

To
The chair of the scientific jury,
Determined by Order № P - 2314/ 05.07.2024
Of the Vice Rector of Medical University – Plovdiv

бул. В. Априлов №15А
4002 Пловдив

On your Report №1/17.07.2024



Attached I present: Review

by competition for filling TWO academic positions "ASSOCIATE PROFESSOR"
in scientific specialty Prosthetic Dentistry
area of higher education 7. Health care and sports, 7.2. Dental Medicine
announced for the needs of MU-Plovdiv, cat. "Prosthetic Dentistry"
in SG No. 35/19.04.2024

Reviewer: Prof. Tsanka Dimitrova Dikova DSc, PhD
Scientific specialty: 5.6. Materials and Materials Science
Institution: Medical University "Prof. Dr Paraskev Stoyanov" - Varna

Address and contacts:

Postal address: ...oditel Blvd, Faculty of Dental Medicine

E-mail: tsar...
Заличено на основание
Чл.5 §1, б."В" Регламент (ЕС)2016/679

Mobile phone

REVIEW

Prof. Tsanka Dimitrova Dikova DSc, PhD, Mech Eng
Scientific specialty: 5.6. Materials and materials science
Medical University "Prof. Dr Paraskev Stoyanov" - Varna

According to the announcement in the Official Gazette, No. 35 of 19.04.2024 to disclose the procedure for filling two academic positions "ASSOCIATE PROFESSOR" in the scientific specialty Prosthetic Dentistry, field of higher education 7. Health care and sports, 7.2. Dentistry, announced for the needs of the Medical University - Plovdiv, Department of "Prosthetic Dentistry", 4 candidates appeared: Dr. Rada Kazakova, DDM; Dr. Tanya Bozhkova, DDM; Dr. Zlatina Tomova – Veleva, DDM; Dr. Dobromira Shopova - Karatsanova, DDM.

CV OF CANDIDATES

Dr. Tanya Pavlova Bozhkova - Bogdanova was born on 13.11.1987. In 2012, she graduated from MU-Plovdiv with a master's degree in dental medicine. In 2017, she received a specialty in "Prosthetic Dentistry" and defended a dissertation on the topic "*Comparative analysis of different methods for registration of occluso-articulation relationships*" and obtained the PhD degree. In 2019, she graduated with a master's degree in "Public Health and Health Management". Since 2012, she has been a dentist in a private practice in Asenovgrad, and since 2020 - in Plovdiv. From 2016 until now, she has been an assistant and chief assistant in the Department of Prosthetic Dentistry at the Faculty of Dental Medicine in MU-Plovdiv. Since 2021, she has been a teacher at the Professional Training Center of MU-Plovdiv in the course "Dental Assistant". According to the exam report she has B2 level proficiency in English.

Dr. Zlatina Tomova Tomova - Veleva was born on March 1, 1980. In 2005, she graduated from MU-Plovdiv with a master's degree in dentistry. In 2021, she obtained a specialty in "Prosthetic Dentistry", and in 2020, she defended a dissertation on the topic "*Laboratory study of the corrosion resistance and tensile strength of base alloys for metal-ceramics*" and obtained a PhD degree in the same specialty. From 2006 until now, she is a dentist and manager of a private practice in Plovdiv. From 2017 until now, she has been working as an assistant and chief assistant in the Department of Prosthetic Dentistry at the Faculty of Dental Medicine in MU-Plovdiv. She has a C1 level English language certificate and a basic level of French.

Dr. Dobromira Antonova Shopova - Karatsanova was born on 09.12.1980. In 2006, she graduated from MU-Plovdiv with a master's degree in dental medicine. In 2012, she received a specialty in "Prosthetic Dentistry", and in 2019 she defended her dissertation on the topic "*Comparative analysis of impression materials for functional shaping of the individual spoon of a completely edentulous upper jaw*" and obtained PhD degree. In 2019, she graduated with a master's degree in "Public Health and Health Management". From 2007 until now, she has been working at MU-Plovdiv as an assistant and chief assistant at the Faculty of Dental Medicine. She has a B2 level English language certificate and speaks German and Russian at a good level.

Dr. Rada Torezova Kazakova was born on 02.06.1983. In 2008, she graduated from the Medical University of Plovdiv with a master's degree in dental medicine. In 2014, she received a specialty in "Prosthetic Dentistry", and in 2017, she defended his dissertation on the topic "*Methods for preparing gingival tissues in fixed prosthetics*" and obtained PhD degree. In the period 2008 - 2012, she worked as a dentist in a private practice in Stara Zagora, and since 2012 she has been an assistant in the Department of Prosthetic Dentistry at the Faculty of Dental Medicine in MU-Plovdiv. From 20.03.2020 she is the chief assistant in the same department, and since the same year she has been a teacher of the specialty "Dental Assistant" in the Professional Training Center at the Medical University of Plovdiv and in charge of postgraduate training at the Center for CAD/CAM Dental

Medicine at the Scientific Research Institute of the university. She has a C1 level English language certificate and speaks French, German and Russian at a good level.

GENERAL DESCRIPTION OF MATERIALS SUBMITTED

All necessary materials are presented on electronic media. They are in full compliance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for its application and the Regulations for Acquiring Scientific Degrees and Holding Academic Positions (RASDHAP) of the Medical University of Plovdiv. Candidates have also submitted additional lists of participation in projects and scientific forums, prepared and delivered lectures on certain disciplines, printed textbooks and teaching books.

