**OPINION** 

by

Dr. Senya Terzieva, Professor at the University of Chemical Technology and Metallurgy (scientific degree, name, surname – academic position in a scientific organization) of the materials submitted by Senior Asst. Prof. Dr. Yordanka Petrova Stefanova, for participation in a competition for the academic position "Associate Professor" in Plovdiv University "Paisii Hilendarski"

in field of higher education 1. Pedagogical Sciences professional field 1.3. Pedagogy of teaching in.... scientific specialty "Methodology of teaching Chemistry"

The current competition for "Associate Professor" has been announced in the State Gazette, issue 40 of 14.05.2021 and on the website of Plovdiv University "Paisii Hilendarski"(PU).

The competition is for two places.

# 1. General presentation of the procedure

By order NP P33-3163/13.07.2021 of the Rector of Plovdiv University "Paisii Hilendarski"(PU) to a member of the scientific jury of a competition for the academic position "Associate Professor" in PU (two places), in field of higher education 1. Pedagogical Sciences, professional field Methodology of teaching Chemistry, announced for the needs of the Department of General and Inorganic Chemistry at the Faculty of Chemistry of Plovdiv University.

Two candidates for the two places have submitted documents for participation in the announced competition:

1. Senior Asst. Prof. Dr. Antoaneta Anastasova Angelacheva – Department of General and Inorganic Chemistry with Methodology of teaching Chemistry, Faculty of Chemistry of Plovdiv University

2. Senior Asst. Prof. Dr. Yordanka Petrova Stefanova – Department of General and Inorganic Chemistry with Methodology of teaching Chemistry, Faculty of Chemistry of Plovdiv University

### 2. Scientometric data for Senior Asst. Prof. Dr. Y. Stefanova

The set of materials in electronic form submitted by the Senior Asst. Prof. Dr. Y. Stefanova is in accordance with the requirements of the Regulations for implementation of the Law on the Development of the Academic Staff of the Republic of Bulgaria and the relevant Regulations of Plovdiv University.

The candidate for associate professor has applied a Diploma for Educational and Scientific Degree "Doctor" in the scientific field "Methodology of teaching Chemistry" (Indicator A1 - 50p.), a list of 7 publications on the topic of the dissertation (Indicators from Group G - 40p.), a list and e-copies of 22 scientific publications for participation in the competition.

According to the indicators of the Regulations for implementation of the Law on the Development of the Academic Staff of the Republic of Bulgaria for the scientific field 1. Pedagogical sciences, the publications for participation in the competition are:

- Published monograph, which is presented as the main habilitation work (Indicator B3 100p.).
- Published book, based on the defended dissertation for obtaining educational and scientific degree "doctor" (Indicator G5 75p.).
- 4 scientific articles in a Bulgarian specialized journal, which is referenced and indexed in SCOPUS (from 2006 to 2017) and 2 articles in Bulgarian specialized journals, which are referenced and indexed in the Web of Science (Indicator G5 – 115 p.).
- 14 articles published in unreferenced journals with scientific review and edited collective volumes (Indicator G6 73p.).

A total of 13 citations are presented for the scientific papers of the competition: 2 citations (Indicator D11 – 30p.) of 2 publications, 11 citations (Indicator D13 – 55p.) of 4 publications. The total number of points for all citations is 85 points, which exceeds the minimum national requirements for associate professor (50p.).

# 3. General characteristics of the activities of Senior Asst. Prof. Dr. Y. Stefanova

### Pedagogical activity

Sen. Asst. Prof. Dr. Y. Stefanova reports: academic employment (lectures, seminars, practices) with students from bachelor and master programs in professional field 1.3. Pedagogy of teaching ... (Chemistry); participation in the preparation of curricula for compulsory and elective subjects in the scientific specialty of the competition; 2 published textbooks for students in the scientific specialty of the competition (one is composed independently); supervision of a doctoral student in the period 03.2018 - 03.2021 (the doctoral student was released with the right of defense by order of the Rector of PU 333-876 of 09.03.2021); management of the master's program "Teacher of Chemistry"; other teaching activities.

A positive assessment can be offered for the pedagogical activity of the candidate as a Senior Assistant Professor.

# Scientific and scientific-applied activity

Sen. Asst. Prof. Dr. Y. Stefanova reports: participation in scientific and educational projects -4 university, 4 national and 1 international; only for the university projects has been submitted a document; participation in 9 conferences -2 have been held abroad, the rest - in Bulgaria; some of the reports have been published in conference proceedings.

A positive assessment can be offered for the candidate's scientific activity, but an increase in the frequency of participation in scientific conferences may also be recommended.

#### Contributions and citations

Sen. Asst. Prof. Dr. Y. Stefanova presents a self-assessment of her scientific-applied contributions in four directions. It is noteworthy that the habilitation thesis, the book and three other publications from the list ( $N \ge N \ge 17$ , 19, 20) are not divided into any of the four groups. I would summarize the candidate's scientific-applied contributions in two directions.

### • Formation and development of key competences

This problem area may include the monograph, presented as a habilitation work, as well as 7 articles ( $N \ge N \ge 1$ , 2, 5, 6, 12, 13, 14; one of them is independent) and 7 conference papers ( $N \ge N \ge 7$ , 8, 9, 11, 15, 16, 18). Citations are described as follows: article  $N \ge 2 - 2$  citations in the journal "Chemistry. Natural sciences in education.", which is referenced and indexed in SCOPUS; article  $N \ge 14 - 1$  citation in an international journal, which is referenced and indexed in the Web of Science and 8 citations in other international specialized publications.

## The explanation in the context of teaching chemistry

This problem area may include: the book based on the defended dissertation paper for obtaining the educational and scientific degree "doctor" and 4 publications ( $N \ge N \ge 3$ , 4, 10, 13);  $N \ge 4$  is independently written and in the rest Senior Assistant Professor Dr. Y. Stefanova is the first author;  $N \ge 13$  is published in English in the international specialized journal "Problems of education in the 21<sup>st</sup> century".

It is noteworthy that the book based on the defended dissertation paper for obtaining the educational and scientific degree "doctor" was published in 2021 - 14 years after the defense of the dissertation (2007). Article No10 from the list for participation in the competition is on the topic of the dissertation paper was published before the defense – in 2005.

The overall impression of the presented annotations is the insufficient informativeness of their text. Emphasis is placed on the relevance of the topics and the contributions (innovation, new models, and other products) are not stated sufficiently. The monograph and the book based

on the dissertation are not provided, and the annotations are placed outside the contribution section.

## CONCLUSION

The documents and materials submitted by Sen. Asst. Prof. Dr. Yordanka Petrova Stefanova meet the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria and the relevant Regulations of Plovdiv University "Paisii Hilendarski". The candidate in the competition has submitted a sufficient number of scientific papers published after the materials used for the defense of Educational and Scientific Degree "Doctor" and a sufficient number of citations.

After getting acquainted with the materials and scientific papers presented in the competition and after analyzing their content and contributions, I give my **positive** assessment and recommend to the Scientific Jury to prepare a report-proposal to the Faculty Council of the Faculty of Chemistry at Plovdiv University "Paisii Hilendarski" for election of Senior Assistant Professor Dr. Yordanka Petrova Stefanova for the academic position "associate professor" at Plovdiv University "Paisii Hilendarski" in professional field 1.3. Pedagogy of teaching in..., scientific specialty Methodology of teaching Chemistry.

10 September 2021

**Opinion stated by:** Prof. Dr. Senya Terzieva