

OPINION

by Prof. Dr. Penka Angelova Moncheva, Sofia University "St. Kliment Ohridski" - Faculty of Biology on the materials submitted for participation in a competition for the academic position of "professor" at Institute of Molecular Biology "Acad. Rumen Tsanev" - Bulgarian Academy of Sciences in field of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.3. Biological Sciences, scientific specialty Molecular Genetics

1. General presentation of the materials for the competition

By order № 85-OB / 22.04.2026 and on the basis of orders №53-OB / 10.03.26. and №81-OB/17.04.26 of the Director of the Institute of Molecular Biology - BAS and the minutes of the scientific jury meeting №1/22.04.26 I am appointed as a member of the scientific jury to prepare an opinion on the materials submitted for participation in a competition for the academic position of "professor" in the professional field 4.3. Biological Sciences, scientific specialty "Molecular Genetics", announced in the State Gazette, № 16 /10.02.2026 with a sole candidate Assoc. Prof. Dr. Galina Simeonova Radeva.

The submitted set of documents by Dr. Radeva has been prepared very precisely, in accordance with the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADASRB) and the Regulations for its implementation, as well as the Regulations of the Institute of Molecular Biology at the BAS, containing all the required documents that describe in detail her academic activity and allow to be assessed objectively.

2. Biographical data of the candidate

Assoc. Prof. Dr. Galina Radeva graduated from the Faculty of Biology of Sofia University "St. Kl. Ohridski" with a Master's degree in Molecular and Functional Biology in 1984. In 1995, she obtained the scientific degree "PhD" by defending a dissertation on the topic "Molecular-genetic characterization of bacteria of the genus *Rhizobium* and construction of strains with increased symbiotic activity". Since 1984, Dr. Radeva has worked at the Institute of Molecular Biology, successively as a biologist, Second- and First-degree Research Fellow, and since 2010 and currently as an associate professor. Her work experience exceeds 41 years.

3. Compliance with the minimum national requirements of the ADASRB and the additional requirements of the Institute of Molecular Biology for the academic position of "professor".

The report on the fulfillment of the minimum national requirements for holding the academic position of "professor", as well as the additional requirements of the Institute of Molecular Biology shows that Assoc. Prof. Radeva fulfills and significantly exceeds the criteria for the individual indicators, forming a total of **1249 points** out of the required **600 (640 points, according to the Regulations of the Institute of Molecular Biology)** as follows:

Indicator	Content	Minimum points required (ADASRB + Additional)	fulfillment by the candidate, points
A1	Dissertation for the "doctor	50	50
B4	6 publications - Q1-3, Q2 – 1, Q3 -2	100	125
Г7	14 publications – Q1 – 2, Q2 - 6, Q3 – 2' Q4 – 4	-	248
Г8	Book chapter	-	15
	Total points of „G“	200+20	263
Д11	210 citations x 2 points		420
	Total p[oints of „D“	100 +20	420
E13	2 doctoral students – 50/n	-	50
E14	Participation in 7 national scientific projects (x 10 points)	-	70
E15	Participation in 1 b international project (20 points)	-	20
E16	Management of 5 national projects (5 x 20 points.)	-	100
E17	Management of 2 international projects (2x50 points)	-	100
E18	Fund received for 4 projects (1 p./5000 BGN.)	-	66
	Total points of „E“	150	406
	Total points	600+40	1279

4. Evaluation of the candidate's research and project activities

The scientific output of Assoc. Prof. Dr. Galina Radeva includes a total of **61** scientific publications, **46** of which have been published in indexed and refereed journals in world-renowned databases of scientific information (WoS, Scopus) with a total **IF= 44.526**. Six publications have been printed in full text in proceedings of scientific forums (national and international), eight in non-refereed journals, one chapter of a book, as well as three deposited sequences in GENBANK.

In the competition for the academic position of "professor", Dr. Radeva participated with 22 papers, of which 21 publications (**IF=24.806; SJR=9.276**) in indexed and refereed journals in world-renowned databases of scientific

information and one chapter of a book, all of which are outside those submitted for the degree of "doctor" and awarding the academic position of "associate professor".