According to the submitted documents, all four candidates meet and repeatedly exceed the national requirements and those of MU-Plovdiv for holding the AP "Associate Professor".

SCIENTIFIC ACTIVITY

Definitions given in paragraph 1, item 10, item 12, item 13 and item 14 of the Supplementary Regulations of the LDASRB:

- **"Monograph"** is a published scientific edition that contains a complete and comprehensive study of a certain subject, problem or person, written by one or several authors adhering to the same point of view. **A monograph is a scientific work that does not repeat or summarize existing knowledge**, has a scientific editor and/or scientific reviewers, has an ISBN, and is no less than 100 standard pages with 1800 characters per page. It contains an extended table of contents, a comprehensive bibliography, and the text contains references to other scientific works.

- **"Study"** is a scientific study published in a journal, collection or stand-alone, which addresses certain aspects of problems and questions, has a scientific editor and/or scientific reviewers, has an ISSN or ISBN, respectively, and has a volume of 20 to 99 standard pages with 1800 characters per page.

- **"Review"** is a scientific study published in a journal, collection or independently, in which a critical review of the published literature is made on a certain scientific problem, has an ISSN or ISBN, respectively, and its volume is from 10 to 99 standard pages with 1800 characters per page.

- **"Article"** is a published scientific work meeting the requirements of item 12, which contains a description of original scientific research and is up to 20 standard pages with 1800 characters per page.

Indicator B3 - HABILITATION THESIS - MONOGRAPH

Dr. Tanya Bozhkova

To participate in the competition, Dr. T. Bozhkova presents the following habilitation thesis:

1. **Bozhkova T.** *Digital study of occlusion*. 2021. Second Supplementary Edition. Macros Publishing House. ISBN 978-954-561-542-9

The presented monograph consists of 212 pages, contains 67 figures, 9 tables and bibliography after each chapter. The references are sufficient for this kind of scholarly work, but it is difficult to determine their total number without repetition. Own research is presented in 3 chapters totaling 78 pages (pp. 73-109, pp. 152-178 and pp. 194-209), which is about 37%. They do not repeat the results of the PhD thesis.

Dr. Zlatina Tomova

For participation in the competition Dr. Zl. Tomova presents the following habilitation thesis:

1. **Tomova Z.** *3D printing in prosthetic dentistry*. 2023. Medical University - Plovdiv. ISBN 978-619-237-126-5 (B 3)

The presented monograph consists of 132 pages, contains 52 figures, 2 tables and 212 references. It provides a very good overview of materials and equipment for 3D printing of metals

and alloys, plastics and ceramics used in dentistry. Own research is presented on a total of 22 pages (pp. 47-55 and pp. 97-188), which is about 20%. They do not repeat the results of the PhD thesis.

Dr. Dobromira Shopova

For participation in the competition, Dr. D. Shopova submits the following habilitation thesis:

1. **Shopova D.** "*Upper edentulous jaw - anatomy, impressions and modern non-implantological prosthetic constructions*" - University Publishing House "Kliment Ohridski" - Sofia, 2021. ISBN 978-954-07-5297-6

The presented monograph consists of 132 pages, contains 80 figures, 4 tables and literature. References follow each chapter and it is difficult to quantify the sources without repeating them. Own research is presented on 13 pages (pp. 19-23, pp. 72-75 and pp. 101-104), which is about 10% of the total volume. It is noteworthy that 7 figures numbered 1.12, 1.16, 2.16 and from 3.7-3.10 including 3 tables 1.1, 2.1 and 3.2 of the monograph are identical to fig. 1, fig. 2 and from fig. 19-23 including tables 5, 14 and 16, respectively, from the abstract of the PhD thesis. A comparison of the investigated materials and properties in the monograph shows identity with the tasks and results set in the dissertation work. Therefore, **the submitted habilitation work is more of a thesis book and does not meet the definition of a "monograph" given in paragraph 1, item 10 from the Supplementary Regulations of the LDASRB.**

Dr. Rada Kazakova

For participation in the competition, Dr. R. Kazakova submits the following habilitation thesis:

1. **Kazakova, R.** *Contemporary Approaches to Gingival Retraction in Fixed Prosthodontics. Laser Troughing Utility.* 'Bulgari' Publishing House, Sofia, 2024. ISBN: 978-619-7656-46-6.

The presented monograph consists of 184 pages, contains 17 figures, 25 tables, 14 pages of appendices and literature. References follow each chapter and it is difficult to quantify the sources without repeating them. Own research is presented in 3 chapters on a total of 83 pages (pp. 81-165), and in the first part (from pp. 81-123) on 42 pages the results of survey studies are given. It is noteworthy that 7 figures (from Fig. 5 to Fig. 11 inclusive) from the monograph are identical to figures (from Fig. 1 to Fig. 7) from the abstract of the PhD thesis. Which means that part of the monograph repeats part of the PhD dissertation. Therefore, **the habilitation thesis does not meet the definition of a "monograph" in the part not to repeat or summarize existing knowledge (paragraph 1, item 10 from the Supplementary Regulations of the LDASRB).**

Indicator G5 - PUBLISHED MONOGRAPH NOT SUBMITTED AS A MAJOR HABILITATION THESIS

Dr. Tanya Bozhkova

She presents **two editions of 1 monograph:**

1. **Bozhkova T.** Musurlieva N. *Medico-social aspects of oral health in geriatric patients. Total edentulism - quality of life.* 2019. Paisii Hilendarski University Publishing House, ISBN 978-619-202-464-2.

