

OPINION

from Prof. DSc. Eng. Stanislava Tsankova Tasheva

Member of the scientific jury for the competition for the academic position "**Associate Professor**", Scientific field: 5. Technical science, Professional direction: 5.13. General engineering, Science specialty: 02.10.23 "Technology of natural and synthetic fuels", announced in the State Gazette, issue 42/12.05.2023 for the needs of the University "Prof. PhD Asen Zlatarov" – Burgas,

Candidate: Main assistant Eng. Milena Petkova Dimitrova, PhD

The only candidate in the competition is Main assistant Eng. Milena Petkova Dimitrova, PhD. The candidate is required of the minimum national requirements for scientific and teaching activities in scientific field and professional areas for holding the academic position "Associate Professor", according to the indicators of Art.2b, para.2 of the Law on the Development of the Academic Staff in the Republic of Bulgaria and requirement under Art.64, para. 1 of the Regulation for the terms and conditions for acquiring scientific degree and holding academic position at the University "prof. PhD Asen Zlatarov"- Burgas.

Main Assistant Eng. Milena Dimitrova, PhD is graduated the University "Prof. PhD Asen Zlatarov" in 1994 Master degree in "Technology of Oil, Gas and Chemmotology". From 1990 to 1993 she is graduated a Master degree in "Technology of Oil, Gas and Chemotology" with the profile pedagogy, qualification chemical engineer – teacher.

From 1994 to 2019, she worked in the "South –Maritime Burgas Territorial Directorate at the Customs Agency", as a supervisor in terms of strict compliance with European regulations in order not to damage the EU fix.

From 2012 to 2019 she worked as a fee assistant at the University "Prof. PhD Asen Zlatarov" – Burgas led lectures, seminars and practical exercises on the specialty: "Management of the operations, procedures and customs service with excise goods" for the Master degree toward department of Industrial technology and management of Social Faculty and lectures, seminars and practical exercises on the specialty: "Transport Engineering and Technology" for the Bachelor's degree of Faculty of Technical science. From 2019 until now, she has been working at the University "Prof. PhD Asen Zlatarov" to a central scientific laboratory, where she teaches, performs analyzes and works on an apparatus for complex thermal analysis.

From September 2019 to July 2021 she held the academic position of assistant and from July 2021 up to now she is "Main assistant".

She has obtained the scientific degree PhD since 2008 in scientific field 5, Technical sciences specific specialty: 02.10.23 "Technology of natural and synthetic fuels".

The candidate presents documents for teaching activities in University "Prof. PhD Asen Zlatarov" from the last 5 years, which indisputably proved her rich teaching experience.

The teaching activity of Main Assistant PhD Milena Dimitrova consisted of conducting lectures and practical exercises for students in the "Professional Bachelor",

“Bachelor” and “Master” degrees, mainly in the professional directions 5.13. General Engineering and 5.10. Chemical technologies. The candidate developed in co-authors ten study programs in the disciplines: “Custom legislation and customs control”, “Customs investigation and risk analysis”, “Custom aspects of the implementation and mechanism of the common agricultural policy”, “Administrative-criminal law and process”, “Custom regimes and procedures”, “Health and safety at work”, “Economic risk (financial and entrepreneurial)”, “Fundamentals of industrial technology” and “Custom legislation and custom control” for trainees.

The candidate has two independent study programs in the following disciplines: “Commercial and forwarding relations in transport” and “Customs regimes and procedures”. She has published three textbooks on the disciplines which she teaches students. My assessment for the candidate’s pedagogical training and activities is high.

I find several groups of contributions in different fields to be well-founded, reasoned and confirmed by the scientific works (articles and reports) with which the candidate participated in the “Associate Professor” competition.

The presented contributions are scientific, scientific-applied and applied and can be grouped in the following main directions:

- Research and analysis of the side processes causing pollution of the technological equipment in the oil refining installation. Studies have been made on the influence of the raw material on the intensity of side processes. Modern methods have been applied to reduce pollution in the installations for atmospheric distillation of oil and hydrotreatment of diesel fractions;

- The corrosion processes in the installations for the oil processing complexes and their influence on the formation and growth of contamination on the surfaces of the equipment were investigated. Methods have been implemented to reduce corrosion processes in atmospheric oil distillation plants. The influence of the starting products and methods used in order to reduce corrosion processes during oil processing has been studied. Inhibitory protection methods have been introduced in bitumen production plants;

- Different methods of chemical treatment of different oil fractions are researched in order to reduce and remove sulfur compounds through alternative cleaning methods;

- The thermodynamic parameters (Gibbs energy, entropy and enthalpy) of various processes were studied in order to establish the thermodynamic possibility for their implementation and to determine the spontaneity of the processes;

- The chemical risk during oil pipeline transport and storage of products from the oil refining industry has been assessed, and the modern and ecological trends in the collection, storage, safety and recycling of used ship oils during operation, transport and berthing in port of the Republic of Bulgaria have been analyzed;

- An analysis of the basic tactical principles in the investigation of crime through custom investigation and risk analysis was carried out.

I evaluate the applicant’s contributions positively and as corresponding the requirements of the normative documents on this point.

In competition for “Associate Professor” Main Assistant PhD Milena Dimitrova participated with one monograph, published after the defense of the dissertation and with a list of 19 publications. Of these, independent – 8, co-author – 11. By types, they are as follows:

- Articles in SCOPUS and Web of Science -12;
- Articles in Bulgarian and foreign peer-reviewed scientific publications – 7;

The structure of scientific publications gives grounds for the following conclusions:

- The scientific works presented in the competition fulfill the requirements of the law;
- The works presented are dedicated to problems in the field of the competition;
- There is balance of independent and co-authored scientific works.

A list with a total of 22 citations is presented, which shows that the candidate's scientific results are discovered and cited by authors working in similar research fields. 22 citations of scientific publications in international database SCOPUS and Web of Science were noted. That is why it can be considered that the contributions of Main Assistant PhD Milena Dimitrova have received the necessary fame and recognition from the scientific community at home and abroad.

The candidate has also presented a list of 4 contracts and won competition projects with her participation (4 scientific at NIH, of which 4 at University "Prof. PhD Asen Zlatarov"-Burgas, 3-participations in a team and leader of the one project).

The candidate has submitted a report on the fulfillment of the minimum requirements under the Regulations for the University's RASDOAP, from which it is clear that she meets the state requirements under the RAS of the Republic of Bulgaria and the University's Regulations for all groups of indicators.

I know Main Assistant PhD Milena Dimitrova and I have personal impressions of her qualities. My impressions of the candidate in the competition for "Associate Professor" are definitely positive because she is a thorough and precise scientific researcher, a competent and responsible organizer and a teacher with proven capabilities. She has the skills to work in a team, to create environment for transferring the accumulated experience and knowledge. All this creates good conditions for her future work.

Based on the presented facts, I consider that the volume and quality of the candidate's research and applied scientific activity meets the requirements of the RASDOAP and RALSDOAPRB. The quantitative indicators of the Regulations of the University "Prof. PhD Asen Zlatarov" – Burgas is occupied for the academic position "Associate Professor".

This gives me grounds with conviction to propose to the Honorable members of the Scientific Jury to vote unanimously to award Main Assistant PhD Milena Dimitrova to the academic position "Associate Professor" in scientific specialty: 02.10.23. Technology of natural and synthetic fuels, in professional direction 5.13. General engineering.

05.09.2023
Plovdiv city

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(Prof. DSc Eng. Stanislava Tasheva)