

OPINION

*by competition for academic position "associate professor"
by professional field 5.4. "Energy",
scientific specialty "Electric Power Plants and Substations",
proclaimed in State Gazette no. 105 / 18.12.2018,
with a candidate - assistant professor Dr. Eng. Nikolay Deyanov Nikolaev*

Member of the Scientific Jury: Eng. Anton Slavchev Georgiev, Associate Professor, Doctor of Science

After acquainting with the materials provided by the applicant for academic position "associate professor" in professional field 5.4. "Energetics", scientific specialty "Power Plants and Substations", I give the following assessment about the readiness of Dr. Eng. Nikolai Deyanov Nikolaev for taking the above mentioned academic position:

1. A general characteristic of the applicant's research and applied activity

The candidate taking part in the Associate Professor's Contest has provided a detailed account of his / her scientific research and applied research activities. The information provided complies with the requirements written in Art. 2b of the Law on the Development of Academic Staff in the Republic of Bulgaria. In it Dr. Eng. Nikolaev shows the fulfilment of minimum national requirements for occupying the academic position "Associate Professor" for the field "Technical sciences" in higher education.

For the purposes of the competition, the applicant has submitted 23 publications. Of these, 14 are referenced by SCOPUS. Dr. Eng. Nikolaev has grouped 10 scientific publications in journals, which are referenced and indexed in world-famous databases, such as "Habilitation work". Apart from this, the applicant has submitted 4 more scientific publications in editions that are referenced and indexed in world-wide databases as well as 9 scientific publications published in scientific review journals or in edited collective volumes but not referenced by global databases. Collected and analysed scientific and applied research information, do research proposals and applications have their objective basis - working in six research projects with external funding, and six projects with university finance / fund 'Research' /. It should be noted that Eng. N. Nikolaev is the manager of one of the projects with internal financing. In the other eleven projects he participated as a contractor, and his activity in them could be considered as equivalent to that of the other participants.

The topic of the presented scientific and applied works corresponds to the research interests of the applicant and his scientific and applied activity. It also corresponds to the professional field in which the competition was announced. The subject of the developments covered fully and completely scientific specialty for which the contest.

In summary, for the characteristics of the applicant's research and applied activity, it can be ascertained:

- 50 points / out of 50 needed / - by the set of indicators A;
- 160 points / out of 100 needed / - by the set of indicators B;
- 220 points / out of 200 needed / - by group of indicators D;
- 60 points / out of 50 needed / - by the set of indicators E;
- 166 points / out of 30 needed / - by the set of indicators G.

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

Dr. Nikolaev is the author of teaching aids, supporting the disciplines he leads. He holds lectures and exercises on "Power Generation Technology", "Electrical Part of Power Plants and Substations" and "Electricity Sustainability".

He works responsibly with professionalism in updating the lab models for the laboratory exercises in the disciplines he leads. He takes an active part in furnishing with new equipment and renovation of several laboratories in the department.

Student feedback on his work is also excellent.

3. Key scientific and applied scientific contributions

The scientific contribution of the applicant concerning the development of original algorithms and models for research and analysis of processes in electricity facilities.

Physical models of photovoltaic modules have been created. New ideas for the operation of power facilities have been introduced. Innovative solutions and practical implementations of computer mathematical models for the analysis of electromagnetic transition phenomena have been developed. The experimental results obtained on this basis are a serious argument for the significance of the Applicant's scientifically-applied contributions.

There are four quoted citations of Dr. Eng. Nikolaev, as well as two reviews in scientific publications, referenced and indexed in world-renowned 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 research have been popularized by professionals in enough 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

electricity. Undoubtedly, he contributed to attracting and motivating students to work in a team on practical issues.

5. Critical remarks and recommendations

I have not found any significant weaknesses or omissions in the candidate's work, which is why I can not make any critical remarks. I can only recommend that he continue to work actively in the scientific field he has already proved.

CONCLUSION

In conclusion, I can only confirm that my assessment of the applicant's scientific output is excellent. On the basis of which I find it perfectly reasonable to propose Ch. Assist. Prof. Eng. Nikolay Nikolaev to take academic position "Associate Professor" in professional field 5.4. "Energetics" in the scientific specialty "Electrical Centers and Substations" at the Department of Electrical Power Engineering at the Faculty of Electrical Engineering of the Technical University of Varna.

Varna
25. 03. 2019

Member of the jury:
/ Associate Professor, Doctor of Science, Eng. Anton Georgiev /