2. **Bozhkova T.** Musurlieva N. *Medico-social aspects of oral health in geriatric patients. Total edentulization - quality of life.* 2021. Second Supplementary Edition. Macros Publishing House. ISBN 978-954-561-543-6.

As both monographs are on the same topic, **I am only accepting one of them for the competition – the second edition**, which has been supplemented with the impact of COVID-19 on the provision of dental care for elderly patients. It consists of 320 pages, 45 figures, 3 tables, 31 diagrams and 43 pages of appendices. **The own research is based on questionnaires** and is presented on 65 pages in chapter 2 and chapter 4, which represents 20% of the total volume of the monograph. **The topic is current and additionally enriched with the influence of external factors at the given moment.**

Dr. Zlatina Tomova

Presents additionally **1 monograph**:

1. **Tomova Z.** *Laser technologies in prosthetic dentistry*. 2023. Medical University - Plovdiv. ISBN 978-619-237-117-3 (G 5).

The monograph consists of 122 pages, 42 figures and 165 references. It provides an overview of the application of laser technologies in the production of dental constructions in prosthetic dentistry mainly through 3D printing and the dental alloys used in these processes. Clinical applications of lasers in PDM are less explored. Part of the information in the overview overlaps with that of the monograph presented as the main habilitation thesis. **Own research** is presented on a total of 16 pages (pp. 47-55 and pp. 97-188), which is **about 15% of the total volume of the monograph**. **They refer to a study of the corrosion resistance and biotolerance of 3 types of Co-Cr dental alloys produced by 3 modern technologies, including 3D printing. They do not repeat the results of the PhD thesis and habilitation work.**

Dr. Dobromira Shopova

Presents additionally 2 monographs:

1. **Shopova D.** *"The dental assistant in prosthetic dental practice"*. "Kliment Ohridski" University Publishing House - Sofia, 2021. ISBN 978-954-07-5304-1;

2. **Shopova D.** *"Modern dentistry through the prism of bioprinting"*. Arena Print - Plovdiv, 2024. ISBN 978-619-7413-46-5.

The first monograph consists of 152 pages and is illustrated with 133 figures. Six references are cited which are textbooks. It does not contain own research. Therefore, **it does not meet the definition of a monograph, and I do not accept it as such. It is more of a textbook** that is very useful in the training of dental assistants.

The second monograph consists of 218 pages, 34 figures and 1 table. It provides a very good overview of 3D bioprinting, tissue engineering and tissue regeneration of teeth, dental tissue and temporomandibular joint restoration. But there is no research of its own. Therefore, **it does not meet the definition of a monograph, but rather a book showing the prospects and future development trends of 3D bioprinting in medicine.**

Dr. Rada Kazakova

Presents additionally 2 monographs:

1. **Kazakova, R.** *Advanced Clinical Laser Approaches in Prosthodontic Preparation: Invasive and Non-Invasive Strategies*. 'Bulgari' Publishing House, Sofia, 2024. ISBN: 978-619-7656-47-3.

2. Dimitrova, M., **R. Kazakova.** *From Analog to Digital Removable Prosthodontics: 3D Printing, Milling and Traditional Approaches*. 'Lax Book' Publishing House, Plovdiv, 2023. ISBN: 978-619-189-229-7.

The first monograph consists of 222 pages, 21 figures, 25 tables and 12 pages of appendices. Own research is presented in 3 chapters on a total of 89 pages (pp. 111-200), and the last chapter (pp. 154-200) is an overview of "modern perspectives on the application of low-frequency laser therapy after gingivectomy as part of non-invasive periodontal preprosthetics preparation". Therefore, the author's clinical studies are totally 41 pages and represent about 1/5 of the monograph volume.

The second monograph with a volume of 484 pages is co-authored and according to the separation protocol, each of the authors has a 50% share or 242 pages each. The own research is presented on page 340 to page 441, starting with survey research up to page 355. Next, the properties of acrylic plastics for the fabrication of removable prostheses by 3D printing are investigated. The following 80 pages present the results of the accuracy, chemical, optical and mechanical properties of the investigated plastics. **The two monographs presented by Dr. R. Kazakova are on contemporary topics and mainly represent an overview of the problems, with the own studies being between 20-30% of the total volume.**

Indicator G6 - PUBLISHED BOOK BASED ON DEFENSED PhD DISSERTATION

Dr. Tanya Bozhkova

Presents an additional book:

1. **Bozhkova T.** Methods for registration of occluso-articulation relationships. 2019. Paisii Hilendarski University Publishing House, ISBN 978-619-202-436-9.

The presented book consists of 104 pages and fully presents the results of the PhD thesis.

Dr. Zlatina Tomova

Does not represent a book.

Dr. Dobromira Shopova

Presents 2 additional books:

1. **Shopova-Karatsanova D.** Anatomical features of the upper jaw related to removable prosthetics, LAP LAMBERT Academic Publishing (2018-02-14) - 56 стр. ISBN-13: 978-613-8-11947-0;
2. **Shopova-Karatsanova D.** Border molding impression materials - laboratory and clinical tests, LAP LAMBERT Academic Publishing (2018-08-30) – 68 стр. ISBN-13: 978-3-659-81367-2.

