

OPINION

from Assoc. Prof. Dr. Roumiana Vassilevska-Ivanova
Member of a Scientific Jury, approved by Order RD 10-02/23.04.2021
of the Director of the Institute of Plant Physiology and Genetics (IPPG)
Bulgarian Academy of Sciences (BAS)

Concerning competition for the academic position “Associate Professor” in Biochemistry, in scientific area 4. Natural Sciences, Mathematics and Informatics, professional field 4.3. Biological Sciences, announced in SG, issue 17, dated February 26, 2021.

Only one candidate – Dr. **Kiril Mihailov Mishev**, has submitted documents for participation in the selection procedure. The applicant presents a reference for fulfilment of the minimum national requirements laid down in art. 2, para. 2 and para. 3, and the requirements under art. 2, para. 5, respectively, to which the necessary evidences are attached. The requirements are determined in the Law on the Academic Staff Development in the Republic of Bulgaria and in the Regulations for its implementation. The documents of the candidate are also in accordance with the requirements of the Regulations for the specific conditions and the procedures for acquiring scientific degrees and for holding academic positions in IPPG.

Dr. Kiril Mihailov Mishev graduated from the Faculty of Biology of Sofia University “St. Kliment Ohridski”. In 2003, he obtained a Bachelor's degree in Molecular Biology, and in 2004 he graduated with a Master's degree in Plant Physiology. He was awarded the educational and scientific degree "Doctor" in the scientific specialty "Plant Physiology" in 2010. Since 2008, Dr. Mishev has a permanent employment contract at IPPG as a Research Associate II degree in the specialty "Biochemistry". Until 2011, he was a Senior Assistant in the same specialty in the laboratory "Regulation of gene expression".

Professional qualifications

- 2014-2015 - postdoctoral specialization, funded by BSF SE in the Department of Systems Plant Biology, Flemish Institute of Biotechnology, Ghent, Belgium;

- 2010-2012 - post-doctoral specialization, funded by the Flemish Agency for Innovation through Science and Technology (IWT) in the Department of Systems Plant Biology, Flemish Institute of Biotechnology, Ghent, Belgium;
- 2007 - PhD, funded by the German Academic Exchange Service (DAAD) at the Institute of Plant Physiology at Martin Luther University, Halle-Wittenberg, Halle, Germany;
- a number of short-term working visits and specializations in the field of LC-MS/MS analyses.

Academic and scientific activity

Dr. Kiril Mihailov Mishev is the author and co-author of papers with fundamental and applied contributions in the field of plant physiology, biochemistry and molecular biology. So far, Dr. Kiril Mishev has published 24 scientific papers, of which only those published after obtaining the educational and scientific degree "Doctor" in 2010 will be considered for review. Eight publications from the attached general list of publications will not be reviewed.

<i>Type of scientific publication and activity</i>	<i>Total number</i>	<i>First author</i>	<i>Co-author</i>
Total number of publications (journals, scientific collections)	16	4	12
Participation in scientific proceeding in Bulgarian language			
Publications in Bulgarian journals	0	0	0
Publications in international journals	16	4	12
• with IF	16		
Participation in Bulgarian congresses and symposia	4	2	2
Participation in international congresses	8	6	2
Citations (WoS and Scopus)	285		
Research Projects	14		
• in Bulgaria	8		
• abroad	6		

In the list of submitted publications with a total number of 16, those with quartile Q1 are 14, and 2 are with quartile Q2. Dr. Kiril Mishev is the leader of two international projects and a member of the research teams in twelve projects.

For the competition, the candidate has submitted an author's reference of scientific articles published in journals with impact factor as follows:

<i>Publications in Journals with IF</i>	<i>IF</i>	<i>Number of authors</i>	<i>% participation in the article</i>
Plants, (2021)	2.76	5	20.000%
Zeitschrift für Naturforschung C, (2019)	1.24	6	16.667%
Nature Chemical Biology, (2019)	12.59	24	4.167%
The Plant Cell, (2018)	8.63	13	7.692%
The Plant Cell, (2018)	8.63	29	3.448%
Proceedings of the National Academy of Sciences of the United States of America, (2018)	9.58	14	7.143%
Journal of Plant Physiology, (2016)	3.12	6	16.667%
Nature Communications (2016)	12.12	34	2.941%
Plant Physiology, (2016)	6.46	17	5.882%
Current Opinion in Plant Biology, (2014)	7.85	3	33.333%
Chemistry & Biology,(2013)	6.59	3	33.333%
Nature Chemical Biology, (2012)	12.95	18	5.556%
Plant Growth Regulation, (2011)	1.60	9	11.111%
Zeitschrift für Naturforschung, (2011)	0.77	3	33.333%
Biologia Plantarum, (2011)	1.97	3	33.333%
Biophysical Chemistry (2004)	2.102	5	20.000%

The scientometric indicators of Dr. Kiril Mishev are in compliance with, and some even exceed the requirements of the Regulations for the specific conditions and the procedures for acquiring scientific degrees and for holding academic positions in IPPG-BAS.

Dr. Kiril Mishev's list of publications includes an article with the participation of 34 co-authors (publication №B4_4). According to the national minimum requirements of the Regulations for the implementation of the Law on the Academic Staff Development in the Republic of Bulgaria as well as the Regulations for the specific conditions and procedures for acquiring scientific degrees and for holding academic positions in IPPG, Dr. Kiril Mishev has no proven significant contribution to this publication, which is defined in the above documents. This fact could be taken only as information, which however, does not diminish the presence and significance of the applicant's scientific contributions, reflected in the rest scientific publications.

The scientific contributions of the candidate are summarized in four topics in the field of functional plant biology: 1/ molecular mechanisms of regulation of intracellular membrane traffic; 2/ mechanisms of hormonal regulation in plants; 3/ studies related to structural and functional aspects of the photosynthetic apparatus reaction under stressful environmental conditions /darkness or chemically induced changes in the properties of thylakoid membranes/; and 4/ regulatory mechanisms of the activity of nuclear organizer in barley and structural organization of the 25S-18S region of the rDNA of *Hordeum bulbosum*. Dr. Kiril Mishev's personal participation in the relevant research is well determined and outlines a wide range of techniques and methodologies that the candidate applies. Quite impressive is the candidate's competence, his ability to analyse and interpret the data obtained from different fields of research, which characterizes him as a scientist with diverse knowledge and interests in the field of functional plant biology. The list of scientific papers shows high competence and declares that Dr. Kiril Mishev is part of the international scientific community.

Conclusion

The documents submitted by Dr. Kiril Mihailov Mishev for the competition for the academic position of "Associate Professor" present him as an erudite and competent scientist with contributions in the field of plant physiology, biochemistry and molecular biology. Evaluated in their entirety, according to the criteria for holding academic positions, the scientometric data of the candidate are in accordance with the Regulations for the implementation of the Law on the Academic Staff Development in the Republic of Bulgaria as well as the Regulations of IPPG.

Based on the findings set out above, I assess positively the candidate's overall research activity and recommend the esteemed members of the Scientific Jury to support the awarding to Assistant Professor Kiril Mihailov Mishev the academic position of "Associate Professor" in Biochemistry, in professional field 4.3. Biological sciences, for the needs of the laboratory "Regulation of gene expression".

18.06.2021

Assoc. Prof. Dr. Roumiana Vassilevska-Ivanova