

OPINION

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Regarding: Competition for taking up the academic position "Associate Professor",
field of higher education 4. Natural sciences, mathematics and informatics;
professional field 4.2 Chemical Sciences, "Inorganic Chemistry"
for the needs of the Faculty of Chemistry and Pharmacy, Sofia University "St.
Kliment Ohridski", promulgated in SG 21/15.03.2022

Information about the procedure

I present this opinion as a member of the scientific jury, according to the order of the Rector of Sofia University "St. Kliment Ohridski" (No. ПД 38-175/01.04.2022) and the decision of the scientific jury from 30.05.2022. The only candidate in the competition is Ch. Asst. Nina Veselinova Kaneva-Dobrevska, PhD.

Brief information about the candidate

Nina Kaneva was born in 1988. In 2011, she acquired a bachelor's degree in Computer Chemistry and a Teacher in Chemistry and Environmental Protection. Since 2012 she has a master's degree in Medicinal Chemistry, Sofia University "St. Kliment Ohridski".

In the period 2013 - 2016, she was a doctoral student in Inorganic Chemistry at Sofia University and successfully defended a dissertation on the topic: "Synthesis and characterization of pure and modified nanosized ZnO for photocatalytic applications".

According to the documents submitted for the competition, Ch. Asst. Nina Kaneva has 7 years of teaching experience. Since 2015, she has been an assistant, and after that (2016) a chief assistant at the Department of Inorganic Chemistry, Faculty of Chemistry and Pharmacy of Sofia University "St. Kliment Ohridski". At the same time, from 2015 to 2021, N. Kaneva taught Chemistry at the Sofia high school "Acad. L. Chakalov."

Teaching activities

Ch. Asst. Nina Kaneva has developed and conducted exercises and seminars in: General Chemistry, General and Inorganic Chemistry, Inorganic Chemistry, General Chemistry and Stoichiometric Calculations for the majors: "Chemistry", "Chemistry and English", "Chemistry and Informatics", "Pharmacy", Engineering Chemistry and Modern Materials", "Ecochemistry", "Nuclear Chemistry", "Biology and Chemistry", "Molecular Biology", "Biology", "Biomanagement and Sustainable Development", "Ecology and Environmental

Protection", "Biotechnologies". The teaching work-load of the candidate at Sofia University for the last four years is a total of 1255 hours.

Dr. Nina Kaneva supervised 11 theoretical and 2 experimental course works for the speciality "Chemistry" on "Practice in Inorganic Chemistry". She also managed the scientific activity of two first-year students in Chemistry.

Scientific research activity

In the competition for the academic position "Associate Professor" Nina Kaneva participates with 18 scholarly publications in specialized scientific journals and one chapter of a book that could rather be classified as a "conference paper" (9 pages). All research papers are in the scientific field of the announced competition, and in 14 of them the candidate is the first author.

Proof of the value of Nina Kaneva's scientific output are the citations of her scientific works - a total of 177 citations of the publications presented for the competition were noticed. According to Scopus, the scientific publications of N. Kaneva for the period 2009-2021 have been cited 612 times with an h-index of 14.

As an additional scholarly activity of Dr. N. Kaneva should be noted participation in 9 important scientific projects.

The research activity of Ch. Asst. Nina Kaneva is mainly focused on heterogeneous photocatalysis, and her contributions can be grouped mainly in two directions:

- Synthesis, characterization and photocatalytic properties of pure ZnO
- Synthesis, characterization and photocatalytic properties of modified ZnO (with rare earth elements, Au, Ni and Fe).

Nanosized ZnO photocatalysts were synthesized by various sol-gel methods and chemical deposition method. Mechanically and thermally activated ZnO powders were also used as catalysts. The resulting samples have been effectively applied to the mineralization of model pollutants such as the dyes Malachite Green, Reactive Black 5, Orange II, Brilliant Green, as well as the drugs Paracetamol and Chloramphenicol.

Compliance with minimum national requirements for the academic position "Associate Professor"

The information about the fulfilment of the minimum national requirements for the academic position "Associate Professor" in Professional Area 4.2 is shown in the following table:

Indicator	Content	Minimum national requirements	Recommended requirements of Sofia University	Nina Kaneva
A1: Dissertation for the award of educational and scientific degree "Doctor"	"Synthesis and characterization of pure and modified nanosized ZnO for photocatalytic applications"	50 points	50 points	50 points

B3: Habilitation work - scientific publications	Topic: Removal of organic pollutant from water by heterogenous photocatalysis 6 papers, of which: 1 paper with Q1 2 papers with Q2 1 paper with Q3 2 papers with Q4	100 points	100 points	104 points
Г7: Scientific publications	12 papers, of which: 3 papers with Q1 4 papers with Q2 3 papers with Q3 2 papers with Q4	200 points	220 points	224 points
Д11: Citations in scientific journals, monographs and collective volumes and patents, referenced and indexed in world-renowned databases of scientific information (Web of Science and Scopus)	47 citations	50 points	70 points	94 points
Ж 21: h-index 120 p. Ж 25: participation in research projects 45 p.		-	70 points	165 points

The comparison between the minimum national requirements, the recommended requirements of Sofia University, and those achieved by Nina Kaneva shows that the presented scholarly production covers and in many respects exceeds the requirements for the academic position of "Associate Professor".

CONCLUSION

The review and analysis of the presented by Ch. Asst. Nina Kaneva, PhD, documents and materials on the announced competition show that they meet all requirements for taking up the academic position of "Associate Professor".

Based on the above, I give my positive evaluation and propose to the members of the scientific jury to award Nina Veselinova Kaneva-Dobrevska the academic position "Associate Professor" in professional field 4.2 Chemical Sciences, for the needs of the Faculty of Chemistry and Pharmacy, Sofia University "St. Kliment Ohridski".

10.07.2022

Prof. Angelina Stoyanova, PhD