A careful examination of the two books shows that the dissertation is mechanically divided into two parts - overview and own research. They were published as two books in English by a foreign publisher. In the first book, consisting of 50 pages, 40 figs. and 111 literary sources the review was published without a conclusion to it. In the second, on 58 pages, the results of the own research are published, and the figures from the abstract, which are repeated in the habilitation work, are naturally given here as well. The second book lacks a bibliography. **In terms of volume, these works are more like a "study", in which case the quality is greatly reduced at the expense of the quantity.** If the dissertation was published in just one book, it would fully meet all the requirements.

Dr. Rada Kazakova

Does not represent a book.

Indicator G7 - PUBLICATIONS AND REPORTS PUBLISHED IN SCIENTIFIC JOURNALS, REFERENCED AND INDEXED IN WORLD-KNOWN DATABASES

Dr. Tanya Bozhkova

In this section, **Dr. T. Bozhkova presents 17 articles. I accept 16 of them**, because one was used in the procedure for acquiring the PhD degree. The articles are published as follows: 4 pieces in Open Access Maced J Med Sci, 3 pc. in BioMed Research Internationala, 2 pc. in Folia Medica, 2 pc. in J of IMAB, 1 each in an edition of BAS, F1000Res, European Journal of Dentistry, Journal of International Dental & Medical Research and Trakia Journal of Sciences. **Three articles of them are in journals with an impact factor and only 2 papers are overview.** The candidate is the **sole author of 3 publications, first author of 4 publications, second author of 7 publications and third author of 2 publications.** This is proof that **the leading role in the publications and the research is primarily the candidate's.**

Dr. Zlatina Tomova

In this section, **Dr. Zl. Tomova presents 14 articles.** The articles are published as follows: 3 nos. in MDPI publications, 2 nos. in Folia Medica, 1 pc. in an edition of BAS, J of IMAB, Materials Today: Proceedings (Elsevier) and in 6 more international refereed journals. **Six articles of these are in journals with an impact factor and only 2 are reviews.** The candidate is the **first author of 8 publications, the second author of 2 issues and in the remaining 4 issues she is after the 3rd place.** This is proof that **the leading role in the publications and research in them is primarily the candidate's.**

Dr. Dobromira Shopova

In this section, **Dr. D. Shopova presents 30 articles, of which I accept 27. I do not accept articles numbered 10, 12 and 14.** The first because it is an abstract, position 12 is not referenced in a global database, and position 14 because full text of article not presented. The articles are published as follows: 10 nos. in MDPI Publications, 4 nos. in J of IMAB, 3 nos. in Open Access Macedonian Journal of Medical Sciences, 2 nos. in Folia Medica, 2 nos. in F1000Res, 2 pcs. in edition of BAS, 2 nos. in the European Journal of Dentistry and 1 issue each in Journal of International Dental & Medical Research and Journal of Environmental Protection and Ecology. **Ten of the all articles are in journals with an impact factor and 10 nos. are overview (about 30%). Seven of the articles with an impact factor are reviews. The candidate is first author of 17 issues (4 reviews), second author of 4 issues, third author of 5 issues and next author of 3 issues. This is proof that the leading role in the publications and research in them is primarily the candidate's.**

Dr. Rada Kazakova

In this section, **Dr. R. Kazakova presents 21 articles** published as follows: 1 no. in Folia Medica, 1 no. in Medicina, Kaunas, 1 in Elsevier journal, 2 nos. in BAS publications, 4 nos. in J of IMAB and the rest in journals of the publishing house MDPI, Basel. **Of these, 12 articles are in journals with an impact factor.** Two more publications in the form of preprints are also presented. **Of all the articles, 11 are reviews (about 50%). The candidate is the first author of 4 articles (2 are overviews), the second author of 2 articles, the third author of 4 articles (3 overviews) and the next author of the remaining articles. This means that the leading role in the publications of this section is mainly of the co-authors.**

Indicator G8 - PUBLICATIONS AND REPORTS PUBLISHED IN NON-REFERRED PEER-REFERRED JOURNALS OR PUBLISHED IN EDITED COLLECTIVE VOLUMES

Dr. Tanya Bozhkova

The candidate, **Dr. T. Bozhkova, presents 59 publications, the last 2 of which were used in the PhD degree procedure for and I will not review them. Of the rest, I do not accept articles numbered 15, 19, 20, 25, 26, 27, 31, 32, 34, 45 and 46.** In substance they are a review, but in volume they do not meet the definition of "review" given in paragraph 1, item 13 from the Supplementary Regulations of the LDASRB. **In the remaining 46 articles, results are given mainly from clinical, experimental and survey studies.** The candidate is the sole author of 2 publications, first author of 15 publications, second author of 14 publications and third – on 7 pcs. In the remaining 8 pcs. she is a subsequent author. **All this is evidence of the candidate's active participation in scientific and publication work.**

Dr. Zlatina Tomova

Candidate **Dr. Zl. Tomova presents 8 publications. They present the results of clinical and experimental studies.** The candidate is the first author of 4 publications, third - of 3 publications. and on 1 pc. is in fifth place. **All this is evidence of the candidate's active participation in research and publication activities.**

