

## OPINION

For the competition for the academic position “Associate Professor” in scientific field 5: Technical Sciences, professional field 5.1: Mechanical Engineering, specialty “Construction mechanics, strength of materials”, published in the State Gazette № 68/31.07.2020.

**Candidate:** Major Assistant Professor Vladimir Petrov Dunchev, PhD

**Scientific Jury member:** Professor Lubomir Dimitrov, PhD

### 1. General characteristic of the applicant's research activities

One candidate participates in the competition – Major Assistant Professor Vladimir Petrov Dunchev, PhD, from the Department of Applied Mechanics, Faculty of Mechanical and Precision Engineering at the Technical University – Gabrovo. The teaching and research activities and contributions of the candidate are entirely in the field of the competition. The candidate fully meets the national minimal requirements as well as those of Technical University – Gabrovo for the academic position of “Associate Professor”, in particular

**Indicator A** (50 for 50 points required) – a doctoral degree from the Technical University – Gabrovo of 17.04.2015.

**Indicator B** (117,2 for 100 points required) – the candidate has presented ten publications equivalent to a monograph. These publications are indexed in world databases of scientific information (Scopus and Web of Science). They form a whole entity that could be entitled "*Increasing the fatigue strength of metal structural elements by means of static surface plastic deformation*". Among these 10 publications there are no works where the candidate is the only author. No separation protocols have been presented, so I believe that the authors have an equal share in publications.

**Indicator Г** (203,2 for 200 points required) – eng. Vladimir Dunchev has submitted a list of 14 publications and one of them in a journal with impact factor. He is the only author in t of them. The presented publications are different from the publications on the candidate's dissertation. No separation protocols have been submitted for the publications and therefore I believe that the participation of the co-authors is the same. The requirement of TU-Gabrovo for the number of publications is covered.

**Indicator Д** (150 for 100 points required) – the list of the citations of the candidate's publications submitted for this competition is accurate and detailed. The TU-Gabrovo requirement for the number of citations is covered (15 for 5 required).

## **2. Assessment of the teaching work of the applicant**

Eng. Vladimir Petrov delivers lectures on "Mechanics I", "Mechanics II" and "Strength of materials" in the specialties of Mechatronics and KTM at TU-Gabrovo. One "Methodical guide for solving problems in statics" and one "Guide for solving problems in kinematics" have been published. The requirement of TU-Gabrovo for issued textbooks and other teaching materials has been met (2 for 2 required). The candidate was an assistant professor from 2015 to 2017, and then he became a chief assistant professor at the Department of Applied Mechanics at the Technical University - Gabrovo. I believe that Eng. Vladimir Petrov has a good pedagogical training, which corresponds to the academic position of "Associate Professor".

## **3. Key scientific contributions**

The candidate's contributions are specified as "scientific", "scientific-applied" and "applied". All contributions are in the field of the competition. The contributions are formulated on the basis of what the author has done and accurately cover what has been achieved. I accept the contributions as they are formulated.

## **4. Significance of the contributions to science and practice**

It makes a good impression that most of the publications and contributions of the candidate are extremely directly addressed at solving practical problems in the field of mechanics and strength of materials. The candidate has attached a document for participation in 7 research projects.

## **5. Critical remarks and recommendations**

I did not find any fundamental and significant errors and inaccuracies in the submitted documents under the competition. I would recommend the candidate to publish more independent works. In addition, it would be good to be more actively involved in European and research projects.

## **CONCLUSION**

In conclusion, I can say that the candidate has met the requirements for holding the academic position of "Associate Professor" according to ЗПАСРБ, the Regulations for its application and the Rules for holding academic positions at the Technical University - Gabrovo. This gives me reason to convincingly propose Major Assistant Professor Dr., Engineer Vladimir Petrov Dunchev to take the academic position of "Associate Professor" in the professional field 5.1. Mechanical Engineering, scientific specialty "Structural Mechanics, Strength of Materials",

Department of Applied Mechanics, Faculty of Mechanical and Precision Engineering, Technical University - Gabrovo.

**Date: 26.11.2020 г.**

**Jury member:**

/Prof. L. Dimitrov/