Институт по информационни и комуникационни технологии-БАН Bx. No. 107 21.01 2020

## REVIEW

for Chief Assistant Prof. Nikolay Ivanov Stoimenov

by competition for the academic position ...associate professor"

in the field of professional direction 5.2. Electrical Engineering, Electronics and Automation,

Specialty: Automated systems for information processing and control

in department "Embedded Intelligent Technologies"

## Reviewer: Acad. Ivan Petkov Popchev

By order No. 347/30.12.2019 of the Director of the IICT-BAS Prof. MSc. G. Angelova on the basis of art. 4, para. 2 from the Law for academic growth and decision of the Scientific council of IICT (protocol No 11 from 18.12.2019) I am nominated as a member of the Scientific Jury in competition for the academic position "Associate Professor" in Professional field: 5.2 Electrical Engineering, Electronics and Automation, Specialty: Automated systems for information processing and control, announced in DV No 85/29.10. for the needs of department "Embedded Intelligent Technologies".

At the meeting of the Scientific Jury on 08.01.2020. I was selected as a reviewer.

As a reviewer in the competition I received all 17 documents from the accompanying letter of Dr. Eng. Nikolay Ivanov Stoimenov, Chief assistant in department EIT with No.

According to the Act of the Development of the Academic Personnel of the Republic of Bulgaria, and the Rules of the Academic Personnel of the Republic of Bulgaria, the candidates for "Associate Professor" must meet certain conditions and requirements.

Art. 24. (1) the candidates for academic position "associate professor" shall meet the following conditions:

- 1. to acquire the educational and scientific degree "PhD";
- 2. for not less than two years:
  - a. to have been an academic assistant, assistant post;
- 3. have submitted published monography work or equal publications in specialized scientific journals ... that do not repeat the presented for acquiring the educational and scientific degree "PhD" and for the acquisition of the scientific degree "doctor of sciences";
- 4. meet the minimum national requirements under Art. 26, para. 2 and 3, respectively the requirements under Art. 26, para. 5;
- 5. not have a plagiarism in the scientific works, provided by the lawful order

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(2) The academic position "associate professor" shall be taken on the basis of competition and selection.

(3) A competition for the academic position "associate professor" shall be opened in the corresponding teaching or research workload can be provided according to the respective regulations of the higher school or scientific organizations.

According to the Rules on the specific conditions for the acquisition of academic degrees and for the occupation of academic posts in IICT in chapter 2, Art. 3 the following are introduced: the minimum points required by groups of indicators for the professional field: 5.2. Electrical Engineering, Electronics and Automation.

Group of indicators	Summary	Associate Professor
А	Indicator 1	
В	Indicators 3 or 4	50
G	Group of indicators from 5 to 11	100
D		220
E	Group of indicators from 12 to 15	60
L	Group of indicators from 16 to the end	20

Chief. Assist. Prof. Dr. eng. Nikolay Ivanov Stoimenov <u>fulfills the requirements of Art.</u> <u>24 (1). 1</u>, he acquired a Ph.D. degree in Electrical Engineering, Electronics and Automation, with a Thesis: "Study of movement and interaction of different shape bodies" on September 29, 2016, diploma No. 000781, issued October 27, 2016.

Chief. Assist. Prof. Dr. eng. Nikolay Ivanov Stoimenov fulfills the requirements of <u>Art.</u> <u>24 (1). 2a.</u> as with a letter note No1205/03.12.2019, signed from the Director Prof. MSc Galia Angelova and Human Resources S. Moncheva ensures Chief. Assist. Prof. Dr. eng. Nikolay Ivanov Stoimenov has work experience of 05 years and 02 months, of which as Chief Assistant 02 years and 08 months.

Chief. Assist. Prof. Dr. eng. Nikolay Ivanov Stoimenov fulfills the requirements of <u>Art.</u> <u>24 (1). 3</u>, since he presented <u>habilitation work</u> – 10 scientific publications in publications that have been referenced and indexed in the world famous scientific information database <u>Scopus</u> and who do not repeat the doctoral degree.

According to the CV, the total number of scientific publications is 81.

In the documents of the procedure <u>"List of scientific"</u> of Chief. Assist. Prof. Dr. eng. Nikolay Stoimenov <u>for participation in "associate professor" competition</u>, are in two groups:

• Group of indicators B (scientific field 5) from No 1 to No 10, and

• Group of indicators G (scientific field 5) from No 11 to No 38.

The analysis of the presented 38 publications shows the following:

- 1 publication in journal with IF: 2,129, SJR 2017: 0,740 No: 9); .
- 5 publications are with SJR (No: 1, 2, 6, 7 and 8); .

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- 4 publications are indexed editions in SCOPUS (No: 3, 4, 5 and 10);
- 1 publication is in chapter 4 Monography in English and Italian (No: 38); •
- 7 publications in Journals (No: 13, 18, 19, 23, 24, 31 and 32);
- 20 publications in congresses and conferences (No: 11, 12, 14, 15, 16, 17, 20, 21, 22, • 25, 26, 27, 28, 29, 30, 33, 34, 35 and 36);
- 6 publications are in Bulgarian language (No: 26, 28, 34, 35, 36 and 37);
- 4 publications are independent (No: 22, 25, 27 and 36).