Dr. Dobromira Shopova

Candidate **Dr. D. Shopova presents 63 publications.** They provide overviews and presentations of new techniques/materials and provide results from clinical, experimental and survey research. A certain part of the articles were published in Bulgarian and in English, but they were correctly counted as 1 issue. **I do not accept articles numbered 6, 8, 11, 12, 20-22, 42, 44, 45, 54 and 59, because they are overviews, but in terms of volume they do not meet the definition in the law.** In the remaining 51 articles, the candidate is the first author of 21 articles, the second author of 12 articles, the third author of 6 articles and subsequent author of 12. **All this is evidence of the candidate's active participation in scientific and publication work.**

Dr. Rada Kazakova

Candidate **Dr. R. Kazakova** presents 207 positions, including full-text publications in non-refereed editions (the first 77 items), abstracts published in conference proceedings, oral and poster presentations and simultaneous translations. Because **items 8.78 to 8.207 are not full-text reports or publications and do not meet the definition of "article" given in paragraph 1, item 14 from the Supplementary Regulations of the LDASRB, I do not accept them.** The candidate is the sole author of 24 publications, first author of 14 publications, second author of 11 publications. and third – on 10 pcs. In the remaining 18 pcs. is a subsequent author. It is noteworthy that **the articles, of which Dr. Kazakova is the sole author, are mostly reviews of 9-12 literary sources, consist of 2 pages, have more the form of abstracts and are of low scientific value.** A large part of them do not meet the definition of "review" given in paragraph 1, item 13 from the Supplementary Regulations of the LDASRB. **For this reason, I do not accept 12 pcs. publications numbered 8.25 to 8.36. Therefore, according to this indicator, 65 publications remain.**

Indicator G9 - PUBLISHED CHAPTER FROM A COLLECTIVE MONOGRAPH

Dr. Tanya Bozhkova

Does not present data.

Dr. Zlatina Tomova

Does not present data.

Dr. Dobromira Shopova

She additionally presents 2 chapters from 1 collective monograph.

1. **Shopova D**, Mihailova A, Yaneva A, Sbirkov Y, Zlatev S, Redzeb M, Hristozova M, Kasnakova P, Parahuleva N, Sarafyan V, Semerdzhieva M, Bakova D. "Application of bioprinting in healthcare". FastPrintBooks - Plovdiv, 2023. ISBN: 978-619-236-463-2 - chapter "Application of 3D bioprinting - a revolution in personalized medicine" - pp. 74-107.

2. **Shopova D**, Mihailova A, Yaneva A, Sbirkov Y, Zlatev S, Redzeb M, Hristozova M, Kasnakova P, Parahuleva N, Sarafyan V, Semerdzhieva M, Bakova D. "Application of bioprinting in healthcare". FastPrintBooks - Plovdiv, 2023. ISBN: 978-619-236-463-2 - chapter "Bioprinting in dentistry - basic guidelines and perspectives" - pp. 137-185.

Dr. Rada Kazakova

Does not present data.

CONTRIBUTIONS

In scientific circles, the following classification of contributions is accepted: scientific, scientific-applied and applied. Scientific contributions refer to the development of new theory, new technology and new methodology, and scientific-applied contributions - to: 1) creation of new classifications, methods, approaches, algorithms, constructions, models, etc. and 2) obtaining and/or proving new or established facts with new methodologies. By their nature, scientific-applied and applied contributions can be original or confirmatory. When compiling the contributions, it should be taken into account that they are a synthesis of the conclusions to the publications, and the conclusions are a synthesis of the results obtained from the research. Conclusions from reviews and surveys may serve to plan new research and experiments, but cannot be considered as contributions. In procedures of this rank, the emphasis should be on the quality rather than quantity, and the contributions should be summarized in a synthesized form.

Bearing in mind the above, **I do not accept the contributions of any of the candidates as they are formulated.**

Dr. Tanya Bozhkova has scientific-applied contributions related to: 1) use of various methods for registration of occluso-articulation ratios and digital study of occlusion; 2) study the accuracy of different materials for functional shaping, the temporal stability and a clinical protocol for working with removable prosthetics; 3) established possibilities of application of CAD/CAM, laser and 3D printer technologies in fixed prosthetics. Applied contributions refer to created: 1) an apparatus for registration of occlusal contacts, an experimental setup for testing articulation paper and a digital method for evaluating occlusal-articulation relationships; 2) results regarding the specifics of oral health in geriatric patients.

Dr. Zlatina Tomova has scientific-applied contributions related to: 1) research and implementation of digital and CAD/CAM production technologies in dental practice and the properties of newly developed dental materials; 2) obtained new facts about the corrosion resistance, ion emission and oxidative stress of Ni-Cr and Co-Cr dental alloys produced by powder metallurgy and 3D printing; 3) established mechanical properties and biotolerability of the most commonly used polymers in PDM, made by CAD/CAM technologies. The applied contributions refer to created: 1) a method for the investigation in saliva of the oxidative stress marker; 2) digital protocol in implantology treatment; 3) a method for direct repair of fractured metal-ceramic structures without the need to replace the structure.

