

STATEMENT

by Professor, Stoyan Angelov Shishkov, PhD

Sofia University "St. Kliment Ohridski", Faculty of biology

of the announced competition for the occupation of the academic position of "Professor" in the professional field 4.3. Biological Sciences; Genetics (molecular genetics, bioinformatics and synthetic biology)

published in the State Gazette no. 93/26.2019.

Associate Professor Dr. Robert Dimitrov Penchovski participated in the announced competition. The documents submitted by the applicant are in accordance with the requirements of the Law for the development of the academic staff in the Republic of Bulgaria, the Rules for its implementation, the Rules for the conditions and the order for acquiring scientific degrees and occupying academic positions at Sofia University "St. Kliment Ohridski".

Applicant biographical data.

Assoc. Prof. Penchovski obtained a Master's Degree in Biochemistry and Microbiology with a major in Genetics in 1994 from the Faculty of Biology at Sofia University "St. Kl. Ohridski". He will acquire a second major in Applied Informatics from the Free Faculty of Sofia next year. He holds a PhD in Genetics from the University of Cologne in 2003, recognized by the HAC in 2009.

The candidate was a postdoctoral fellow at the Department of Molecular Biology, Cell Biology and Developmental Biology at Yale University (2003 - 2006), scientific consultant to biotechnology companies (2007-2010).

He holds the academic position of "Chief Assistant" in the Department of Genetics at the Faculty of Biology at Sofia University "St. Kl. Ohridski" in 2010, and since 2013 he is an assistant professor in the same department.

Assistant Professor Penchovski presented 48 scientific papers, 27 of which were published in prestigious journals in the field of competition, 1 book, 7 chapters in monographs, 8 reports from scientific forums, 4 patents and 1 dissertation. His works have been cited 352 times (Scopus), have a total IF of 126.49 and an h-index of 10.

In order to participate in the competition, the applicant submitted 25 scientific papers: 14 articles in periodicals, 1 book, 4 chapters in monographs, 4 abstracts of reports from scientific forums, 1 Bulgarian patent and 1 application for an international patent. In these works he is a leading author.

I do not accept as a book the paper presented by Associate Professor Penchovski's paper "An Integrated DNA Selection in Micro-flow Reactors as an Approach for Molecular Computation and Diagnostics" because it has no reviewers or editors, is not printed by an academic publisher and is in practice Self-serving. I also find it incorrect to include 4 abstracts from conference presentations with no publications available.

The number of articles in international scientific publications is 14 with a total impact factor of 39. It is noted that half of them have quartile Q1. The book chapters are printed by the leading

Springer and Elsevier publishers, one Bulgarian patent issued, one international patent application.

The Scopus Citation for Candidate's Publications Quotes shows 349 citations, with only 30 being included for the academic position of Associate Professor.

The candidate has participated in 27 scientific forums.

In 2015, Assoc. Prof. Penchovski was honored with the Union of Bulgarian Scientists Award for Excellence.

Scientific contributions. Applicant's scientific contributions span three areas - Molecular Genetics of Bacteria, Synthetic Biology, and Bioinformatics and Molecular Evolution. The applicant co-authored the first computer-aided design algorithms for allosteric ribozymes. For the first time, an allosteric ribozyme has been created that records the length of RNA molecules. In the field of Molecular Bacterial Genetics, he is exploring newly discovered elements for controlling gene expression that are promising for the development of new antibacterial drugs. 28 different classes of fish switches have been extensively studied. Assoc. Prof. Penchovsky is involved in the development of biochemical tests for the discovery of new antibiotics and in the programming and creation of microreactors that act as DNA-based computers. The applicant has also participated in the creation of high-performance biochemical tests for the discovery of new antibiotics and in the programming and creation of microreactors that work as DNA-based computers. They are applicable for the selection of DNA molecules and in molecular diagnostics.

Pedagogical activity. The applicant participates in the three levels of undergraduate education as well as in the pursuit of postgraduate courses. He is a holder of the Bachelor of Molecular Genetics and Bioinformatics courses and 3 Master's programs in Bulgarian and English - Bioinformatics and Molecular Evolution, Synthetic Biology and Genomics. The applicant is also the holder of three doctoral courses enrolled in Genetics. He also participates in post-graduate training in Modern aspects of biology: Bioinformatics, Genomics and Synthetic Biology.

The average annual academic load of Assoc. Prof. Penchovski for the last 5 years is 497.94 hours, of which 375.6 hours are classroom work.

Since 2011, Assoc. Prof. Penchowski has been the scientific leader of 16 Masters Degrees.

He is the head of two PhD students, two of them with a defense degree and three PhD students.

Project activity. Assoc. Prof. Penchovski is a participant in 4 scientific projects funded by the MES and the EU, as well as leading 3 projects funded by the Ministry of Education and Science. The total value of the attracted funds from the projects is BGN 326,000.

Compliance with the minimal national criteria. Assoc. Prof. Penchovski covers the national minimum required as well as those of the Sofia University for the position of "Professor". With the presented 4 articles with quartile Q1, equal to rehabilitation work - group of indicators B, he collects the required minimum of 100 tons.

The publications in Group D cover a total of 209 points with a minimum of 200 points. The detailed information on the fulfillment of the minimum national requirements by the applicant includes the so-called book, which I do not remove.

The quotation points - group D, of Assoc. Prof. Panchovski are 638 and also exceed the minimum threshold of 100 points. According to the indicators of group E the candidate collects a total of 265.2 points with the required minimum of 150 points.

Conclusion.

The materials provided to me show that Dr. Penchovski meets the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules for its implementation and the internal rules of the Sofia University “St. Kl. Ohridski ”, and exceed the national criteria for acquiring the academic position of “ Professor ”. I give a positive assessment and recommend to the members of the Faculty Council of the Faculty of Biology to vote positively for the election of Assoc. Prof. Dr. Robert Dimitrov Penchovski in the academic position “Professor” in the professional field 4.3. Biological sciences, specialty Genetics (molecular genetics, bioinformatics and synthetic biology).

March 30, 2020

Signature

/ Prof. S. Shishkov /