In the list of citations of Chief Assistant Professor Dr. Nikolay Stoimenov are included 6 cited works with a total of 15 citations. It may be correct to exclude those cited publications

According to Art. 26 from the Development of the Academic Personnel of the Republic of Bulgaria, the candidates presents... a reference to the original scientific contributions, to which shall be attached the relevant evidence set out in this Act, the rules for its implementation, and the regulations of university education institutions and scientific organizations.

In the documents of the competition is missing such "reference", and "relevant evidence", but it is presented in accordance with the requirements of Art. 9 (1).13 from the requirements of IICT-BAS, "Reference to original scientific and applied scientific contributions" in volume of 11 pages in two parts:

- Contributions to scientific publications presented in a group of indicators "B" (5
- Contributions to scientific publications presented in a group of indicators "G" (6

The contributions to the report are not divided into scientific and applied science and none of them are self-identified by the candidate as original but provide sufficient information

The contributions of Chief. Assistant Nikolay Stoimenov can briefly be introduced as follows:

• 3D tactile plates for disadvantaged people (blind or visually impaired) have been developed. Tactile plates were developed with scenes from the "Battle of Pavia 1525" and "Jesus Christ and the Samaritan woman at the Well". Tactile plates have tangible segments and an added legend of Braille symbols.

- The factors for increasing the performance of drum, rod and ball and semi-autogenous mills have been investigated. Ways to increase the productivity and efficiency of grinding in mills are given.
- A method for scanning the inside of mills and for determining wear is proposed. Grinding media with appropriate software were investigated, and attention is paid to the shape of the lifter.
- Migrants in the food simulants of ethanol and acetic acid A, B and D1 were detected by laser diffraction analyzer.
- The processes of packaging, increasing the productivity and quality of automatic machines and lines, as well as the possibilities for automation of packaging processes and assembly operations are considered.

From the documents of the competition follows that Chief Assistant Professor Nikolay Stoimenov is:

- <u>Co-author</u> in patent application No 112368, title: Thermometer, priority date: 25.08.2016.
- <u>Member of the team</u> in contract with NSF No DN17/21-2017, Project: "3D digitalization of objects from the national cultural and historical heritage"
- <u>Head of the team of contract with BAS DFNP-96/04.05.2016</u> "Investigation and optimization of milling processes by using innovative shape of milling bodies and environment ", duration 2016 with attracted funds of 10 000,00 ly.

The reviewer considers, that Chief Assistant Professor Dr. Nikolay Stoimenov <u>fulfills</u> <u>the requirements of Art. 24 (1). 4</u> as he meets the minimum national requirements under Art. 26, para. 2 and 3, respectively the requirements of Art. 26, para. 5 as well as the requirements of the Rules of IICT-BAS. He also meets <u>the requirements of Art. 24 (1). 5</u>, as there is no lawfully proven plagiarism in scientific works.

In the CV are noted the received over the years diplomas and certificates.

As summarized "science metrics image" of Chief Assist. Prof. Dr. Nikolai Stoimenov, the world scientific databases up to 13.01.2020 shows the following:

- <u>Scopus:</u> 11 documents by author, total citations 10 by 10 documents, h-index 2; 30 co-authors.
- <u>Web of Science:</u> 6 total publications; h-index 2; 6 sum of times cited; 5 without of self-citations.
- Researchgate: 35 research items; 772 reads; 25 citations.

Publication No 9 in Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment from "List of Scientific Publications of Chief Assist. Prof. Dr. Nikolay Stoimenov for participation in the competition for associate professor" is definitely noticeable and has citations in Web of Science 4, in Scopus, in scholar.google 3. It can not be marked that at the above-mentioned "List of scientific publications of Chief Assis. Prof. Nikolay Stoimenov for participation in the competition for associate professor" are missing: volume, issue, page!

Publication No 7 in Computer Helping People with Special Needs is also noticeable and cited in Web of Science 2, in Scopus 4, and in scholar.google 8.

The reviewer believes that the elements of "<u>science metrics image</u>" can be subject to careful and critical introspection, to form a future concentration of research, and to be the basis for independent publication in IF / SJR journals.

This activity <u>must be in harmony with the tradition of attracting young researchers and</u> projects.

## CONCLUSION

All requirements, conditions and criteria of the Act of the Development of the Academic Personnel of the Republic of Bulgaria, and the Rules of the Academic Personnel of the Republic of Bulgaria, and the rules of IICT-BAS meets the requirements and I gave <u>strongly positive</u> <u>conclusion</u> for choosing Chief Assis. Prof. Dr. Nikolay Ivanov Stoimenov in competition for "<u>Associate Professor</u>" in the field of professional direction 5.2. Electrical Engineering, Electronics and Automation.

<u>I recommend that the Scientific Jury unanimously to vote positively to the Scientific</u> <u>Council of IICT-BAS to elect Chief Assistant Professor Nikolay Ivanov Stoimenov for the</u> <u>academic position of "Assistant Professor" in the professional field 5.2. Electrical Engineering.</u> <u>Electronics and Automation, specialty Automated systems for information processing and</u> <u>control in department Embedded Intelligent Technologies.</u>

17.01.2020