Dr. Dobromira Shopova has scientific-applied contributions related to: 1) obtained results for accuracy, mechanical properties and clinical characteristics of a wide range of dental materials - silicone impression materials, materials for making temporary structures, thermoplastic materials, composite nanomaterials; 2) established facts from the application of classical and modern methods of diagnosis and treatment in dental practice; 3) results of laboratory and clinical studies of periodontal diseases. Applied contributions refer to created: 1) methodology for measuring the negative pressure between the prosthetic field and the inner surface of the prosthesis; 2) digital protocols for creating occlusal splints and retainers through 3D printing; 3) a complex approach to acoustic analysis in dentistry.

Dr. Rada Kazakova has scientific-applied contributions related to: 1) the application of modern laser technologies and CAD/CAM systems for milling and 3D printing in prosthetic dentistry in treating patients and making prosthetic structures and 2) obtained results for the accuracy, optical, chemical and mechanical properties of plastics made by 3D printing. Applied contributions refer to developed clinical methodologies and treatment protocols using various dental materials and modern techniques.

CITATIONS

Dr. Tanya Bozhkova has **93 citations and 48 reviews** in scientific journals, referenced and indexed in world-renowned databases. She provided **13 citations in peer-reviewed monographs** and collective volumes, **but the first three citations were made by co-authors of the articles, so I do not accept them.** There are also 123 citations in non-refereed journal publications. According to the Scopus database, Dr. Tanya Bozhkova has 12 publications, 88 citations, and an H-index of 5. The Web of Science data is as follows: 14 publications, 52 citations, and an H-index of 4.

Dr. Zlatina Tomova has presented **17 citations and 11 reviews** in scientific journals, referenced and indexed in world-renowned databases, as well as 4 citations in publications in non-refereed journals. According to the Scopus database, Dr. Zl. Tomova has 14 publications, 29 citations and an H-index of 3. The Web of Science data is as follows: 10 publications, 15 citations and an H-index of 2.

Dr. Dobromira Shopova has **53 citations and 53 reviews** for journals from MDPI publishing house. She presented 14 citations of 7 publications made in 1 textbook and 1 teaching book with tests issued in Bulgarian and English. There are 47 citations and 2 reviews in publications in non-refereed

journals. According to the Scopus database, Dr. D. Shopova has 20 publications, 52 citations and an H-index of 4. The Web of Science data is as follows: 16 publications, 27 citations and an H-index of 3.

Dr. Rada Kazakova has **90 citations** in scientific journals, referenced and indexed in world-renowned databases, and **52 reviews** for journals mostly from MDPI publishing house. She presented 42 citations in dissertations, monographs and books published in Bulgaria and abroad, as well as 61 citations in publications in non-refereed journals. According to the Scopus database, Dr. Rada Kazakova has 16 publications, 87 citations, and an H-index of 7. The Web of Science data is as follows: 16 publications, 80 citations, and an H-index of 5.

PARTICIPATION IN SCIENTIFIC PROJECTS

Dr. Tanya Bozhkova participated in a **total of 9 projects**, of which 4 were intra-university scientific projects, 3 under the National Scientific Program "Young Scientists and Postdoctoral Students", 1 under the Operational Program "Human Resources Development" 2007-2013 No. DD-33 (BG051PO001-3.3.06-0011) and 1 national educational with European funding of the MES "Student practices - phase 2" as an academic mentor.

Dr. Zlatina Tomova participated in a **total of 4 scientific projects**, of which 2 were intra-university, 1 from the Scientific competition "Start of doctoral programs" and 1 project with European funding under Contract No. BG-RRP-2.004-0007-C01, which is currently operating.

Dr. Dobromira Shopova participated in a **total of 7 projects**, one of which she was the head of. Three of the projects are intra-university, 3 from the National Science Program "Young scientists and postdoctoral fellows", 1 related to the COVID-19 epidemic and 1 funded by the Ministry of Education and Culture - European Structural and Investment Funds "Student internships - phase 2" as an academic mentor.

Dr. Rada Kazakova participated in **2 intra-university scientific projects and 2 national educational projects** with European funding of the Ministry of Education and Culture "Student practices - phase 1 and phase 2" as an academic mentor.

PARTICIPATION IN SCIENTIFIC EVENTS

For the period 2013-2024, **Dr. Tanja Bozhkova** participated in 39 national forums, organized mostly by BDA, and 1 participation abroad at the 19th BASS congress in Belgrade, Serbia. Dr. Tanya Bozhkova is a certified Tekscan Dental lecturer for Bulgaria. She took part in 21 practical courses to improve her qualification.

For the period 2018-2021, **Dr. Zlatina Tomova** participated in 8 national forums, mainly organized by BDA, and 1 participation abroad - Ukraine. Dr. Tomova was a lecturer at 2 practical courses in 2024 and regularly participates in postgraduate training courses.

For the period 2008-2024, **Dr. Dobromira Shopova** took part in 38 national forums, organized mostly by BDA, and 2 congresses abroad - Spain. Dr. D. Shopova is a lecturer at the Open Dental Community. She presented certificates for participation in 11 practical courses for qualification improvement.

For the period 2013-2024, **Dr. Rada Kazakova** has 102 participations in national and international scientific forums with oral/poster presentations and as a simultaneous interpreter. She has presented an average of 3 posters/presentations/translations in one event, therefore, the number of forums is about 34. She is a lecturer, demonstrator and organizer of courses and lectures for postgraduate training of dental doctors - including those accredited to BDA. She has attended more than 124 lectures and postgraduate training courses in Bulgaria and abroad.

