



DEPARTMENT OF DEFENSE

DEFENSE INSTITUTE „PROFESSOR TSVETAN LAZAROV”

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STATUS

by Associate Professor Ph. D. **Alexander Assenov Kolev**,

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under the competition for holding the academic position of "Associate Professor" for a serviceman in the field of higher education 5. "Technical Sciences", professional field 5.2. "Electrical Engineering, Electronics and Automation", scientific specialty "Automated Information Processing and Control Systems" in the Directorate „Development of C4I Systems“ of the Defense Institute „Prof. Tsvetan Lazarov”, published in „State Gazette”, issue 109/21.12.2021 in accordance with Order № OX-1130 of 10.11.2021 of the Minister of Defense

with the candidate:

Major Eng. **Angel Dimitrov Genchev**, Doctor, Senior Expert the Directorate „Development of C4I Systems“ of the Defense Institute „Prof. Tsvetan Lazarov”

1. General characteristics of the research, scientific-applied and pedagogical activity of the candidate

In the current competition for the academic position of "Associate Professor", announced in the "State Gazette", issue 109 / 21.12.2021, participates as the only candidate Major Dr. Eng. Angel Dimitrov Genchev.

For review by the scientific jury of this competition are presented 20 publications (articles and scientific reports), one monograph (272 pages, 2021, co-authored), 10 scientific and applied developments in the field of information technology, 9 educational and methodological works. Information for participation in 5 international projects is presented. The distribution of the presented titles of publications is: 15 in Bulgarian, 7 in English.

The presented works as scientific achievements in practice and enrichment of existing knowledge are in the field of research, descriptions, assignments, programs and methodologies in connection with the construction of corporate information systems, data centers, communication and information environments for collaboration, of call centers, VoIP solutions, digital data transmission systems from the scene and others. Areas covered are: Research related to information and communication systems and technologies, cybersecurity, data centers and cloud environments; Research relating to integrated collaboration information environments and computer systems for decision support for crisis management; Automated control systems, automated information systems and application programs for the needs of defense.

Major Dr. Eng. Angel Dimitrov Genchev is a researcher and implementer in the professional field of the announced competition. He has participated in working groups in 5 international projects, in 2 national research projects and in 15 different projects with departmental scope, the most important of which are: "Homemade Explosives and Recipes characterizations" (HOMER) EU project, European network of Cybersecurity center and competence Hub for innovation and Operations (ECHO), "Fighting Crime and Terrorism with an IoT-enabled Autonomous Platform based on an Ecosystem of Advanced Intelligence,

Operations, and Investigation Technologies" (CREST), "Malicious Network Activities Monitoring and Data Analysis "(MAMA), a CyberTwin project.

The candidate has worked in the military, scientific and military-scientific field since 1998, which includes units on combat duty and specialized units for construction and development of information and communication systems and technologies for the needs of defense.

The attached monograph on "Modern data centers (requirements, technology, construction)", of which I acknowledge the sufficient 50% authorship of the candidate, is a good indicator of his potential in the pedagogical field.

By 2022, he held the position of "Senior Expert" in the "C4I Systems Development" Directorate of the "Professor Tsvetan Lazarov" Institute of Defense, and in the years from 1988 to now he has passed through the military ranks from "lieutenant" to "major" .

2. Evaluation of the special preparation and activity of the candidate

Major Dr. Eng. Angel Dimitrov Genchev holds a Master's degree in Technical Sciences: Electrical Engineer in Computer Science and Automated Control of Troops, Higher Military School, Shumen, 1998. The candidate has a degree in Education and Science. scientific specialty 02.07.20 "Communication Networks and Systems", 2006, after the defense of his dissertation on the topic: "Adaptive management of frequency resources in mobile cellular radio networks for military purposes." He has worked in his field for the last 17 years or more. According to the attached documents, his significant scientific and practical manifestations can be traced after 2005.

