

STATEMENT

From Associated Professor Milen Ivanov Georgiev, PhD

Laboratory of Metabolomics, The Stephan Angeloff Institute of Microbiology – BAS

Regarding a competition for the academic position professor, professional area 4.3 Biological Science (Microbiology – lactic acid bacteria and probiotics)

The present statement is prepared in agreement with an order number I-80 from 01.07.2020 of the Head of Stephan Angeloff Institute of Microbiology – BAS (IMicB), following a decision of the Scientific Council of the IMicB with Protocol number 4 from 2020.

Applicant(s): Assoc. Prof. Dr. Svetla T. Danova, DSc – the only candidate

The set of documents agrees with the formal requirements of Chapter IV, Section IV. Terms and orders for acquisition of academic position “Professor” from the Rules for terms and orders for acquisition of scientific degrees and occupation of academic positions of the Stephan Angeloff Institute of Microbiology at Bulgarian Academy of Sciences and contains all necessary documents for evaluation.

I, personally, know the applicant well; I have no joint publications with her and have no conflict of interest, according to the applicable law.

Short biographical data and characteristics of scientific interests of the candidate

Assoc. Prof. Dr. Svetla T. Danova, DSc was born on May 25, 1963. She received a higher education (1987) in the discipline of molecular and functional biology from Sofia University “St. Kliment Ohridski”, where later, in 1989, she was admitted as a regular PhD student. In 1997 she successfully defended a PhD thesis at the specialized scientific council of microbiology, virology and immunology of higher attestation committee, and later, in 2015, she added DSc on her name from the Institute of Microbiology – BAS. Her career development went through all steps of the scientific development (specialist, assistant, research scientist I grade, senior scientist II grade, now associated professor).

Assoc. prof. Danova had training in France (in total 16 months), was an invited scientist in Republic of South Africa, and in 2018 she was awarded with prestigious Fulbright scholarship for research stay in USA at Midwestern University (Phoenix, AR).

Evaluation of the submitted set of documents

Assoc. Prof. Danova submitted 76 scientific papers for the current competition call. Ten (10) publications in journals with impact factor are listed in criterion B, while at criterion D in total 33 papers are included, besides 38 participations at national and international conferences (9 of which as an invited speaker). The total impact factor (IF) of the publications is 52.8. The publication record of assoc. prof. Danova fully corresponds with the requirements of IMicB-BAS for promotion of the academic staff – assoc. prof. Danova has presented 27 publications after habilitation (while 20 are requested), in 19 of which she is leading/corresponding author (while 16 are requested).

It is worth pointing out that assoc. prof. Danova has published her data in prestige journals such as *Biochimica et Biophysica Acta*, *Journal of Applied Microbiology*, *Colloids and Surfaces B: Biointerfaces*, *International Dairy Journal*, *Bioelectrochemistry*, *Journal of Photochemistry and Photobiology B: Biology, Beneficial Microbes* and etc.

Main fundamental and applied contributions

Lactic acid bacteria (LAB), the products based on their metabolism and the eventual health benefits are among the trademarks of our geographical latitudes. In this direction the work of assoc. prof. Danova and the teams headed by her, are of particular interest and with significant added value. The set of publications, submitted to the present professor's call, are mainly in the field of microbiology of lactic acid bacteria and probiotics.

The main contributions could be formulated as follow:

1. Characterization of biodiversity and phylogenesis of LAB from different ecological niches, according to the requirements of the contemporary polyphasic-taxonomy. For the first time in Bulgaria such systematic molecular-genetic studies of LAB from white brined cheese, qatia, sour rye dough, curd, yellow cheese (kashkaval) are performed. The dominating species of the non-starter LAB microflora are identified.
2. Functional characteristics and probiotic potential of LAB.

3. Evaluation of the technological significance and application of LAB from Bulgaria.
4. Study of the benign microorganisms, as a part of the mechanisms for healthy balance in the body and a base for a new strategy towards healthy living and longevity.

Reflection of candidate's publications in national and international literature, awards and recognitions

The scientific record of assoc. prof. Danova appeared in reputable scientific journals, some of which are with high IF. This fully explains the number of citations received – 531. The H index of assoc. prof. Danova is 13 (according to WoS and Scopus) and 16 according to Google Scholar.

The work of assoc. prof. Danova was awarded with Diploma and price money from the Union of Scientist in Bulgaria in a competition call for high scientific achievements in 2009 for her work on biodiversity and molecular characteristics of lactic acid bacteria.

Assoc. Prof. Danova is a member of the food safety expert council at the Ministry of Health, Republic of Bulgaria (since 2012), independent expert at Bulgarian Small and Medium Enterprises Promotion Agency (2006-2014), external technical expert (since 2012), external technical evaluator (since 2018) and external expert-microbiologist in the list of the accreditation committee of the Executive Agency "Bulgarian Accreditation Service".

She took part in 23 scientific projects and 8 international programs, and was a coordinator of 6 projects among them.

Teaching activity

References for the teaching activity of assoc. prof. Danova are duly presented, which I found as solid – she is an honorary lecturer at the Faculty of Biology, Sofia University “St. Kliment Ohridski” and Faculty of Chemical and Systemic Engineering, University of Chemical Technology and Metallurgy. It should be noted the training of 6 PhD students, diploma students – 12 MSc and 4 BSc, besides 10 trainees.

Compliance of the candidate with the requirements of the Act for the Development of the Academic Staff (ADAS) in the Republic of Bulgaria

As self-stated, in the reference sheet for the compliance of the ADAS requirements along with these of the IMicB-BAS, assoc. prof. Danova, DSc record significantly exceeds both national as

well as specific requirements for promotion of the academic position “professor” as follows: while the required points by groups of indicators A is 50 p., B is 100 p., G is 100 p., D is 100 p. and E is 150 p., assoc. prof. Danova has submitted, 50 p., 210 p., 613 p., 1062 p. and 964 p., respectively, along with 100 p. for the DSc thesis.

Critical comments and recommendations – I have no critical remarks or comments, neither any further recommendations.

Personal opinion of the reviewer about the candidate

I know assoc. prof. Danova since many years. In my opinion, she is well-established competent and authoritative scientist, from whom younger generation of scientists (incl. myself) have lots to learn.

CONCLUSION

The thorough analysis of the scientific activity of assoc. prof. Danova, DSc reveals that it is entirely within the area of the present call, as her achievement are with serious fundamental character, as well as with a clearly outlined practical application. The scientific work and teaching activities exceed the requirements of the Act for the Development of the Academic Staff in the Republic of Bulgaria (ADAS), the Rules for ADAS application, as well as specific Rules of BAS and the Institute of Microbiology – BAS. The presented set of documents and reported results are in agreement with the specific requirements of the Institute of Microbiology – BAS’s Rules. Taking all above into account, along with my personal opinion, I consider that assoc. prof. Danova, DSc is a leading scientist in microbiology domain in Bulgaria.

As a member of the scientific jury and taking all above into account, I express **my positive assessment and confidently recommend to the esteemed scientific jury to vote positively on awarding the academic position “professor”, in professional area 4.3 Biological science (Microbiology – lactic acid bacteria and probiotics), to assoc. prof. dr. Svetla T. Danova, DSc.**

September 10, 2020
Plovdiv, Bulgaria

Prepared by:
/Assoc. Prof. Milen I. Georgiev, PhD/