EDUCATIONAL AND TEACHING ACTIVITY

Indicators E20 and E21 - Published university textbooks or teaching manuals

Dr. Tanya Bozhkova presents **1 textbook and 4 study books** in co-authorship with a team from the department. The general part of the material science discipline, dental alloys and ceramics and the basic technologies for manufacturing dental constructions are very well presented in the textbook. Two of the books are manuals for practical classes on propaedeutic of prosthetic dentistry (PPDM) in Bulgarian and English, and the other 2 are tests on material science and PPDM of the "multiple choice questionnaire" type.

1. Slavchev D, **Bozhkova T**. Lecture course in materials science for doctors of dental medicine. 2021, Medical University - Plovdiv, ISBN 978-619-237-082-4;
2. Todorov G, Slavchev D, Shopova D, Hristov IL, **Bozhkova T**. Manual for practical classes in propaedeutics of prosthetic dentistry. 2018, Medical University-Plovdiv, ISBN 978-619-237-009-1;
3. Todorov G, Slavchev D, Shopova D, Hristov I, **Bozhkova T**. Practical guide for introduction to prosthetic dental medicine. 2018, Medical University – Plovdiv, ISBN 978-619-237-010-7;
4. Todorov G, **Bozhkova T**, Slavchev D. Sample tests on propaedeutics of prosthetic dentistry. 2018, Paisii Hilendarski University Publishing House, ISBN 978-619-202-397-3;
5. **Bozhkova T**, Slavchev D. Tests for a lecture course on materials science for dentists, part I. 2022, Medical University - Plovdiv, ISBN 978-619-237-095-4.

Dr. Zlatina Tomova presents **1 chapter in 1 textbook** authored by Prof. Hristo Kisov and **1 manual with tests** co-authored with a team from the department.

1. Hr. Kisov, **Z. Tomova**, Preparation of dental alloys, in Kisov Hr. Materials Science for Dentists. 2019. Sofia: UI "St. Kliment Ohridski". pp. 214, ISBN 978-954-07-4822-1;
2. Kisov Hr, Shopova D, Alexandrov Sv, Zlatev S, Georgiev Zh, **Tomova Z**, Atair R, Zhekov Ya. Materials science for dentists-tests. 2020. UI "St. Kliment Ohridski". ISBN: 978-954-07-4916-7.

Dr. Dobromira Shopova presents **2 chapters published in 2 textbooks** with authors Prof. Hristo Kisov and Prof. Stefan Ivanov.

1. Kisov Hr. "Materials Science for Dentists". Chapter "Print Materials". Sofia, 2019.
2. Ivanov St. "Materials Science Part 2". Chapter "Scanning a Working Model with Movable Stumps". Infodent - Sofia, 2024

In addition, the candidate presents **6 teaching guides** in co-authorship with a team from the department and a multidisciplinary team. The open tests in dental materials science, where students have to complete certain terms or answer individual questions, are impressive. The latest manual provides very up-to-date information on the regulatory framework for regulating bioprinting.

1. Todorov G, Slavchev D, **Shopova D**, Hristov I, Bozhkova T. Manual for practical classes in propaedeutics of prosthetic dentistry. 2018.
2. Todorov G, Slavchev D, **Shopova D**, Hristov I, Bozhkova T. Practical guide for introduction to prosthetic dental medicine. 2018.
3. Kisov Hr, **Shopova D**, Alexandrov S, Zlatev S, Georgiev Zh, Tomova Z, Atair R, Zhekov Ya. Materials science for dentists - tests. Sofia, 2020.
4. Kasnakova P, Mihailova A, **Shopova D**, Peneva P, Bakova D, Semerdzhieva M. "Design of the training of dental specialists". Plovdiv, 2022.
5. Hristov I, **Shopova D**. "Trial tests in dental materials", Plovdiv, 2022.
6. Hristozova M, **Shopova D**, Mihailova A, Yaneva A, Kasnakova P, Semerdzhieva M, Mavrov M, Bakova D. "Ethical and legal regulation of bioprinting in medicine and healthcare", Plovdiv, 2024.

Dr. Rada Kazakova presents 1 manual of 224 pages in English with clinical tests of prosthetic dentistry co-authored with Prof. A. Vlahova and Prof. Hr. Kisov. Tests of the "multiple choice questionnaire" type on 105 topics have been developed in it.

1. Vlahova, A., C. Kisov, **R. Kazakova**. Tests of clinics of prosthetic dentistry. Medical University – Plovdiv, Plovdiv, 2017, ISBN: 978-619-7085-91-4.

Indicator F – Teaching load (lectures and classes)

Dr. Tanya Bozhkova

According to Certificate P-1279/28.05.2024, Dr. T. Bozhkova has work experience and has held the academic positions of assistant and chief assistant for a total of 8 years, 2 months and 2 days. According to the attached reports on the academic workload, **Dr. Bozhkova has a total of 3,251 hours** of auditory, scientific and non-auditory employment **during the last 3 academic years**. For the **last two years, she has 938 hours in the columns of exercises/seminars/study practice** and 147 hours for exams. Data on lectures and pre-graduate student internships are not specified. Dr. T. Bozhkova is the supervisor of 1 specialist.

