

STATEMENT

on competition for academic position **Associate Professor**,
Professional field 5.2. **Electrical Engineering, Electronics and Automation**,
Specialty **Automated systems for information processing and control**,
for the needs of department "Embedded Intelligent Technologies" of IICT-BAS
published in the State Gazette No 85/29.10.2019 г.
with candidate: **Nikolay Ivanov Stoimenov**, Ph.D., Assist. prof.
Member of the Scientific Jury: **Ivan Stoyanov Yatchev**, D.Sc., professor

1. General characteristics of the provided materials.

The only candidate in the competition Assist. Prof. **Nikolay Ivanov Stoimenov**, Ph.D. works at IICT - BAS.

In the competition for associate professor, Dr. Stoimenov has presented a total of 38 scientific publications. Information is also provided for citations, for participation in research projects, for patent applications, as well as on all other legally required documents.

The analysis of the presented materials shows that all requirements for 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 additional requirements of BAS and of IICT-BAS of the academic position, "Associate Professor" are covered.

2. Evaluation of the applicant's scientific-research and scientific-applied activities of the candidate.

Scientific-research and scientific-applied activities of the candidate are aimed entirely at the announced competition.

The presented total 38 scientific works are in two groups:

- A. Publications, corresponding to group of indicators B – 10 papers published in referred and indexed in the world databases of scientific information – Scopus and Web of Science, and 6 of them are with Impact factor and impact rank (1 with Impact Factor and 6 with SJR). From that group of publications, the candidate is first co-author in 3 of them;
- B. Publications, corresponding to group of indicators G – 28 papers, from them one is chapter of collective monograph. From the publications in this group, in 4 of them he is a single author, and the candidate is first co-author in 8 of them.
34 from the publications are in English, and 4 of them are in Bulgarian language.

A reference of the candidate's papers citations is presented, from which follows that the candidate has 5 citations in publications, referenced and indexed in world-renowned scientific information databases and 11 citations in other publications.

The activity of the applicant for participation in projects should also be noted. The applicant has submitted information for participation in a total of 2 national projects, and he is team leader in one of them.

The participation of the applicant in a patent application should also be positively evaluated.

4. General scientific and scientific-applied contributions.

The main scientific and scientific-applied contributions to the presented works can be summarized as follows:

- new approaches for preserving and digitizing the cultural heritage objects are proposed in order to improve the quality of life of disadvantaged people;
- innovative shape of grinding media with application in cement production, mining industry, in solid fuel TECs is proposed;
- by using the modern technologies and measuring tools (3D computerized industrial tomography, laser diffraction analyzer), the internal structure and micro structure of objects and details were investigated;

- increasing the efficiency of the enrichment process is achieved by increasing productivity, reliability, reducing electricity costs, applying innovative grinding media and grinding bodies and increasing their wear resistance;

- contributions in the field of non-destructive analysis and control: approaches for non-destructive testing of dental specimens, contactless testing of temperature in transformers, electromagnetic micro-drive motion testing, and motion control systems.

4. Significance of the contributions for the science and practice.

The importance of the candidate's contributions to science and practice is indisputable. Overall, the results in the field of automated information processing and control systems are of considerable scientific value and practical relevance.

Comparison of the indicators in the presented materials with the requirements of the Rules for the specific conditions for acquiring scientific degrees and occupying academic positions at the Institute of Information and Communication Technologies at the BAS shows that for all groups of indicators the minimum requirements are met:

- group A (minimum 50 pts):	50 pts;
- group B (minimum 100 pts):	143 pts;
- group G (minimum 220 pts):	227.5 pts;
- group D (minimum 60 pts):	72 pts;
- group E (minimum 20 pts):	52 pts.

5. Critical notes and recommendations

It may be advised to present a summary topic of group publications in group B (equivalent to monograph work).

It may be recommended that in the near future the candidate should also direct his efforts towards writing a monograph.

CONCLUSION

On the basis of acquaintance with the submitted scientific works, their importance, the content of the scientific and scientific-applied contributions, as well as the fact that by all indicators the applicant meets the minimum requirements in accordance with 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 Rules for the conditions and the procedure for acquiring scientific degrees and for the occupation of academic positions in the Bulgarian Academy of Sciences and the Rules for the specific conditions for the acquisition of academic degrees and for the occupation of academic positions in the Institute of Information and Communication Technologies, I find it justified to propose Assist. Prof. Nikolay Ivanov Stoimenov, PhD to take the academic position of "Associate Professor" in the professional field 5.2. Electrical engineering, electronics and automation in the specialty of "Automated systems for information processing and control".

Date: 20.01.2020.

MEMBER OF THE JURY:

/Prof. D.Sc. I. Yatchev/

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