The rich research and implementation experience of the candidate is maintained as a result of his high qualification. The following courses were attended: "Introduction to Oracle: SQL and PL / SQL"; Enterprise DBA Part1A: Architecture and Administration; "Enterprise DBA Part1B: Backup and recovery" in the company Technology - Sofia. He holds certificates

"Administering Microsoft Share Point Portal Server 2003" and "Designing IT Platform Collaborative Applications with Microsoft Share Point 2003" (Microsoft certified Partner for Learning Solutions).

I believe that the candidate has the necessary professional, research, implementation, promotion and personal qualities that are necessary to hold the academic position of "Associate Professor" in the competition.

3. Main scientific results and contributions

I accept the claim for the contributions proposed by the candidate as the essence and application according to the submitted documents.

I determine the obtained results and contributions as:

- Research related to information and communication systems and technologies, cybersecurity, data centers and cloud environments: publications (II.2.1, II.2.15, II.2.4, II.4.5, II.2.5, II.2.5, II.2.7 , II.2.8, II.2.10, II.4.11, II.2.12, II.2.17, II.2.21) and a sufficient part of the monograph (II.1.1);

- Research related to integrated collaboration information environments and computer systems for decision support in crisis management: publications (II.2.2, II.2.6, II.4.8, II.2.9, II.2.11, II.2.13 , II.2.14, I.2.14, II.2.18, II.2.16, II.4.15);

- Automated control systems, automated information systems and application programs for the needs of defense: developments and projects (II.4.9, III.7, III.8, II.4.10).

Of the 20 scientific and applied works submitted for review, one of which is a monograph, the candidate has a significant personal contribution, the only author of 8 of them. The distribution by languages of publications is 4 in English and 16 in Bulgarian.

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

The candidate demonstrates his high scientific training, knowledge, skills

and scientific achievements in 5 international projects, in 2 national research projects and in 15 different projects and developments with departmental scope. A list of 13 citations is presented, of which 3 in scientific journals, referenced and indexed in world-famous databases, 10 in collective volumes with scientific review.

5. Critical remarks for the submitted works

A careful review of the presented scientific output of the candidate shows a good level of presentation of the content with extended reference to mathematical methods (2.2.16). Some critical remarks can be made on the layout of the materials. In isolated cases there is an poorly presented list of used literature (2.2.15, 2.2.19). Editorial remarks can be made on the readability of the text and the quality of the graphics (2.2.18 Fig. 3, 2.2.14 Fig. 1). In some of the earlier materials (2.2.15) the structure of the introduction-problem-solution-results-conclusions exposition can be balanced by expanding the derivation part.

The above remarks in no way reduce the scientific and practical value of the materials. The author should look for more opportunities for publication with inclusion in recognized international databases with scientific production.

6. Conclusion

Everything presented so far allows me to give a positive assessment of the materials for participation in the competition. The attached materials and documentation meet the requirements of the Law for the Development of Academic Staff in the Republic of Bulgaria and the Regulations for its implementation in its part for scientific production with contributions and applicability in the research and teaching process for the academic position of "Associate Professor" in higher education. 5. "Technical Sciences", professional field 5.2. "Electrical Engineering, Electronics and Automation", scientific specialty "Automated systems for information processing and control".

7. Evaluation of the candidates

Having performed a careful analysis of the presented scientific production in terms of significance and content of scientific and applied contributions, I give a **positive** assessment of the scientific activity of Major Dr. Eng. Angel Dimitrov Genchev.

I recommend the esteemed members of this scientific jury **to vote FOR** the award of the academic position of "Associate Professor" in the field of higher education 5. "Technical Sciences", professional field 5.2. "Electrical Engineering, Electronics and Automation", scientific specialty "Automated systems for information processing and control", Major Dr. Eng. Angel Dimitrov Genchev.

Jury member:

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/ass. prof. Alexander Kolev/

Date: 07.04.2022