#### **STANDPOINT**

For competition for taking the academic position "Associate Professor" in a professional field 5.4. "Energetics" under the specialty "Electric Power Plants and Substations", at the Department of Electric Power Engineering at the Faculty of Electrical Engineering of the Technical University-Varna, announced in State Gazette, issue 105 / 18.12.2018.

Candidate: Nikolay Deyanov Nikolayev, Ch. Assistant Prof. PhD Eng.

Member of a scientific jury: Margreta Parashkevanova Vasileva, Assoc. Prof. PhD Eng.

# **1.** A general characteristic of the applicant's research and development activities

The candidate in the competition for associate professor Dr. Nikolaev has presented information about his research and applied activity by reference, according to art. 2b of the ZRASRB for the fulfillment of the minimum national requirements for occupying the academic position "Assoc. Prof." by higher education field "Technical sciences".

To participate in the competition Nikolaev has presented the text and abstracts of 23 publications, 14 of which are in SCOPUS. The publications are grouped as "Habilitation work - scientific publications in journals that are referenced and indexed in world-renowned scientific information databases" (10), Scientific publications in journals that are referenced and indexed in world-renowned databases of scientific information (4) and Scientific Publications in non-indexed journals and proceedings with scientific review or in edited collective volumes (9).

Scientifically applied research is thematically related to the applicant's research activity.

Eight of the projects are externally funded and the remaining are internally funded by the Research Fund. Dr. Nikolaev is the head of a single contract with internal financing, and in the other 9 issues. was equally involved as a contractor.

#### 2. Evaluation of the applicant's pedagogical training and activities

Dr. Nikolaev teaches lectures and exercises on "Electrical part of power stations and substations", "Electricity generation technology" and "Power system stability".

He is the author of teaching aids for his disciplines.

His ability to work with students is excellent.

He participates actively in the renovation of the laboratories: "Electricity Networks", "Electric Power Plants and Substations", "Modern Electricity Systems".

#### 3. Key scientific and applied science contributions

The scientific contributions of the applicant are expressed in: Mathematical models developed for different components of smart grids; Formulating the hypothesis that fuzzy set theory can be applied for indirect identification of passive electrical devices; Developed probabilistic approach based on the Monte Carlo method in solving the problem of the study of the stability of large power systems; Developed mathematical models and computer program for analysis of electromagnetic transients, etc.

The applicant's teaching and methodological contributions are related to the development and implementation of software products in the educational process and the commissioning of unique high-voltage testing facilities.

From the reference to the citations of the scientific works of Dr. Nikolaev there are 4 citations and 2 reviews in scientific publications, referenced and indexed in world-renown databases with scientific information.

#### 4. Significance of contributions to science and practice

Dr. Nikolaev's research has contributed to theory and practice as they are devoted to current issues of development, work regimes and EES governance. The results of his scientific research are available to the specialists in his publications.

The submitted documents for participation in the competition meet the quantitative indicators of the criteria for occupying the academic position "associate professor".

Dr. Nikolaev is known and enjoys authority among colleagues dealing with the problems of electric power engineering. Undoubtedly, he contributed to attracting and motivating students to work in a team on practical issues.

### 5. Critical remarks and recommendations

I have no critical remarks to the candidate. Dr. Nikolaev should continue to work in the field of electrical systems and the current issues related to their management. Still dedicated to working with students and PhD students and to integrate and engage them with the problems of electrical engineering.

## CONCLUSION

On the basis of the presented scientific papers, their significance, the scientific, applied and applied contributions contained therein, and the results for the points obtained by the groups of indicators, according to Art. 2b of ZRASRB, I propose Dr. Nikolay Deyanov Nikolayev to take the academic position "associate professor" in a professional field 5.4. "Energetics", under the specialty "Electric Power Plants and Substations".

Date: 19. 03. 2019

Jury member:.....

/Assoc. prof. PhD eng. M. Vasileva/