STATEMENT OF OPINION

From: Assoc. Prof. Desislava Atanasova Konstantinova, Ph.D., Department of Dental Material Science and Propaedeutics of Prosthetic Dental Medicine, Faculty of Dental Medicine, Medical University "Prof. Dr. Paraskev Stoyanov"- Varna, "Tsar Osvoboditel №84" Str., cell phone: 0888 618 327, e- mail: desi.konstantinova@mu-varna.bg, Member of the Scientific Jury according to Order № P-109-290/07.08.2020 of the Rector of the Medical University – Varna.

Regarding: Competition for the occupation of the academic position "Professor" in the scientific specialty "Material science and technology of machine building materials, professional direction 5.6 Materials and material science, field of higher education 5. Technical sciences, specialty "Material science and technology of machine building materials" – one for the needs of the Department of Dental Material Science and Propaedeutics of Prosthetic Dental Medicine at the Faculty of Dental Medicine at MU – Varna, according to announcement of State Gazette, issue 53/12.06.2020

Assoc. Prof., engineer Tsanka Dimitrova Dikova, DSc., Assoc. Prof. in the Department of Dental Material Science and Propaedeutics of Prosthetic Dental Medicine at Faculty of Dental Medicine, Medical University "Prof. dr. Paraskev Stoyanov"- Varna is the only applicant in this competition. She has submitted all the required documents according to the Law of the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its Application and the Regulations for the Development of the Academic Staff at MU – Varna.

I. Brief personal and professional details of the applicant:

Assoc. Prof. Tsanka Dikova completed her secondary education in "Vasil Drumev" school in her hometown of Veliko Tarnovo in 1979. In 1984 she graduated TU-Varna as a "Master of Engineering", specialty "Technology of machine building and metal cutting machinery". In 2005 she obtained the title of "Doctor" in the field of "Material science and technology of machine building materials" at TU-Varna. In 2019 at TU-Gabrovo she obtained the degree "Doctor of sciences" in the professional direction 5.6. Materials and material science with the dissertation work "Properties of the layer-by-layer dental materials". During the years Assoc. Prof. Tsanka Dikova furthers her knowledge with a series of specializations, some of which in the St. Petersburg Marine Technical University, Russia, twice in the University Tokai in the city of Hiratsuka, Japan, Rice University, Houston, USA.

Her professional development began in 1984 at "TEREM-Ivailo", Veliko Tarnovo, where she had worked as a designer - technologist. From 1997 to 2003 she had worked at "Metal expert Peev et al", Veliko Tarnovo, Chief Constructor. In the period 2004-2006 - High-tech park of TU- Varna, Engineer-Researcher. From 01.01.2007/01.09.2007 - "Mauer Locking Systems" Varna, project manager. Since 01.09.2007 she has worked at the Medical University of Varna, Faculty of Dental Medicine as Associate Professor in the field of "Material science and technology of the machine building materials". In the period 06.2013 to 05.2018 she was a Vice Dean at the Faculty of Dental Medicine at MU- Varna.

She is a member of: Academy of Dental Materials; Steering Committee of World Academy of Materials and Mechanical Engineering; The Management Board of NTS in Mechanical Engineering; National Coordination Council for Nanotechnologies at BAS, Bulgaria; Union of Scientists in Bulgaria, Varna Branch.

II. Scientific, Research and Publication activity of the applicant

Assoc. Prof. Tsanka Dikova has submitted a standardized reference as a proof for meeting the minimum national requirements for the occupation of the academic position "Professor" in accordance with Art. 138 (1), p.4 of the Regulations for the Development of the Academic Staff at MU- Varna.

