



REVIEW

of Prof. Angelina Pecheva Vlahova-Petrova, DMD, PhD

Head of the Department of Prosthetic Dentistry,

Faculty of Dental Medicine, Medical University-Plovdiv, Bulgaria

Of Dissertation for PhD Degree '**Doctor**'

Professional direction: Dental Medicine

Doctor's program: Prosthetic Dentistry

Author: Dr. Georgi Atanasov Alexandrov

Form of dissertation: self-preparation, PhD student external for MU-Plovdiv

Department: Department of Prosthetic Dentistry, FDM, MU-Plovdiv

Topic: "Comparative evaluation of the precision of the conventional and the digital impressions for the All on four conception – in vitro study"

Scientific Supervisor: Prof. Christo Kalchev Kisoov, DMD, PhD

1. General presentation of the procedure and the PhD student

The presented set with the materials on paper and electronic variant includes the following documents:

- Report to the Rector of MU-Plovdiv for disclosure procedure of PhD defense
- Signed CV in European format
- notarized copy of university diploma
- orders for PhD student and for deduction with the right to make final defense
- order for individual plan exam and protocol of PhD student exam according to the specialty
- protocol of department meeting for discussion of the dissertation with decisions for starting procedure of final defense and choice of scientific jury
- Dissertation

- Abstract book
- list of publications connected with the topic of the dissertation
- copies of the publications
- list of participations in scientific forums
- list of noticed citations
- declaration of originality and reliability of the documents
- other documents.

The PhD student has 4 full text publications, one of them in referred journal (Q4) and 3 participations in congresses.

Notes and comments for the documentation:

The documents are properly prepared and submitted.

2. Short CV data of the PhD student

Dr. G. Alexandrov graduated Dental Medicine in FDM, MU-Plovdiv in 2009.

In 2011 he graduated as a post-graduate student in the Department of Maxillo-Facial and Oral Surgery of БГМУ, Minsk, Belarus as a specialist of “Oral Surgery”, educated by Assoc. Prof. Alexandr Glinnik.

2013 - 2019 – works as a dentist in Ausburg, Germany.

From 2019 till now – a private practice with a digital dental lab.

2015-2017 – international medical college in Munster, Germany, where Dr. Alexandrov receives professional qualification “Master of Science in Implantologie and Dental Surgery“ under the education of Prof. Dr. Ulrich Joos.

3. Relevance of the topic and expediency of the aim and the tasks of the dissertation

Today the digital methods make the Implant-supported Prosthodontics really easy. Scanning and receiving digital impression are made via intraoral scanners and special scan bodies that are fixed on every implant.

The digital impression allows the fabrication of a virtual model on which the design of the implant-supported restoration is made. Digital impressions also allow the fabrication of material models made of resins via milling or printing.

The clinical practice, connected with the prosthetic treatment using many implants with different angle and distance between each other, poses the question how and with what type of impression

methods the most precise and detailed information can be send to the dental lab for the fabrication of the perfect prosthetic restoration. This fact makes the comparison between the analogue and the digital techniques extremely actual and guides to the aim and the tasks of the dissertation that are clear and precise formulated.

4. Knowledge of the problem

The PhD student Dr. Georgi Atanasov Alexandrov has an excellent knowledge about the problem and creative evaluation about the material. A proof of this is the detailed literature review based on 241 literature sources, 54 of them on Cyrillic and 187 on English and German. Most of them are from the last 5 years.

5. Methods of the investigation

The chosen methods of the investigation allow achievement of the aim and tasks of the dissertation.

6. Characteristics and evaluation of the dissertation

The dissertation of Dr. Alexandrov has 222 standard pages and is illustrated with 41 tables, 40 diagrams and 31 figures. The bibliography has 241 sources, 54 in Cyrillic, and is detailed and well structured.

The aim and the tasks of the dissertation are formulated according to the topic.

The presentation and the illustration with figures and graphics of the own investigations is on the desired level according to the materials and the methods.

The results are systemized and arranged according to the tasks. They are illustrated with photo material, final tables and schemes.

The discussion is made following the present requirements for the structure of the dissertation, separately for every task. There are also tables and diagrams with the statistical data.

The conclusions are in a direct connection with the evaluated results.

The contributions present the modern focus of the dissertation.

7. Contribution and significance of the dissertation for the science and practice

The contributions of the dissertation of Dr Alexandrov are systemized and divided into three groups: with actual, with confirmatory and with scientific and applied character.

The biggest interest is provoked of the contribution with actual character – an investigation for comparison between the digital and analogue impressions according to three aspects (in the

space, according to the interimplant distance and according to the inclination) was made for first time.

8. Assessment of the dissertation publications

The full text publications and participations associated with the dissertation of Dr Alexandrov are 7 – 4 full text, one of them in referred journal (Q4), and 3 participations in congresses that are enough for PhD degree according to the Regulation of MU-Plovdiv.

9. Personal engagement of the PhD student

According to my opinion the personal engagement of Dr Alexandrov in the dissertation study is dominant and the approved contributions and the final results are his own personal merit and a merit of his Scientific Supervisors Prof. Kissov.

10. Abstract book

The Abstract book of Dr Alexandrov is designed according to the requirements and presents the main results of the dissertation.

The contents and the quality of the Abstract book meet the requirements.

11. Critical notes and recommendations

I have no critical notes connected to the final variant of the dissertation of Dr. Alexandrov.

12. Personal impressions

I do know Dr. Alexandrov and I have excellent personal impressions of him as a clinician. His scientific work is also successful.

13. Recommendations for future application of the dissertation contributions and results

I recommend to Dr. Alexandrov to continue his work in the field of the evaluation of analogue and digital impressions (in vivo) with patients.

CONCLUSION

The dissertation has scientific, scientific-practical and practical results that are an original contribution in the science and respond to all the requirements of the Law for academic development in Bulgaria (ЗПАЧПБ), the Regulations of ЗПАЧПБ and the Regulations of MU-Plovdiv. The materials and results of the dissertation respond to all the specific requirements of MU-Plovdiv.

The dissertation present that the PhD student Dr. Georgi Atanasov Alexandrov has exhaustive theoretical knowledge and professional skills of the scientific specialty “Prosthetic Dentistry” and demonstrates qualities and abilities for self-conduct scientific study.

Due to the above, I confidently give my **positive assessment** for the investigation presented in the Dissertation, Abstract book, Results and Contributions, and propose to the honorable scientific jury to award an educational and scientific degree „Philosophy Doctor (PhD)” to Dr. Georgi Atanasov Alexandrov in PhD program of “Prosthetic Dentistry”.

15.09.2022
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Залчено на основание
Чл.5 §1, б. "В" Регламент (ЕС)2016/679

Reviewer:

(Prof. Angelina Vlahova, DMD, PhD)