

REVIEWER STATEMENT

from Assoc. Prof. Dr. Diana Cheshmedzhieva

Faculty of Chemistry and Pharmacy, Sofia University "St. Kliment Ohridski"
on an open procedure for the academic position "Associate Professor" in professional field 4.2
Chemical Sciences, scientific specialty "Theoretical Chemistry"
for the needs of the Laboratory "Structural Organic Analysis" at the Institute of Organic
Chemistry with Center of Phytochemistry, Bulgarian Academy of Sciences,
announced in Bulgarian State Gazette No. 79 from 08.10.2019

Head Assistant professor Dr. Nadezhda Markova is the only candidate for the Associate Professor position, announced in the Bulgarian State Gazette 79/08.10.2019. For the competition the candidate has provided a full set of documents in accordance to the Law for the Development of the Academic Staff in the Republic of Bulgaria, The Regulations of BAS for the Implementation of this Law and the Regulations of IOCCP-BAS.

Nadezhda Vasileva Markova graduated from "Konstantin Preslavski" University of Shumen in 2000. In 2005 she defended her Ph.D. thesis under the supervision of Assoc. Prof. Dr. Venelin Enchev IOCCP-BAS, which satisfies the requirements of **Indicator A** from the minimum national requirements for the academic position "Associate Professor". Since 2006, Dr. Markova has been appointed Head Assistant Professor at IOCCP-BAS, where she has worked until now.

Indicator C "habilitation thesis" is accomplished with the equivalent 5 publications (four in quartile Q1 and one in quartile Q2) and a habilitation thesis. In 4 of the publications, Dr. Markova is the first author.

According to **Indicator D**, 13 publications were presented by the candidate (1 in quartile Q1, 5 in quartile Q2, 4 in quartile Q3 and 3 in quartile Q4). A total of 221 points, which satisfies the additional criteria set out in the regulations of IOCCP-BAS.

Indicator E was fulfilled (198 points) with 99 citations on articles numbered 4, 10 and 11 of the candidate's general list of publications.

Dr. Nadezhda Markova is a co-author of a total of 34 scientific papers (according to the reference provided by the candidate) with a h-index of 7, and 261 citations (with excluded self-citations of all authors according to Scopus – February 2020).

The participation of the candidate in national and international conferences is impressive. Dr. Markova's scientific results are presented at several international and national forums in the form of 18 oral presentations and 40 posters.

The applicant was the manager of 3 projects (one of them international) and participated in 10 projects, three of which are international. These data are not required for the position of Associate Professor. There is also a two-week international specialization mentioned in the documents presented.

Dr. Markova's scientific interests are in the field of application of quantum-chemical computations for determining the molecular structure of organic compounds, as well as modeling the reaction mechanisms of organic processes, clarifying the role of water as a medium and catalyst in tautomeric reactions and modeling of processes of formation of prebiotic compounds.

The application for the academic position "Associate Professor" would only win if the candidate's personal contributions were clearly defined in the habilitation thesis (or elsewhere).

Dr. Nadezhda Vassileva was a mentor to students from Sofia University, Medical University, Sofia and the University of Chemical Technology and Metallurgy – Sofia within the framework of the “Student Practices -Phase I” project of the Ministry of Education and Science. She was a supervisor of two diploma works, as well as participated in the preparation and advanced training of two PhD students - one from Southwestern University "Neofit Rilski" and the other from Agricultural University - Plovdiv.

Conclusion

Scientific publications, presented by the candidate Dr. Markova, fall into the scope of the announced procedure. The candidate is proven scientist in her scientific field. The results obtained provide a basis for further research in the field of theoretical modeling of systems of interest to chemistry and biology. The materials presented by Dr. Nadezhda Vassileva Markova fully comply with all the requirements for the academic position of "Associate Professor", according to the Law for the Development of the Academic Staff in the Republic of Bulgaria, The Regulations of BAS for the Implementation of this Law and the Regulations of IOCCP-BAS.

In connection with the above, I recommend Head Assistant Professor Dr. Nadezhda Vasileva Markova to be appointed to the academic position of Associate Professor in the professional field 4.2 Chemical Sciences, scientific specialty "Theoretical Chemistry".

14. 02. 2020 г.

Reviewer:.....
Assoc. Prof. Dr. Diana Cheshmedzhieva