The scientific production of the applicant includes a total of 134 titles (including monographs, textbooks, book chapters and publications) and 37 abstracts, of which 29 for the meeting of the minimum requirements for the occupation of the academic position "Professor", distributed from a scientific metric aspect as follows:

- ➤ Referring criteria A1: The dissertation work entitled "Study of the behavior of steels 5HNM, 3X2V8F and 4X5MFC under laser and thermocyclic influence" (2005).
- > Referring criteria B2: The dissertation work entitled "Properties of the layer-by-layer dental materials" (2019).
- ➤ Referring criteria C3: Independent monograph/habilitation work with the topic "Cobalt-Chrome dental alloys manufactured by selective metal smelting".
- > Referring criteria G4: Independent monograph "Design of equipment for cold sheet stamping".
- ➤ Referring criteria G7: Publications and papers in scientific journals, peer-reviewed and indexed in world data bases a total of 9.
- ➤ Referring criteria G8: Publications and papers, published in unreferenced scientific journals with scientific reviews a total of 12, in 8 of which she is the lead author, in 2 second author and in 1 third author.
- ➤ Referring criteria D10: Citations or reviews in scientific journals, referenced and indexed in world data bases a total of 14.
- ➤ Referring criteria D11: Citations in monographs and collective tomes with scientific reviews a total of 3.
- ➤ Referring criteria D12: Citations or reviews in unreferenced scientific journals a total of 17.
- > Referring criteria E16: Acquired scientific degree "Doctor of science" with the topic "Properties of the layer-by-layer dental materials".
- > Referring criteria E17: Participation in scientific research of 4 successfully defended doctoral students in various scientific fields.
- ➤ Referring criteria E18: Participation in national scientific or educational project a total of 1.
- ➤ Referring criteria E23: Published university textbooks a total of 4, 2 of which in Bulgarian and 2 in English.

In addition, there are more 40 scientific works present, which are not included in the reference for meeting the minimum requirements for holding the academic position of

In addition, there are more 40 scientific works present, which are not included in the reference for meeting the minimum requirements for holding the academic position of "Professor". Of these, full-text publications in foreign scientific journals - 19 issues, and full-text publications in Bulgarian scientific journals - 21 issues.

Assoc. Prof. Tsanka Dikova has taken part in 59 national and international scientific events, 56 of which (22 abroad and 34 in Bulgaria with international participation) were presented for participation in the current competition for the academic position "Professor".

The main scientific directions in which Assoc. Prof. Dikova develops her works are:

- Laser surface treatments of materials
- > Dental materials and implant materials
- > Nanomaterials, nanocoatings and nanotechnologies
- > Application of the 3D printing technologies in dental medicine

III. General assessment of the applicant's teaching activity

The teaching activity of Assoc. Prof. Tsanka Dikova is linked to the development of a total 9 lecture courses, with 7 of them participating in the competition for the academic position "Professor" (Dental materials science, Dental materials science for dental technicians, Apparatus and Instruments, Nanomaterials and Nanotechnologies in Medicine, Dental Materials Science, LED Nanomaterials and Nanotechnologies in Medicine, 2020 - discipline Dental Materials Science (face-to-face and distance learning through an electronic-based Blackboard system).

First-year students majoring in dental medicine currently use textbooks in Bulgarian and English for their training in dental materials science, respectively I and II part, whose author is Assoc. Prof. Tsanka Dikova, DSc.

The teaching experience of Assoc. Prof. Tsanka Dikova as of July 10, 2020 according to the presented certificate is 12 years and 10 months and 09 days.

From the presented report on her study load it is evident that Assoc. Prof. Dikova fully meets the requirements.

IV. Critical remarks and recommendations

In my opinion, Assoc. Prof. Tsanka Dimitrova Dikova fully meets the requirements for the occupation of the academic position "professor" and I have no critical remarks.

V. Conclusion

As a member of the Scientific Jury appointed for the announced competition, I consider that according to the scientific research and scientific metric indicators, Assoc. Prof. Tsanka Dikova meets the requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria the Regulations for its Application and the Regulations for the Development of the Academic Staff at MU – Varna.

All of the above gives me grounds to propose Assoc. Prof. Tsanka Dimitrova Dikova, DSc., to occupy the academic position "professor" in the scientific specialty "Material science and technology of machine building materials, professional direction 5.6. Materials and material science, field of higher education 5. Technical sciences, specialty "Materials science and technology of machine-building materials" at the Department "Dental materials science and propaedeutics of prosthetic dentistry", Faculty of dental medicine, MU "Prof. Dr. Paraskev Stoyanov"- Varna.

28.09.2020

Varna

/Assoc. Prof. Dr. Desislava Konstantinova PhD/