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# OPINION

Regarding the competition for occupying the academic position of "Associate Professor" in the scientific specialty Mechanization and Electrification of Crop Production, announced in the State Gazette 7 from 23.01.2024, with a candidate Asst. Prof. Eng. Ivan Angelov Mitkov, PhD Opinion worked out by: Prof. Eng. Violeta Dimitrova Rasheva, PhD, from the University of Food Technologies – Plovdiv, assigned a member of the scientific jury according to Order № РД 16-406/20.03.2024 of the Rector of the Agricultural University - Plovdiv

### 1. Brief introduction of the candidate.

The candidate participating in the present competition, Asst. Prof. Ivan Mitkov, was born on 20th August 1970 in the town of Parvomay, Plovdiv region. He completed his secondary education at the Vocational School of Architecture in the city of Plovdiv in 1989 with the professional qualification "Construction Technician". Since 1990 he has been a student at Gabrovo Technical University, and in 1995 he graduated as a mechanical engineer (master's degree) specializing in "Technology of Metals and Metalworking Machinery". From 2001 to 24th August 2015 he worked in various companies as a production manager or technical assistant. From 23rd March 2012 to 23rd March 2015, he was a doctoral student at the Agricultural University - Plovdiv (AU-Plovdiv), and in 2017 he successfully defended his dissertation work and obtained a PhD in the scientific specialty "Mechanization and Electrification of Crop Production". On 25th August 2015 Eng. Mitkov was appointed to the academic position of "Assistant Professor" at the Department of Agricultural Mechanization in AU-Plovdiv. Since 1<sup>st</sup> October 2018 up to the present he has been working as a chief assistant professor in the professional area 5.13. General Engineering, scientific specialty: "Mechanization and Electrification of Crop production" in the same department.

## 2. General description of the candidate's scientific production.

Chief Asst. Prof. Ivan Mitkov participates in the current competition with 31 research works in total, grouped as follows:

Scientific publications under the nomenclature specialty – 30:

- Publications related to the doctoral dissertation work 4, which are not subject to discussion;
- Impact Factor publications 3;
- Publications in peer-reviewed and referenced scientific editions 14, 12 of them are published in collective volumes from international congresses and symposiums and 2 are in scientific journals;
- Publications in non-referenced journals with scientific reviewing or in editor collective volumes 12;

The candidate's personal participation in the above mentioned research works is illustrated by the fact that 7 of them are independent, in 4 of them he is a first author, in 3 - a second author, and in the rest 12 - a third or consecutive author

Textbooks – 1 book based on the dissertation work.

**27 research works in total** are subject to analysis for the preparation of the present opinion.

#### 3. Teaching work.

The candidate Chief Assistant Professor Ivan Mitkov is an established university teacher. His work experience until 1<sup>st</sup> March 2024 in AU-Plovdiv is 5 years and 5 months. He has successively held the academic positions of "assistant professor" and "chief assistant professor" in the Department of Agricultural Mechanization. In 2017 he successfully defended his doctoral thesis and obtained the educational and scientific degree of "Doctor". Chief Asst. Prof. Mitkov has presented a certificate of his academic employment for 5 academic years (2018-2024) issued by AU-Plovdiv. It is evident that during this period he fulfilled the standard for academic employment with an average annual workload of 686.76 academic hours, of which 171.6 hours represented lectures, 405.4 hours represented seminar exercises, and 109.76 hours were extracurricular activities. He delivers lectures and conducts seminar exercises to undergraduate students in 5 academic disciplines (Materials Science; Resistance of Materials; Theory of Machines and Mechanisms; Technical Mechanics; Equipment for RES). He is the author of 1 published book developed on the basis of his dissertation work. The teaching activity of Chief Asst. Prof. Mitkov is complemented by the scientific supervision of 18 graduates from the Faculty of Viticulture and Horticulture who have successfully defended their diploma theses. In his work, the candidate uses English and Russian languages.

All this speaks of the candidate's good preparation and high level of educational and pedagogical activity.

## 4. Scientific and research work.

With relation to the participation in the present competition, the only candidate Chief Assistant Professor Ivan Mitkov has presented a report and the relevant evidence proving the fulfillment of the minimum requirements of the Act on Development of the Academic Staff in R Bulgaria (ADASRB), the Regulations for its implementation, and the Regulations of AU-Plovdiv for its application. He participated with publications in a number of scientific forums in Bulgaria and abroad.