Dr. Zlatina Tomova

According to Certificate P-1073/09.05.2024, **Dr. Zl. Tomova** has work experience and has held the academic positions of assistant and chief assistant for a total of 7 years, 3 months and 12 days. According to the attached reports on the academic workload, **Dr. Tomova has a total of 2285.6 hours** of auditory, scientific and non-auditory employment during the last 3 academic years. For the **last two years, she has a total of 1895.2 hours of classroom employment, of which: 5 hours of lectures (Bulgarian language), 829 hours of exercises in English and 393 hours of exercises in Bulgarian, 530 hours of pre-diploma internship in English** and 138, 2 hours of exams.

Dr. Dobromira Shopova

According to Certificate P-1366/31.05.2024, Dr. D. Shopova has work experience and has held the academic positions of assistant and chief assistant for a total of 16 years, 8 months and 29 days. According to the attached reports on the academic workload, **Dr. Shopova has a total of 4040.2 hours** of auditory, scientific and non-auditory employment during the last 3 academic years. For the **last two years, she has a total of 1,994.2 hours of classroom employment, of which 1,023 hours were classes in English, 838 hours were classes in Bulgarian** and 133.2 hours were exams. During the academic year 2023/2024, she leads interns and is the supervisor of 1 specialist.

Dr. Rada Kazakova

According to Certificate P-1269/23.05.2024, Dr. Rada Kazakova has work experience and has held the academic positions of assistant and chief assistant for a total of 11 years, 11 months and 3 days. During this period, the candidate has experience in the specialty for a total of 9 years, 1 month and 13 days (Certificate P-1348/23.05.2024), and during the rest of the time she used statutory holidays. According to the attached reports on the teaching load, **Dr. Kazakova has no auditory or non-auditory employment during the last 3 academic years. For the last two years, she has 0 (zero) hours in the columns for exercises/seminars/study practice and exams, no data for lectures and pre-graduate internship students are indicated.** She was engaged only in scientific activity, of which there are 218 hours for the academic year 2021/2022, 345 hours for 2022/2023 and 258 hours for 2023/2024. **Therefore, no points can be given for this indicator.**

CRITICAL NOTES AND RECOMMENDATIONS

I have written a large part of the critical notes in the assessment of the candidates' materials according to the individual criteria. In general, the pursuit of maximum quantitative indicators at the expense of quality is impressive. The evaluation criteria are clearly defined in the LDASRB. We need

to think about what we will leave behind and what the new associate professors we review will leave behind. **The criteria should not be lowered.**

PERSONAL IMPRESSIONS

I do not know the candidates for the academic positions. I made the reviews based on the provided documentation.

OVERALL ASSESSMENT OF THE CANDIDATE'S SUITABILITY

Dr. Tanya Bozhkova with a total of 5047.2 points covers and exceeds the minimum national requirements from the LDASRB and the specific requirements defined in the Regulations for Academic Development at the Medical University - Plovdiv.

Dr. Zlatina Tomova, with a total of 1872.23 points, covers and exceeds the minimum national requirements from LDASRB and the specific requirements defined in the Regulations for Academic Development at the Medical University - Plovdiv.

Dr. Dobromira Shopova does not meet the minimum national requirements from the LDASRB under the indicator B3 Habilitation work - monograph. The presented habilitation thesis partially overlaps the results of the PhD thesis, which does not meet the condition of Art. 24, para. 3 of LDASRB. Dr. Shopova meets all other requirements.

Dr. Rada Kazakova does not meet the minimum national requirements from the LDASRB under indicator B3 Habilitation work - monograph. The presented habilitation thesis partially overlaps the results of the PhD thesis, which does not meet the condition of Art. 24, para. 3 of LDASRB. Dr. Kazakova also does not meet the requirement of MU-Plovdiv for teaching activity under indicator F - in the last two academic years, she has no teaching workload (lectures and classes).

CONCLUSION AND CLASSIFICATION

The in-depth analysis of the candidates' documents gives me reason to propose the following ranking:

1. **Dr. Tanya Bojkova meets** the mandatory and specific conditions and scientometric criteria for the academic position "ASSOCIATE PROFESSOR".
2. **Dr. Zlatina Tomova meets** the mandatory and specific conditions and scientometric criteria for the academic position "ASSOCIATE PROFESSOR".
3. **Dr. Dobromira Shopova does not meet** the mandatory conditions and scientometric criteria for the academic position "ASSOCIATE PROFESSOR".
4. **Dr. Rada Kazakova does not meet** the mandatory and specific conditions and scientometric criteria for the academic position "ASSOCIATE PROFESSOR".

PROPOSAL TO ACQUIRE THE POSITION

Based on the above, I propose and vote with conviction FOR:

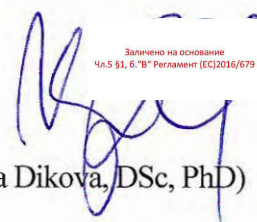
1. **Dr. Tanya Bozhkova TO BE ACQUIRED** the position of "ASSOCIATE PROFESSOR" in "Prosthetic Dentistry".
2. **Dr. Zlatina Tomova TO BE ACQUIRED** the position of "ASSOCIATE PROFESSOR" in "Prosthetic Dentistry".

20.08.2024

Varna

Reviewer:

(Prof. Tsanka Dikova, DSc, PhD)



Залчено на основание
Чл.5 §1,6 "Б" Регламент (ЕС)2016/679