

STATEMENT

on the competition for obtaining the academic position “Associate Professor” in the professional field 4.3. Biological Sciences (Biochemistry), announced in the State Gazette, issue 63, July 30, 2021 (correction in SG No. 65 of August 6, 2021), for the needs of the Faculty of Medicine, Department of Chemistry and Biochemistry, Physiology and Pathophysiology.

Candidate: Ch. Assistant Professor Asya Svilenova Tsanova, PhD

Author of the statement: Assoc. Prof. Dessislava Anri Lazarova, PhD – Department of Physics, Biophysics and Radiology, Faculty of Medicine, Sofia University "St. Kliment Ohridski"

The statement was prepared on the basis of the Law for Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for implementation of the law and the Regulations on the terms and conditions for acquiring scientific degrees, for holding academic positions at Sofia University „St. Kliment Ohridski” and order № RD-38-485/28.09.2021 of the Rector of the Sofia University “St. Kliment Ohridski” for appointing the scientific jury for the competition.

Documents for participation in the competition, within the legally regulated term, are submitted electronically by the only candidate: Ch. Assistant Professor Asya Svilenova Tsanova, PhD.

1. Biographical data

Ch. Assistant Professor Dr. Asya Svilenova Tsanova was born on September 13, 1980. She graduated with a bachelor's degree in Molecular Biology and a master's program in Plant Physiology at the Faculty of Biology of Sofia University „Kliment Ohridski” in 2005 with full honors. She defended her doctoral dissertation in 2014 on professional field 4.3. Biological sciences (Molecular biology) on the topic: „Properties and mechanisms of action of neuropeptides with model membranes in view of their pharmacological application” with supervisor Prof. Zdravko Lalchev, DSc.

For the period 2004 - 2005 Asya Tsanova is a specialist biologist at the Faculty of Biology of the Sofia University „St. Kliment Ohridski”, and from 2006 to 2007 she worked at Chaikapharma High Quality Medicines AD as a biologist.

Since 2007 Dr. Tsanova is a lecturer in the Department of Chemistry and Biochemistry, Physiology and Pathophysiology of the Medical Faculty of Sofia University „St. Kliment Ohridski”, successively „Assistant Professor” from 2007 to 2015, and from 2015 until now „Chief Assistant Professor”.

2. Lecturing activity

From the attached report on the workload of Dr. Tsanova, it can be seen that it is over 600 hours per year, which significantly exceeds the required hours at Sofia University.

Ch. Assistant Professor Tsanova conducts practical and seminar classes in the disciplines „Biochemistry” and „Peculiarities of metabolism in norm and pathology” for medical students at the Faculty of Medicine of Sofia University in Bulgarian and English. She is an erudite, energetic and highly regarded student teacher.

Dr. Tsanova has extensive experience in the preparation and updating of materials for academic work and preparation of exam assignments (participation as the first author in practical guides for students).

3. Research activity

3.1. Scient metric indicators and implementation of minimum national requirements

Ch. Assistant Professor Asya Tsanova has submitted for participation in the competition (outside the publications on the dissertation) 21 publications in publications, referenced and indexed in the world-famous databases with scientific information Web of Science and Scopus, 20 publications in non-refereed journals with scientific review and 73 participations in scientific forums. Dr. Tsanova has worked on a large number of scientific educational projects at the Scientific Research Fund – MES, Scientific Research Fund – Sofia University „St. Kliment Ohridski” and Operational Programme „Human Resources Development”.

The reference, presented by Dr. Tsanova for implementation of the minimum national requirements under Art. 2b of the Law on Scientific Research in the field of science 4. Natural sciences, mathematics and informatics, professional field 4.3. Biological Sciences on indicators, is prepared precisely, clearly and correctly. The report shows that the candidate fully meets and even exceeds in some groups of indicators, the minimum national requirements for Academic position „Associate Professor”.

Group of indicators	Minimum national requirements	Candidate data
A	50	50
V	100	109
G	200	213
D	50	60
E	Not required for “Assoc. professor” 150 for “Professor”	106

The total impact factor of the publications submitted for participation in the competition is 16.979, H-index: 4 (Scopus); 5 (Web of Science).

The total number of citations of the scientific works of Ch. Assistant Professor Tsanova is 34, of which 31 in journals referred to in Web of Science and Scopus.

3.2. Contributions to the scientific works of Ch. Assistant Professor Asya Svilenova Tsanova, PhD.

The contributions related to the analysis of the composition, properties and characteristics of the alveolar surfactant in norm and pathology, in addition to being fundamental, have a strongly applied character for the clinical practice in the search for fast and adequate methods for diagnosis of pulmonary maturity and treatment of pulmonary dysfunctions. The main studies are related to the composition and properties of alveolar surfactant in Neonatal Respiratory Distress Syndrome, the interaction of alveolar surfactant with hydrophilic polymers in order to increase the therapeutic efficacy of exogenous surfactants, *in vitro* analyzes for broncho-alveolar lavage in patients with pulmonary alveolar proteinosis, *in vitro* analyzes for broncho-alveolar lavage in patients with Non-small cell lung cancer.

The contributions related to the interaction of molecules of biological significance with model membranes, are the other main scientific topic of the candidate's work. The interaction between synthetic enkephalins with model membrane systems, the mechanisms of antimicrobial action of newly synthesized benzanthrone on model membranes, potential drug delivery systems on model membrane systems, and the mechanism of interaction between photosynthetic cytochrome b6f complex and thylakoids were studied.

4. Personal impression

I know Ch. Asst. Asya Tsanova as an extremely positive, diligent and correct colleague. She is a well-organized and competent university lecturer and scientist, who enjoys respect and appreciation among colleagues and students.

5. Conclusion

The scientific papers and materials submitted for the competition comply and exceed the required scientific indicators according to LDASRB, the Regulations for application of LDASRB and the Rules for the terms and conditions for acquiring scientific degrees and for holding academic positions at Sofia University „St. Kliment Ohridski“. The above analysis and my personal impression of the candidate are grounds to confidently give my **positive assessment** and recommend to the Scientific Jury to prepare a report-proposal to the Faculty Council of the Faculty of Medicine at Sofia University „St. Kliment Ohridski“ for awarding the academic position „Associate Professor“, in professional field 4.3. Biological Sciences (Biochemistry) of Ch. Assistant Professor Asya Svilenova Tsanova, PhD.

Assoc. Prof. Dessislava Anri Lazarova, PhD

November 27, 2021

Sofia