

STANDPOINT

for participation in a competition for an academic position “Associate professor”
in scientific field 5 Technical sciences
professional field 5.1 Mechanical Engineering
scientific specialty Manufacturing technology
posted at DV issue 67/28.07.2020

with a single applicant: Assistant Professor Eng. Tanya Georgieva Avramova, PhD
Member of the scientific jury: Prof. Angel Antonov Dikov, PhD
According to Rector’s Order 438/08.10.2020

1. A general characteristic of the applicant's research and development activities

Assist. Professor Eng. Tanya Georgieva Avramova, PhD graduated from the Technical University of Varna in the specialty "Manufacturing Engineering and Technology". In 2014 she defended her doctoral thesis on the topic "Management of quality parameters of treated surfaces through the application of combined technological impacts". The teaching activity of the applicant began in 2009, when she was appointed as an assistant professor at the Dept. “Technology of Machine Tools and Manufacturing”.

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

1.1 Monograph "Finishing operations by sliding friction when machining holes", published in 2019 (A1).

1.2. Thirty scientific papers published in various publications, of which:

- Four papers in publications referenced and indexed in international databases.
- Twenty papers in unreferred editions.
- One textbook and two teaching tutorials.

Moreover, there are two recognized utility model requests.

For evaluation I accept 24 works in which the applicant's participation is as follows:

- Independent author in 10 works.
- First author in 6 works.
- Second author in 6 works.
- Third author in 1 work.
- Fourth author in 1 work.

All publications are on the topic of the competition, as in Bulgarian there are 8 pcs and 16 pcs in English.

I do not accept 14 papers for review for the following reasons:

➤ Publications on the dissertation for educational and scientific degree "Associate professor" – papers from (Д1) to (Д8) (8 pcs);

➤ I report the monograph (A1), but do not review it (1 pc);

➤ University textbook (B2) and university teaching tutorials (B1) и (B3) I report, but do not review (3 pcs);

➤ Registered utility models (Г1) and (Г2) I report but do not review (2 pcs).

The works of Assistant Professor Eng. Tanya Georgieva Avramova, PhD are in the following directions:

- Designing of combined tools for machining holes.
- Methods and mathematical models for studying the shape formation and for determining the characteristics of regular microrelief during milling.
- Use of software products for design and research of processes and objects

For the period 2012 - 2019 she participated in 5 research projects and 2 educational projects funded by EU operational programs.

In addition to research, the applicant has a significant implementation activity - two tools created by her are implemented in the production company "C Pro" Ltd. - Varna.

There is no data on the realized economic effect.

Conclusion - Assistant Professor Eng. Tanya Georgieva Avramova, PhD covers the minimum national requirements for all groups of indicators for AP "Associate Professor", as some are over fulfilled - Group Г and Ж.

2. Assessment of the pedagogical preparation and activity of the applicant

Assistant Professor Tanya Avramova, PhD has given and gives lectures in nine disciplines for bachelor's and master's degrees, she has supervised and reviewed a large number of diploma theses. She has also developed numerous curricula for various specialties. She has participated in 4 international programs (international mobility).

She has provided the purchase of 20 process management software licenses through real-time data collection and statistical processing. Two digital measuring tools with the respective transmitters, a connecting module, a receiver and software for processing the obtained results were donated to them. They are equipped with a computer laboratory available to students, PhD students and lecturers (11.5.1).

Conclusion – I evaluate the pedagogical qualification of the candidate at the required level for the required academic position "Associate Professor".

3. Major scientific and applied science contributions

The contributions contained in the applicant's works can be referred to the following groups:

- Scientific contributions 2 pcs;
- Scientific applied contributions 8 pcs;
- Applied contributions 14 pcs;
- Methodological contributions related to the developed and published textbooks, teaching tutorials and articles 7 pcs.
- Citations – 29 pcs.

As can be seen, there are significant scientific, scientific-applied and applied contributions, the predominant part of which are the personal work of the applicant or were obtained with her decisive participation. The citations of these works speak of the recognition of the candidate by the scientific circles in our country and abroad.

4. Significance of contributions to science and practice

The large number of scientific-applied, applied and methodological contributions enriches the theory, teaching material and practice in the field of the announced competition. Considering that out of 24 works, she is an independent author in 10 and the first in 6, we can conclude that the contributions are a personal work or were received with her decisive participation.

Представените 29 цитирания на нейните трудове говорят за признанието на кандидатката от научните среди у нас и в чужбина.

The presented 29 citations of her works speak of the recognition of the applicant by the scientific circles at home and abroad.

The quantitative indicators of the criteria for holding the academic position "Associate Professor" have been met.

I consider that Assistant Professor Tanya Avramova, PhD is a highly qualified specialist and a recognized researcher and pedagogue in the field of mechanical engineering technology.

5. Critical remarks and recommendations

I have no principled remarks on the scientific works of the applicant. I have remarks of a secondary nature, which do not change the excellent impression of the presented and arranged materials. I would like to recommend emphasizing the implementation activity from the results and conclusions obtained by the applicant, especially in the conditions of the machining of hydraulic cylinders in the companies "HES" - Yambol, "Palfinger" - Tenevo, "Pneumatics - Serta" - Kardzhali.

CONCLUSION

I do not know the candidate personally, but based on my acquaintance with the presented scientific papers, their significance and the scientific, scientific-applied and applied contributions contained in them, I consider that **Assistant Professor Tanya Avramova, PhD is worthy to hold the academic position of "Associate Professor"** in professional field 5.1 Mechanical Engineering, scientific specialty "Manufacturing technology".

29.10.2020
Sofia

JURY MEMBER:
/Prof. Angel Dikov, PhD/