OPINION

By Prof. Stefan Tsakovski, PhD

Faculty of Chemistry and Pharmacy – Sofia University "St. Kliment Ohridski", Chair of the Scientific Jury appointed with Order № RD 38-15/16.01.2023 of the Rector of Sofia University "St. Kliment Ohridski"

Regarding the call for the academic position "Associate Professor",

Area of Higher Education 4. Natural sciences, Mathematics and Informatics,

Professional Field 4.2. Chemical sciences (Analytical chemistry - Archaeometry)

for the needs of the Department of Analytical Chemistry,

Faculty of Chemistry and Pharmacy – Sofia University "St. Kliment Ohridski",

published in the State Gazette issue 100 dated 16 December 2022

Eligibility materials

In the call for the academic position "Associate Professor", there is a single applicant – Head Assistant Prof. Dr. Boika Kuncheva Zlateva. The set of materials provided by the applicant is in accordance with the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Regulations on its implementation, and the Internal Rules of Sofia University "St. Kliment Ohridski".

General presentation of the career development of the applicant

Boika Zlateva graduated from the Faculty of Chemistry, Sofia University "St. Kliment Ohridski" in 1997. Her career started at the Ministry of Agriculture, Sofia (1997-2001) and since 2002 she has continued his scientific career at Sofia University "St. Kliment Ohrdski" where she successively held the positions of chemist, chief specialist, assistant prof. and head assistant prof.; in 2003 she acquired the educational and scientific degree "Doctor of philosophy". Since August, 2019 Dr. Zlateva has had a parallel position as a Researcher second level (R2) at the Faculty of History at Sofia University "St. Kliment Ohridski", Department Archaeometry.

Evaluation of the applicant's research profile

Evaluation of the scientific metrics

Head Assist. Prof. Boika Zlateva participates in the current procedure for the academic position "Associate Professor" with 18 publications (incl. 3 book chapters), which have not been used in the previous scientific advancement calls of the applicant. They are distributed among the criteria of the Regulations for implementation of ADASRB in the following way -5 in "Criterion B" (4 papers and 1 book chapter) and the rest 13 publications - in "Criterion Γ ". The majority of publications are in Q1 and Q2 journals, therefore, I conclude that the results are published in

recognisable and well-established journals, which is a positive indication about the quality of the performed research. It is necessary to note that the applicant has published in well-recognised scientific journals in the field of Archaeometry such as Mediterranean Archaeology and Archaeometry and Science&Technology of Archaeological Research.

According to data submitted by the applicant, her scientific publications have 75 citations, 55 of them after acquiring PhD. Hirsh index of her scientific publications excluding citations from all authors is 5 according to the Scopus database. These parameters are indication of scientific recognition of the applicant.

An essential component of the scientific and teaching work is the applicant's participation in research projects. Dr. Zlateva has demonstrated intense project activity – according to the provided data she has been a participant in five projects. It should be stressed that this number does not include the participations in projects funded by the National Science Fund of Bulgaria. I consider the latter as an omission in the preparation of data provided by the applicant. The results of the research carried out with the participation of the applicant have been presented at 63 national and international scientific forums.

Evaluation of the scientific contributions

On the basis of the presented contributions' report, the habilitation thesis as well as the publications, I estimate the scientific contributions of Head Assist. Prof. Dr. Zlateva as interdisciplinary and applied scientific. The interdisciplinary profile of her investigations is a basis for active cooperation with a number of research groups in Bulgaria and abroad.

Dr. Zlateva's scientific research is in the field of Archaeometry and environmental protection (articles 8 and 23). I accept the scientific contributions in the author's reference report as original and correctly formulated, further summarizing them as follows:

- 1. Archaeometric studies of three types of finds (metal and metal alloys; glass, mosaics, mortar and organic remains).
- 2. Study of the toxic effect of Roundup herbicide.

For the participation in the current procedure Head Assist. Prof. Dr. Zlateva has also presented a habilitation thesis, which includes an archeometric analysis of metals in belt accessories and coin treasures from different historical eras.

Evaluation of the applicant's teaching activities

The main part of the teaching activities of Dr. Zlateva is concentrated in Analytical Chemistry and Instrumental Methods of Analysis courses, which are basic for the Chair of Analytical Chemistry. It is also necessary to stress the participation of the applicant in the Master programme in Archaeometry, which is carried in cooperation with Faculty of History, Faculty of Biology, and Faculty of Geology and Geography.

Under the supervision of Dr. Zlateva, four students' theses have been defended.

Fulfilment of the minimal national requirements and the recommended specific criteria of the Faculty of Chemistry and Pharmacy – Sofia University "St. Kliment Ohridski"

The comparative analysis on the fulfilment of the minimal national requirements for holding the academic position "Associate Professor", as well as the specific criteria of the Faculty of Chemistry and Pharmacy – Sofia University "St. Kliment Ohridski" indicated that the applicant fulfils and exceeds the above requirements.

Conclusion

The materials submitted for participation in this call meet and exceed the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations on its implementation, the Internal Rules of Sofia University "St. Kliment Ohridski", as well as the recommended specific criteria of the Faculty of Chemistry and Pharmacy – Sofia University "St. Kliment Ohridski".

The materials of the call, as well as my personal impressions from Dr. Boika Zlateva, give me a reason to conclude that he is a well-established researcher with high academic standards and significant research activities, which academic position would contribute for the development of the important interdisciplinary field of Archaeometry.

Based on what has been previously said, I give a positive assessment and recommend to the respected members of the Scientific Jury to vote for the appointment of Head Assist. Prof. Dr. Boika Kuncheva Zlateva, as an Associate Professor in the Area of Higher Education 4. Natural sciences, Mathematics and Informatics, Professional Field 4.2. Chemical Sciences (Archaeometry) for the needs of the Department of Analytical Chemistry, Faculty of Chemistry and Pharmacy, Sofia University "St. Kliment Ohridski".

11.04.2023 Chair of the Scientific Jury:

/Prof. Stefan Tsakovski, PhD/