

## STANDPOINT

on a competition for occupying the academic position "Associate Professor"  
in scientific field 5. Technical Sciences  
Professional field 5.1. Mechanical engineering  
study discipline "Materials Technology"  
announced in SG issue No2 from 05.01.2024.  
with the only admitted candidate: Assist. Dr. Ing. Tatyana Mitkova Mechkarova  
Member of the scientific jury: Assoc. Dr. Ing. Radostin Dimitrov Dimitrov  
according to Order No. 110 of 28.02.2024. of the Rector of TU-Varna

### ***1. General characteristics of the applicant's research and applied activities***

Assist. prof. PhD eng. Tatyana Mitkova Mechkarova graduated from the Technical University of Varna, specialty "TTOM" in 2004. He defended his doctoral dissertation in 2017. on "Optimization and study of indirect plasmatron for chemical-thermal treatment of titanium alloy Ti-6Al-4V". In 2007. She was appointed Assistant Professor at the Department of Materials Science and Materials Technology at the Technical University of Varna, where she still works.

For participation in the competition for associate professor are presented the following works:

- 1.1 By indicator C.4. - 11 pcs. scientific publications in international scientific journals, indexed by Scopus and Web of Science, united as equivalent to a habilitation work on the topic: "Study of the structure and properties of materials";
- 1.2 By indicator D.8. - 37 pcs publications, four of which stand alone;
- 1.3 Indicator E.12. - There are 18 citations of the candidate's work.

For evaluation I accept 48 works in which the participation of the applicant is as follows:

- He is the first author of 13 papers.
- He is a second author in 11 papers.
- He is a third author in 18 papers.
- The fourth and subsequent author is in 2 works.

All publications are on the topic of the competition, with 15 in Bulgarian, 2 in Russian and 29 in English.

Candidate Assist. prof. PhD eng. Tatyana Mechkarova has participated in 12 international scientific conferences and in 3 applied scientific developments focused on conducting various research in her professional field. The applicant has participated in 9 research projects, all of which are in charge. A large part of the research projects are related to the professional field of the applicant.

As a project manager Assist. prof. PhD eng. Tatyana Mechkarova has attracted funds to the university and the department where she works at the amount of about BGN 60,000.

**Conclusion** - Assist. prof. PhD eng. Tatyana Mitkova Mechkarova, PhD satisfy all procedural requirements under the Law on the Development of Academic Staff in the Republic of Bulgaria - ZRASRB, the Regulations for its implementation and the Regulations on the terms and conditions for acquiring academic degrees and occupying academic positions at the Technical University of Varna, necessary for the occupation of AD "Associate Professor", some

of which are exceeded – groups B, D and J.

## ***2. Evaluation of the candidate's pedagogical training and activity***

Assist. prof. PhD eng. Tatyana Mitkova Mechkarova conducts lectures, seminars and laboratory exercises of students from the Faculty of Mechanical and Technological Engineering and the Faculty of Shipbuilding at the Technical University of Varna. Leads course projects with students from the same faculties.

According to a report for the period 2020 – 2023 Assist. prof. PhD eng. Tatyana Mechkarova has held 403 hours - lectures, 638 hours - laboratory exercises and course projects. There are 10 successful graduates.

Assist. prof. PhD eng. Tatyana Mitkova Mechkarova for the period 2018-2023 has implemented eight Erasmus+ mobilities at foreign universities in Greece, Cyprus and Romania.

From a reference for the acquired qualification the candidate Assist. prof. PhD eng. Tatiana Mechkarova has:

1. Welding certificate Per.No: 1764-74/ 08.09.2023
2. Member of CEID - Regional College Varna, part Technology of Mechanical and Instrument Engineering with a certificate of full designer's capacity - per. number No16151 with a protocol decision of the Board of CEID 151/12.10.2018
3. Certificate for professional qualification TEACHER in the specialty "Mechanical Engineering and Technologies" - series C-00, No052527 / reg.No291 15.11.2002;
4. Course: Increased danger; Certificate No: 5158/10
5. Course: Emergency Response; Certificate No: 5159/1

**Conclusion** – I appreciate the pedagogical qualification of the candidate at a very high level for the required academic position "Associate Professor".

## ***3. Basic scientific and applied research contributions***

In the submitted 48 scientific papers of the candidate, scientific contributions related to the following thematic areas can be differentiated:

**Thematic direction 1** - Study of the structure and properties of materials;

**Thematic direction 2** - Research and modeling of technological processes;

**Thematic direction 3** - Study of the structure and properties of materials;

**Thematic direction 4** - Experimental statistical modelling and regression analysis;

The contributions contained in the candidate's work can be assigned to the following groups:

- Scientific and applied contributions - 30 pieces;
- Applied contributions - 18 pieces;
- Citations - 18 issues in world-famous databases Scopus and Web of Science.

As you can see, there are significant scientific, applied and applied contributions, some of which are the personal work of the candidate or are received during her decisive participation. The citations of these works speak of the recognition of the candidate by the scientific circles in the field at home and abroad.

## ***4. Significantness of contributions to science and practice***

The large number of scientific, applied and applied contributions enrich the theory, training material and practice in the field of the announced competition. Considering that the candidate Assist. prof. PhD eng. Tatyana Mechkarova presents 48 works with her participation,

18 of which have been published in international scientific conferences and journals indexed in world-famous databases Scopus shows that the candidate is at a high scientific and technical level.

The citations of his works tell him about the recognition of the candidate by the scientific community in Bulgaria and abroad.

The quantitative indicators of the criteria for occupying the academic position "Associate Professor" are met.

I find that Assist. prof. PhD eng. Tatyana Mitkova Mechkarova is formed as a highly qualified specialist and recognized researcher and pedagogue in the field of materials science, heat treatment of materials and welding.

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

I have no critical comments about the scientific work and activities of the candidate.

### **CONCLUSION**

I know the candidate personally, and based on the submitted documents, materials and scientific works, their significance and the scientific, applied and applied contributions contained therein, I believe that **Assist. prof. PhD eng. Tatyana Mitkova Mechkarova** fully meets the requirements of the Law on Internal Development and the Regulations of the Technical University of Varna for the development of the academic staff for obtaining the academic position of Associate Professor. For this reason, I give mine positive assessment and I recommend to the honourable the Scientific Jury to support the application of the Assist. prof. PhD eng. Tatyana Mitkova Mechkarova for the academic position "Associate Professor" in the Field of Higher Education 5 Technical Sciences, professional field 5.1. Mechanical Engineering, course "Materials Technology".

Apr 23, 2024  
Varna

Member of the

Заличена информация  
по Регламент (ЕС)  
2016/679