

### STATEMENT

by Prof. Dr. Dimitar Karastoyanov, Institute of Information and Communication Technologies, Bulgarian Academy of Sciences

#### ABOUT

documents and scientific papers presented in the competition for the occupation of the academic position "Associate Professor"

Field of higher education : 5. Technical sciences

Professional field: 5.2 Electrical Engineering, Electronics and Automation,

Specialty: Automated systems for information processing and control,

announced in DV no. 85 of 29.10.2019 for the needs of section "Embedded intelligent technologies" at the Institute of Information and Communication Technologies-BAS

with the only candidate in the competition: Dr. Nikolay Stoimenov.

By order No 347 / 30.12.2019 of the Director of IICT-BAS, I am included in the Scientific Jury of the competition for occupation of the academic position "Associate Professor", announced in DV no. 85 of 29.10.2019. The only candidate, Dr. Nikolay Stoimenov, an assist. prof. at IICT, submitted materials for the competition. As a member of the Scientific Jury I have received the following

- 1. Application for participation in the competition;
- 2. European CV;
- 3. Copy of the diploma for the educational and scientific degree "doctor";
- 4. Certificate of internship in the specialty;
- 5. List of scientific publications for participation in the competition;
- 6. List of inventions and other scientific results;
- 7. List of citations:
- 8. Abstracts of the scientific publications for the competition in Bulgarian and English;
- 9. Copies of the scientific publications for participation in the competition;
- 10. Reference for meeting the minimum requirements of IICT;
- 11. Reference for the original scientific and applied contributions;
- 12. Declaration that there is no legally established plagiarism in scientific works.

# General characteristics of the materials presented.

The attached CV shows that during the period 2013-2016 the applicant was studied at the IICT-BAS, where he received educational and scientific degree "doctor" in Electrical engineering,

electronics and automation, which corresponds completely to the specialty of this competition. The reference for fulfillment of the requirements of IICT-BAS for occupation of the academic position "Associate Professor" shows that the requirements for all groups of indicators are fulfilled and exceeded. All the materials presented by the candidate Dr. Stoimenov are prepared in accordance with the Law for academic growth, the Regulations for its implementation, as well as with the Rules of the specific conditions for acquisition of academic degrees and occupation of academic positions at IICT-

## Evaluation of the scientific works.

To participate in the competition, the applicant submitted copies of 38 scientific publications in specialized national and international editions, and 1 patent application in procedure. All of them were issued in the period 2013-2019 and do not repeat publications for the doctoral degree. For the most part, they are co-authored with the applicant's participation, including in large international authors teams. The minimum of 10 publications has been met, indexed and referenced in the Scopus scientific database. In general, the submitted works contain scientific and applied results related to the preservation and digitization of cultural and historical heritage, innovative technologies in the process of grinding, non-destructive analysis of objects and details, automation of production. These results undoubtedly indicate that the applicant has extensive knowledge, high competence and experience in the field of competition.

### **Evaluation of the citations**

In the list of citations provided, most citations to the candidate's publications are in the works of authors in foreign prestigious editions, which are indexed and referenced in the Scopus scientific information database. In this way, significant results in the applicant's research activities have obviously attracted interest and become available to scientists in the field of robotics internationally.

## Scientific and applied contributions

I accept and appreciate positively the applicant's scientific and applied contributions as outlined in the attached reference for contributions. They are fully relevant to the scientific specialty "Automated systems for information processing and control" of the competition and include preservation and digitization of cultural and historical heritage - improving the quality of life for disadvantaged people (blind or visually impaired), innovative technologies in the process of grinding research and development of an innovative form of grinding medium, non-destructive analysis of objects and details - study of the internal structure and micro structure of objects and details, automation of production - automation of packaging processes and assembly operations. The listed and documented scientific and applied contributions determine the applicant as a highly qualified specialist in the field of automated systems, incl. in terms of their practical implementation.

# General characteristics of the applicant's activities

The candidate in this competition, Dr. Stoimenov, holds a Master's degree from the Technical University of Sofia, majoring in Automation Technics and Engineering. He has a total of 5 years and 2 months of professional work in IICT, of which 2 years and 8 months as Assistant Professor. During this period he worked as PhD Student, Software specialist and Assistant Professor. The presented scientific

publications for participation in the competition show the active publication activity of the candidate and contain original scientific and applied results in the field of automated systems for information processing and control.

Dr. Nikolay Stoimenov holds 3 Certificates and 2 Diplomas for Excellence in IICT, Institute of Metal Science, Evrika Foundation, and Sofia City Art Gallery. He has leaded 2 Youth projects. He is a member of the team of one current project from the NSF. He is the head of the team of another ongoing project from the NSF (not included in the materials).

## Notes and recommendations

I have no substantive remarks on the materials submitted by Dr. Stoimenov for the competition. I would recommend that in his future work he should additional focus on the patentability of his developments. The currently registered useful model of an abrasive body with its authorship (not included in the materials) clearly indicates that such capabilities exist.

### Conclusion

The materials for the competition and the applicant's results presented therein satisfy all requirements of the Law for academic growth, the Rules for its implementation, the Rules for the conditions and the order for acquiring scientific degrees and occupying academic positions in BAS, as well as the Rules for the specific conditions for acquiring scientific degrees and occupation of academic positions in IICT. My assessment of the applicant's overall activity is positive.

I strongly recommend that the distinguished Scientific Jury vote on a proposal to the Scientific Council of IICT-BAS to select Dr. Nikolay Stoimenov for occupation of the academic position "Associate Professor" in the Professional Field: 5.2 Electrical Engineering, Electronics and Automation, Specialty: Automated systems for information processing and control, for the needs of the section "Embedded Intelligent Technologies" at IICT\_BAS.

Sofia.

13.01.2020 г.

Signature:

/Prof. Dr. D. Karastoyanov/