

## STATEMENT

From

**Prof. Dr Stefan Vasilev Peev PhD, DSc**

Dean of Faculty of Dental Medicine

Medical University of Varna

Chair of the scientific jury according to an order of the Rector of Medical University -Varna № P-109-290/07.08.2020 for appointment of a scientific jury and Report of the first meeting of the scientific jury from 17.08.2020.

Concerning

**The competition for the Academic Position “Professor”** in the area of higher education 5. Technical Sciences, professional field **5.6. Materials and Materials Science**, specialty **“Materials Science and Technology of Machine Building Materials”** at the Faculty of Dental Medicine, Department “Dental Materials Science and Propaedeutic of Prosthetic Dental Medicine”, announced in State Newspaper 53/12.06.2020.

The only candidate is **Assoc. Prof. DSc Eng. Tsanka Dimitrova Dikova**.

### **Brief biography**

Assoc. Prof. Tsanka Dikova was born in 1961 in the city of Veliko Tarnovo, Bulgaria. In 1984 she graduated Technical University of Varna. She worked in engineering positions successively in MRP "Terem - Ivaylo" and "Metal-expert Peev and Co" - Veliko Tarnovo, High-Technology Park at the Technical University of Varna and "Mauer Locking Systems" Ltd. - Varna. Since 2007 she has been an associate professor of "Materials Science and Technology of Machine Building Materials" at the Faculty of Dental Medicine of MU-Varna. In the period 2013-2018 she was Vice Dean of the Faculty.

In 2004 she defended dissertation and acquired PhD degree in the scientific specialty 02.01.02 "Materials Science and Technology of Machine Building Materials". In 2019 she defended a dissertation on "Properties of additively manufactured dental materials" and obtained DSc degree in the area of higher education 5. Technical Sciences, professional field 5.6. Materials and Materials Science, specialty “Materials Science and Technology of Machine Building Materials”.

## Scientific research activity

For participation in the competition Assoc. Prof. Ts. Dikova presents 61 full-text publications after the procedures for acquiring PhD degree, DSc degree and AP "Associate Professor", two dissertations, two monographs and four textbooks. They are grouped in two lists:

I – a list under “Information for covering the minimum requirements for acquiring of Academic Position “Professor” according to the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB) from 2018”, which includes a total of 29 scientific publications. They include: PhD thesis – 1, DSc thesis – 1, monograph (main habilitation work) - 1 issue, monograph, which is not presented as a main habilitation work - 1 piece, 8 articles and 1 chapter of a book in scientific journals, referenced and indexed in world-famous databases, 12 articles in journals with scientific review, not referenced in world-famous databases with scientific information and 4 textbooks, 2 of which in English.

II - List of publications, additional to the reference for the minimum requirements, in which another 40 full-text publications are presented, 19 of which are in international and 21 - in Bulgarian scientific journals.

The scientific papers, presented in both lists, are published in Bulgarian (18), Russian (2) and English (49). Four of these publications are in journals with an impact factor. Of the total of 69 scientific works mentioned in the two lists, 18 are individual work of Assoc. Prof. Ts. Dikova and in 20 she is the first author, i.e. in a total of 38 works presented (55%) the author is the only or leading one. In 24 publications (34.8%) Assoc. Prof. Ts. Dikova is the second author, and in the remaining 7 (10.2%) works she is the subsequent author.

As of 01.08.2020, the scientific works of Assoc. Prof. Ts. Dikova have been cited 196 times. Thirty four of them are presented in the competition according to the attached academic report, which covers the minimum scientific requirements for acquiring AP "Professor". The individual *h*-index of the candidate is 8 according to Google Scholar, 4 according to ResearchGate and Scopus and 3 according to Web of Science.

The results of the research are presented to a wide audience at universities and scientific forums abroad and in Bulgaria. These include: a) 8 lectures given at foreign universities in Japan, the USA and China; b) mainly oral presentations at 56 scientific forums, of which 34 are in Bulgaria with international participation

and 22 - abroad, and at 13 of the scientific events Assoc. Prof. Ts. Dikova was invited lecturer.

Assoc. Prof. Ts. Dikova presents participations in a total of 5 research projects - 1 national, funded by the Fund for Scientific Investigations, Ministry of Education and Science, 2 – by the Medical University of Varna and 2 international, which have won scholarships for specialization in Japan and "Fulbright". Under her leadership and with her participation, a total of 31 engineering projects and tasks have been developed and implemented in Mauer Locking Systems Ltd.

The contributions in the scientific works of Assoc. Prof. Dikova are in seven directions, related to the application of the technologies for 3D printing in dental medicine; nanomaterials and nanocoatings in mechanical engineering, general and dental medicine; apparatus, technologies and dental materials for restoration of defects of teeth and dentitions; unconventional and surface heat treatments of alloys with concentrated energy flows; corrosion processes in steels and alloys with application in dentistry and mechanical engineering; design and application of modern software in mechanical engineering, digitalization in dentistry and education.

### **Educational activity**

Assoc. Prof. Ts. Dikova has been working as an associate professor since 2007 at the Faculty of Dental Medicine. She has developed curricula and teaches in 5 disciplines, 3 of which in Bulgarian and 2 in English. The study load of Assoc. Prof. Dikova satisfies the required minimum according to the Rules at MU-Varna.

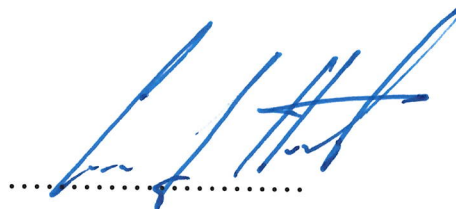
Assoc. Prof. Ts. Dikova has published 4 textbooks, which are used in teaching students of Dental Medicine. For ten years she was chair of the State Examination Commission in the discipline "Dental Materials Science, Apparatus and Instruments" of students majoring in "Dental Technician" at the Medical College, MU-Varna. She was scientific supervisor of 6 graduates. Four PhD students have successfully defended dissertations under her supervision, and 2 have been enrolled.

Assoc. Prof. Dikova has given a total of 8 lectures at foreign universities in Japan, USA and China.

## Conclusion

Assoc. Prof. Tsanka Dimitrova Dikova meets the minimum requirements for acquiring AP "Professor" according to the LDASRB from 2018 and meets all the requirements according to the Rules of MU-Varna: she has acquired DSc degree, she has four defended and two enrolled PhD students, a habilitation work, and the data on criteria D, E and F exceed the required minimum.

All written above gives me a reason to vote positively for the award of Assoc. Prof. Tsanka Dimitrova Dikova to the academic position of "Professor" in the area of higher education 5. Technical Sciences, professional field **5.6. Materials and Materials Science**, specialty **“Materials Science and Technology of Machine Building Materials”** at the Faculty of Dental Medicine, Department of Dental Materials Science and Propaedeutic of Prosthetic Dentistry.



(Prof. Dr Stefan Peev, PhD,DSc)

Varna, 18.09.2020