the development of requirements for university pedagogical education.

Question: Given the differences in the age of the two groups of respondents in your empirical study, would you highlight which specific approaches and methods you envisage in the developed design for implementing the construction of an appropriate educational environment in the conditions of university and which ones – in school education, which would facilitate the university lecturer, respectively the teacher of the Higher Education System in their choice of effective methodological solutions (p. 23)?

5. Conclusion

Based on the materials presented in the competition and after the analysis of the scientific production and teaching activity, I believe that the candidate Senior Assistant Professor Dr. Eng. Hristivelina Kostadinova Zhecheva meets the criteria for occupying the academic position of "Associate Professor", defined by the Law on the Development of the Academic Staff in the Republic of Bulgaria and by the Regulations for its implementation, as well as by the Regulations on the terms and procedure for acquiring scientific degrees and for occupying academic positions at the Prof. Dr. Assen Zlatarov University, Burgas.

I propose to the esteemed members of the Scientific Jury to vote positively and to propose to the Faculty Council of the Faculty of Social Sciences at the Prof. Dr. Assen Zlatarov University, Burgas, to elect Senior Assistant Professor Dr. Eng. Hristivelina Kostadinova Zhecheva to the Academic Position of "Associate Professor" in the professional field 1.3. Pedagogy of Teaching in ..., scientific specialty "Methodology of Education in Chemistry and Environmental Protection" for the needs of the Department Chemistry.

Date: 30 December 2024

Member of the Scientific Jury:

Burgas

/Assoc. Prof. Dr. Hrisula Nedyalkova/