

OPINION

On the Competition for Academic Position "Associate Professor" at the Stephan Angeloff Institute of Microbiology, BAS, field of higher education 4.3. Biological sciences, scientific specialty Microbiology - Extremophilic Microorganisms, State Gazette 29 of 9 April, 2021

Prepared by Assoc. Prof. Stoyanka Rangelova Stoitsova, PhD, member of the Scientific Jury according to Order № I 74/07.06.2021 of the Director of the Stephan Angeloff Institute of Microbiology, BAS

Documents for the competition have been submitted by one candidate, Nadya Stoycheva Radchenkova, PhD

Carrier development of the candidate

Dr Radchenkova started her carrier in 1995 as a laboratory technician at the Institute of Microbiology while studying at the Higher Institute of Chemical Technology and Metallurgy. She completed her studies in 1999 with MS degree in Information and Management Technologies. Further work of N. Radchenkova at the Institute of Microbiology was as specialist (since 2003 - at the Department of Extremophilic Microorganisms) and Research Assistant. In 2014 she completed her PhD studies and was promoted as Senior Research Assistant. This carrier development is in support of the fact that the candidate has undergone a consistent professional and scientific development, with acquisition of knowledge and skills for complex investigations on extremophilic organisms.

Both the CV, and the whole set of documents, confirm that the application of Dr Radchenkova is completely in accordance with the objectives of the competition.

Main directions in the candidate's research

As may be seen from the application documentation, the research activities of Dr Radchenkova may be divided into three basic directions:

The first of them, included by the candidate to Group "B" criteria, or "habilitation work", is related with the isolation, characterization and the possible practical applications of exopolymers, mainly exopolysaccharides, produced by halophilic or thermophilic bacteria from Bulgarian habitats. Among the 10 publications included in this direction, the candidate is the leading author of 5, which is in support of her personal contribution, interest and expertise in the field.

In her work on other projects of the Laboratory of Extremophilic Microorganisms, Dr Radchenkova has as well contributed to the studies on the biodiversity of microorganisms from extreme habitats and also to the isolation and characterization of extremophilic enzymes.

The publications included for the competition, a significant part of which have been published in high-impact scientific journals, underline the good professional level of the candidate, and are as well in agreement with the objectives of the competition.

Research publications and fulfillment of the criteria for academic position

"Associate Professor"

- *Requirements in accordance to the Law for Development of the Academic Staff (LDAS)*

Criterion "A" - Abstract is submitted of the PhD Thesis on "**Production and Characterisation of exopolysaccharide(s) synthesized by thermophilic strain *Aeribacillus pallidus* 418**".

"B" Group criteria: The candidate presented 10 research papers (2 with Q1, 2 with Q2, 1 with SJR and 5 others). The summary credits on this criterion is 100, completely in accordance with the Regulations for the LDAS application in the Republic of Bulgaria.

"G" Group criteria: 11 papers are included (6 with Q1, 1 with Q2, 4 with Q3, and 2 book chapters). According to the credit system for Life Sciences, these publications account to 260 credits thus substantially exceeding the requirements of the National Regulations (200 credits) and these of BAS and the Institute of Microbiology (220 credits).

"D" Group criteria: The candidate has submitted a list of 320 citations, available in Web of Science or Scopus which account for 640 credits thus substantially exceeding the requirements of the Regulations for the LDAS.

"E" Group criteria are not a requirement for the academic position "Associate Professor". Nevertheless the list of projects (3 national and 6 international) that the candidate participated in should be considered. This illustrates Dr Radchenkova as an industrious and skillful investigator and also as a good team-worker.

- *Additional requirements* according to the Regulations for the acquisition of scientific degrees and academic positions of the Stephan Angeloff Institute of Microbiology.

After the completion of her PhD Thesis Dr Radchenkova has been the co-author of 16 research papers in IF-journals, 2 book chapters and 2 full-text publications of reports presented at international scientific meetings. Thus the requirement for 20 publications not included in the PhD thesis is completed. In 6 of these publications the candidate is the leading author (requirement: 5). The total number of citations is 330 (minimum requirement: 100). The IF of the publications included in this competition is 30.732, and of all her publications - 35.035 (minimum requirement: 20). The minimum requirement for project participation (3) is also exceeded (3 national and 6 international projects).

Summing up, the scientific metrics of Dr Radchenkova exceed substantially both the national and the additional requirements for academic position "Associate Professor".

Conclusion

Being in accordance, or exceeding, the scientific metrics and other credits, required by LDAS, is definitely decisive for the decision on a "Associate Professor" competition, and, no doubt, the candidate has fulfilled these demands. Well, LDAS includes the so-called "minimal criteria". Beyond the digits and the values, it has to be underlined that the work of Dr Radchenkova, and the team of Laboratory of Extremophilic Microorganisms, is outlined for its strive for deep, detailed and complex scientific solutions on the objectives of each single publication. In support of this is the publishing in high-impact journals (8 out of 23 papers within this competition are Q1), and also the international collaborations of the team. The extremophilic microorganisms are a source of scientific novelty in combination with practical applications. I believe that the good practice and traditions of this laboratory headed by Prof. Kambourova will find good continuity and development with researchers like Dr Radchenkova.

I strongly support Dr Nadya Radchenkova's application to this competition. I would like to recommend to the Scientific Jury to propose to the Scientific Council of the Institute of Microbiology the appointment of Dr Nadya Radchenkova as "Associate Professor" in 4.3. Biological sciences, scientific specialty Microbiology - Extremophilic Microorganisms.

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Sofia

/Assoc.Prof. S. Stoitsova, PhD/