According to group of indicators A "Dissertation Work", the candidate obtained 50 points for being awarded with the educational and scientific degree of "Doctor", and a copy of the diploma has been attached. 4 scientific publications have been published based on the dissertation work, 1 of them has been published in a journal indexed in WoS. He is the first author in 3 of these publications and the second author in 1, with 2 of the publications being in English language and the rest - in Bulgarian. In total, the 4 publications bring him 30.65 points, with a required minimum of 30 points for registration in the National Center for Information and Documentation.

According to group of indicators B.4, 125.57 points have been obtained out of the minimum required 100, and 10 publications equivalent to habilitation work have been presented in publications referenced and indexed in the world-famous databases Scopus and WoS. Three of these publications have an impact factor. English language abstracts of these scientific publications are presented. All 10 publications are in English and are co-authored with other scientists. In 3 of them Chief Asst. Prof. Mitkov is a second author, in 1 – a third author, in 2 – a fourth author, and in the rest 4 – a fifth or sixth author.

According to group of indicators  $\Gamma$ , 257.25 points have been fulfilled with a minimum required of 200. According to indicator  $\Gamma$ .6, 1 published book has been presented developed on the basis of his dissertation work, which gives the candidate 30 points. According to indicator  $\Gamma$ .7, 4 publications in English are submitted in journals indexed in Scopus or WoS, which brings 49.93 points. According to indicator  $\Gamma$ .8, the candidate has presented 12 publications in non-refereed journals with scientific review or in edited collective volumes, which gives him 177.32 points. Taking into account all publications under indicator  $\Gamma$ , 14 are in English and 3 - in Bulgarian, with 1 of them being independent for the candidate, in

11 publications he is the first author, in another 4 - the third author and in 1 - the fourth author. Summaries in Bulgarian and English of these publications are attached.

The candidate has submitted information on citations of the scientific works presented in the competition. The cited publications under the **group of indicators Д.12** are **5** with a total of **7** citations in the scientific databases Scopus and WoS, carrying **70** points out of the minimum required 50. Two of the citations are published in quartiles Q1 and Q3 and have an impact factor. These data indicate that the candidate's research results are known and useful to the global scientific community.

The candidate has divided his scientific production and the corresponding contributions into several sections, qualifying all contributions as scientific and applied. In my opinion the contributions are correctly summarized in each section and I accept his claims about the formulated contributions. Nevertheless, I think that a part of them are not scientific-applied, but engineering-applied contributions. Since Chief Asst. Prof. Mitkov did not submit a protocol for the scientific works in co-authorship, I consider that their contributions are an equal work for all co-authors.

Chief asst. Prof. Ivan Mitkov has also submitted a reference for participation as operational manager in two scientific projects financed by AU-Plovdiv.

The dissertation work and scientific publications presented in the present competition are directed entirely to the nomenclature specialty. I have not conducted a check-up about the presence or absence of plagiarism, as I do not have licensed software for this purpose, and I have no reason to suspect the presence of plagiarism. At the same time, publications in editions referenced and indexed in the world databases WoS and Scopus pass such a check. A declaration of originality and credibility of the presented results, signed by the candidate, is also submitted.

#### 5. Notes and recommendations.

I have reflected the notes on the presented materials, as far as they are available, in the previous points of this opinion. I would recommend Chief Asst. Prof. Mitkov to take advantage of the opportunities for international exchange of academic staff under the Erasmus program, as well as to participate more actively in national and international scientific or educational projects.

#### 6. Conclusion.

After analyzing the pedagogical, scientific and scientific-applied work of the candidate, I believe that **Chief Asst. Prof. Eng. Ivan Angelov Mitkov**, **PhD**, meets the requirements of ADASRB, the Regulations for its implementation, and the Regulations of AU-Plovdiv for its application regarding the occupation of the academic degree of "Associate Professor". The presented materials give me reason to evaluate **POSITIVELY** his overall work.

Taking into account the above mentioned, I propose the Honorable Scientific Jury to award Chief Asst. Prof. Eng. Ivan Angelov Mitkov, PhD, the scientific title of "Associate Professor" in the professional area 5.13. General Engineering, scientific specialty: "Mechanization and Electrification of Crop Production".

Date: 18.04.2024 The city of Plovdiv