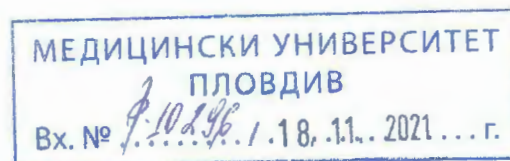


TO THE MEMBERS OF THE SCIENTIFIC JURY,  
APPOINTED BY ORDER OF THE RECTOR OF MU -  
PLOVDIV, № P-2004 / 02.11.2021

OPINION



by **Prof. Dr. Metodi Zahariev Abadjiev, MD,**  
Head of the Department of Prosthetic Dentistry Clinic,  
FDM, MU – Varna

**Regarding** dissertation on the topic: "**Speciality in the application of fibrous composite splints made by CAD/CAM technology in the treatment of periodontally compromised teeth**" by **Dr. Yanko Dimitrov Zhekov** from the Department of Prosthetic Dentistry, FDM, MU – Plovdiv

The presented dissertation on "**Speciality in the application of fibrous composite splints made by CAD/CAM technology in the treatment of periodontally compromised teeth**" is written on 186 computer pages, of which 25 pages are bibliography and 7 contain applications. The bibliography includes 229 literary sources, of which 68 are in Cyrillic. An abstract is attached to it.

**The literature review** is purposeful, informative and analytical. The unsolved problems are well extracted from the literature review and outline relatively underdeveloped or unaffected aspects in the use of fiber-reinforced composite splints made with CAD/CAM technology.

The **aim** is to study the advantages of fibrous composites for the manufacture of splinting structures using CAD/CAM technology.

There are 4 **tasks** with two subtasks:

**Task №1.** Investigation of the bond strength between materials designed for CAD/CAM technology and adhesive cement in different surface treatments.

**1.1.** Production of test specimens according to the international standard (ISO 29022). Evaluation and comparison of the roughness parameters during different surface treatment with an atomic force microscope.

**1.2.** Investigation of the bond strength with a universal testing machine.

**Task №2.** Application of an atomic force microscope in the study of the possibilities for polishing and glazing of materials intended for CAD/CAM technology.

**Task №3.** Offering our own laboratory protocol for planning and production of innovative design of extracoronary splints made by CAD/CAM technology and deriving recommendations to dental technicians.

**Task №4.** Clinical evaluation of fibrous composite extracoronary splints made by CAD/CAM technology and derivation of a clinical protocol and recommendations for the practice of D.

The topic of finding the most suitable materials and technologies for the prosthetic treatment of periodontal diseases has always been relevant. Modern technologies allow for clinical trials and for comparing the results of analog and digital prosthetic dentistry.

### **Research methodology**

The selected research methods allow unequivocally achievement of the set aim and obtaining an adequate answer to the tasks set in the dissertation.

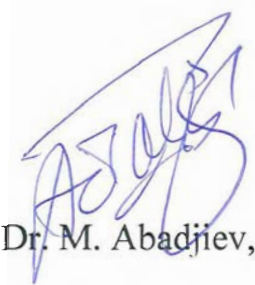
### **Characteristics and evaluation of dissertation work and contributions**

The results, their discussion, and the conclusions are made in accordance with the set aim. The obtained results are statistically processed and well

analyzed. The dissertation would have contributions and significance for science and medical practice, through scientific and scientific-applied contributions with a view to its implementation in medical practice. The dissertation is a scientific-applied development with an original character. The author demonstrates practical experience and knowledge on the topic, as well as the opportunity to conduct independent research.

In conclusion, I declare that I give my positive assessment and I vote confidently with "Yes" for awarding the educational and scientific degree "Doctor" to Dr. Yanko Zhekov.

09.11.2021



Prof. Dr. M. Abadjiev, MD