
MILITARY ACADEMY „GEORGI STOYKOV RAKOVSKI“

OPINION

from Assoc. Prof. Eng. Antoniya Todorova Tasheva, PhD
Technical university of Sofia, Bulgaria
8 Kliment Ohridski Blvd., Building 1, Room 1205

on the scientific works, submitted to the competition for
occupying academic position “Associate Professor”
In the field of higher education 5. „Technical sciences“,
professional field 5.3. „Communication and Computer Science“, and in the
specialty „Automated systems for Information Processing and Control“
for the need of the science section „Doctrines, concepts and lessons learned from
practice“ of the Institute „Advanced Defense Studies“
of Military Academy „Georgi S. Rakovski“,
announced by order of the Minister of Defense of the Republic of Bulgaria
№ OX-460/16.05.2019 and published in State Gazette vol. 51/28.06.2019

of the candidate:

Lt. Col. Eng. Zarko Ivanov Zdravkov, Ph.D.
Chief Expert in the Defense Planning Division of the Strategic Planning Directorate,
Ministry of Defense.

1. A general characteristic of the applicant's scientific, research, and pedagogical activities.

In the announced competition for "associate professor" for the needs of the scientific section "Doctrines, Concepts and Lessons from Practice" of the Institute „Advanced Defense Studies“ only participant participated - Zarko Ivanov Zdravkov, PhD. According to the "Reference for Original Scientific Contributions", 27 publications have been submitted for review by the scientific jury, of which 1 monograph, 25 reports and articles and 1 methodology, that have been published over a period of 23 years. In Appendix 2. List of scientific, teaching and / or sports activities, by groups of indicators and number of points, a total of 28 articles are listed and scored. Evidence for 1 monograph, 25 reports and articles and 1 methodology are presented.

Papers [4]¹, [19], [20], and [21] are cited in the monography and must be considered as one. Paper [25] is in project management topics and shows the applicant's leadership skills, but I do not consider it relevant to his scientific contributions considered in this competition. For review I accept the remaining 20 pcs. articles and reports and 1 pc. monograph.

I do not personally know the candidate and I judge his professional and personal qualities from the CV presented at the competition. The candidate graduated as an engineer in Computer Science in 1993 and received a Master's degree in “Design and Management of Communication and Information Systems in operative formations” in 2005. The same year, the candidate also obtained a doctoral degree in the specialty "Automated systems for information processing and management (by industry)" in the dissertation topic "Models for information security in database management systems".

The documents presented show that the applicant has worked and continues to work in the scientific fields and problems of information security and information technology in general. He has experience as a part-time lecturer.

2. Opinion on the presence or absence of plagiarism.

The scientific works presented at the competition are published in non-refereed journals with scientific review or in edited collective volumes, the successful publication of which requires compliance with the accepted ethical and legal norms.

I am not aware that any claims have been made by other authors for misuse of the literature, or that there have been anonymous or non-anonymous reports of the plagiarism in the candidate's publications.

¹ The numbering in brackets is as suggested by the candidate in the LIST of scientific output

Co-authored publications are correctly presented except [6], [8], [10], [13] and [15], where the order of the authors is changed. Separation protocols were not presented and the contribution of the authors was assumed to be equal.

I have no joint publications with the candidate.

3. Assessment of pedagogical training and activity of the applicant.

The applicant has many years of experience as a part-time lecturer at the National and International Security Department at New Bulgarian University, where he lectures in the courses on Designing Secure Automated Information Systems and Critical Information Infrastructure Protection. From 2002 to 2009 he taught at the CISCO Academy of the Military Academy "G. S. Rakovski".

The monograph proposed for review would be useful and could be used in the training of undergraduate and doctoral students in the field of information security.

4. Key scientific results and contributions.

I accept the claim for the contributions offered by the applicant as substance and application, but I do not accept their non-scientific wording.

Scientific and applied contributions:

- *Enrichment of existing knowledge:*
 - Overview of models of automated information systems for defense applications – [1], [2], [10], [22];
 - Overview of models for providing information security in databases – [1], [11], [12], [13], [17], [18];
 - Non-exhaustive classifications of access control models through authentication and authorization – [3];
 - Review and classification of terms in the field of cyber warfare – [23].

Applied contributions:

- *Application of scientific achievements in practice:*
 - Applications of methods and approaches for providing information security when working with databases - [9], [14];
 - Creating solutions for storing and processing information with databases - [5], [6], [7], [15];
 - Review and analysis of software tools - [8];
 - Analysis of security aspects and characteristics of existing AIS - [24], [26];

- Application of distance learning methods and tools in real-life training - [16].

Of the 21 publications I have accepted for review, the applicant is the sole author of 7 of them, the first author in 8 articles and the second author 6 articles, which proves his personal contribution and his ability to work in a team.

5. Assessment of the significance of contributions to science and practice.

The applicant has applied his knowledge, skills and scientific achievements in the application project "Establishment of an Information System for Public Access to Spatial Data and Services of the Ministry of Defense" and the development of the Risk Assessment Methodology for identified critical infrastructures and their sites in the sector Defense in the Republic of Bulgaria.

There are no known publications and citations in referenced and indexed in world-renowned databases of scientific information. A list of the citations in Bulgarian editions is given, which formally meet the minimum requirements for occupying the academic position of associate professor, but it seems that they were made mainly by scientists, co-authors of the candidate in other articles.

6. Critical remarks about the presented works.

All publications are in Bulgarian language, there are no publications abroad or in journals that are referenced and indexed in world-renowned databases of scientific information.

Of the 27 submitted papers for review, only 8 are from the last 10 years, and only 3 pcs have been published in the last 3 years. A total of 11 publications were made prior to the acquisition of the Doctoral and no information is available on whether they were used in the procedure.

In Appendix 2. List of scientific, teaching and/or sports activities, by groups of indicators and number of points, 32 citations from Bulgarian scholars are listed, mostly candidate's co-authors. Citation 14.31 should be removed from this list as it is an self-cite of the first author of the cited article [10]. No supporting material was provided for the citations.

Due to the dynamism in the field of information technology security, a serious question about the relevance of the published in 2019 monograph is raised by the presence of only 5 sources from the last 5 years listed in the literature and without being cited in the text.

7. Conclusion.

Despite the critical remarks made above, the papers I reviewed by Lieutenant Colonel Dr. Zarko Ivanov Zdravkov give me reason to believe that he meets the minimum requirements for acquiring an Associate Professor and fulfills the requirements of the Law for the Development of the Academic Staff of the Republic of Bulgaria for occupying the academic position "associate professor" in the professional field 5.3 "Communication and computer science", scientific specialty "Automated systems for information processing and control", the Rules for its implementation and the Rules for the development of the academic staff at the Georgi Stoykov Rakovski Military Academy.

8. Assessment of the applicant.

Given the above, I give a positive assessment and I recommend to the honorable scientific jury to award Lieutenant Colonel Dr. Zarko Ivanov Zdravkov with the academic position "Associate Professor" at the science section „Doctrines, concepts and lessons learned from practice“ of the Institute „Advanced Defense Studies“ of Military Academy „Georgi S. Rakovski“.

Date: 12.12.2019

Member of the Jury:
(signature)