After joining the section "Regulation of Gene Activity" in 2015, Assoc. Prof. Radeva formed a research group that continues and develops scientific activity in the field of environmental microbiology with the application of molecular genetic approaches. The focus of the research is on the microbial diversity, functions and ecology of microorganisms in soils and agricultural lands influenced by human activity. Scientific results of a fundamental, scientific, scientifically applied and methodological nature have been achieved. I fully accept the habitation report for the scientific contributions of Dr. Radeva's research. In general, they are grouped into three main areas:

- Taxonomic diversity and composition of microbial communities in anthropogenically influenced soils and agricultural lands, reflected in 4 publications (B4_1, B4_2, B4_3, B4_6). The object of research in them are soils influenced by the mining and metallurgical industry, tailings ponds. The taxonomic composition of the main groups in microbial communities – bacteria, archaea and fungi – was studied using complex and complementary approaches. A molecular genetic approach was applied - construction of 16S rDNA clone libraries, as well as metagenomic analysis;
- Functional potential of soil microorganisms in anthropogenically influenced soils and agricultural lands, contained in 7 publications (B4_3, B4_4, G7_1, G7_2, G7_5, G7_6, and G8_1). Based on bioinformatic processing of metagenomic data from 16S rRNA gene sequences, functional pathways of bacterial communities related to resistance to heavy metals were predicted. Functional profiling of cultivable bacterial communities was achieved in the studied soils, the role of basic soil enzymes as indicators of soil pollution with heavy metals has been proven;
- Influence of abiotic factors on the diversity of microbial communities, contained in results from 12 publications (B4_5, G7_3, G7_4, G7_5, G7_13, G7_14, G7_7, G7_8, G7_9, G7_10, G7_11, and G7_12).

A large part of Dr. Radeva's scientific articles have been published in prestigious journals (e.g. **Q1** -*Water, Air & Soil Pollution, Archaea, Toxics, Ecotoxicology and Environmental Safety, Environmental Science and Pollution Research; Q2*- *Plant, Soil and Environment, Archives of Microbiology*, etc.). The scientific results of her research activities have been noticed and evaluated by the scientific community, through the citations received (only 210 citations are presented).

After her habilitation as Associate Professor, Dr. Radeva has participated in 49 scientific forums (national and international) - with reports (16), oral (5) and poster (25) communications, lectures (3).

In the presented habilitation report and based on her achievements in the field of environmental microbiology, Dr. Radeva has outlined the framework of her future research, which will also cover other ecosystems, such as forests. It is planned to introduce new technologies into the research, which will deepen the analysis of the results obtained and the capacity of the research group.

Dr. Radeva has carried out scientific supervision of two doctoral students who successfully defended doctoral dissertations in the field of environmental microbiology.

She has carried out significant project activity - leadership and participation in national projects (5 and 7 projects, respectively), leadership and participation in international projects (2 and 1 project, respectively), as a result of which funds have been attracted for the basic organization.

5. Educational and pedagogical activity

Dr. Radeva has teaching experience, having conducted practical exercises in the discipline Introduction to Molecular Biology and Computational Molecular Biology in the Master's Degree Program at Sofia University "St. Kliment Ohridski".

She has provided a scientific supervision of 10 students successfully defended diploma theses, of which two in the Bachelor's Degree and 8 in the Master's Degree Program at the Faculty of Biology of Sofia University.

6. Membership in scientific organizations and administrative activity

Dr. Radeva is a member of The Union of Scientists in Bulgaria and The Bulgarian Peptide Society. She has administrative and organizational activity - member and chairman of The Scientific council of the Institute of Molecular Biology - BAS and is Responsible for supervision and safety of work with GMOs.

CONCLUSION

The documents and materials submitted by Dr. Galina Radeva for participation in the competition for the academic position of "professor" meet and fulfill all the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation, as well as the Regulations of the Institute of Molecular Biology – BAS. She has presented a sufficient number of scientific works and convincing evidence of her overall academic activity. The results of her research activity have a contributing nature with scientific, applied-science and methodological significance and have been evaluated by the scientific community through the citations received. Dr. Radeva has significant project and administrative activity. All this allows me to confirm my positive assessment, given

by me in the analysis of all aspects of her academic activity and to confidently recommend to the respected scientific jury, formed and structured by orders No. 53-OB/10.03.26 and No. 85-OB/22.04.26 of the Director of the Institute of Molecular Biology at the BAS and to the members of the Scientific Council, to evaluate the candidacy of assoc. prof. Dr. Galina Simeonova Radeva and to vote positively for the holding of the academic position "professor" in the field of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.3. Biological Sciences (Molecular genetics).

10.06. 2026

Sofia

Reviewer:

(prof. Dr. Penka Moncheva)