

OPINION

on a competition for an academic position
"Associate Professor"
in a professional direction 4.1. Physical sciences,
for the needs of Sofia University "St. Kliment Ohridski",
Faculty of Physics, announced in SG No. 87 / 19.10.2021

The opinion was prepared by: **Prof. Asen Enev Pashov**, SU St. Kliment Ohridski, in his capacity as a member of the scientific jury on the competition according to Order № RD-38-578 / 09.12.2021. of the Rector of Sofia University St. Kliment Ohridski.

The only candidate who has submitted documents for participation in the announced competition is Assistant Professor Dr. Neno Todorov from Sofia University St. Kliment Ohridski.

1. Candidate data

The documents submitted by the competition by the candidate comply with the requirements of ZRASRB, PPZRASRB and the Regulations on the terms and conditions for obtaining scientific degrees and holding academic positions at Sofia University "St. Kliment Ohridski" (PUR-PNSZADSU).

Assistant Professor Todorov participates in the competition with 18 publications, 12 of which are in quarters Q1 and Q2. In addition, a list of the scientific contributions, a list of the teaching activities, tables and other documents supporting the application are attached. Documentarily, the application fully satisfies the minimum requirements of the ZRASRB, as well as the additional requirements of the Faculty of Physics. This can be seen from the attached Reference 12. In addition to the required scientific publications, the relevance of his work is supported by over 270 independent citations and h-index 7. He has participated in a series of research projects and has a convincing teaching career.

2. Details of the candidate

Neno Todorov is a graduate of the Faculty of Physics at Sofia University St. Kliment Ohridski. He graduated with a bachelor's and master's degree in 2010. He immediately became a doctoral student at the Faculty with research supervisor Prof. Miroslav Abrashev. In 2012 he left for Nantes, France, where he completed his dissertation with Dr. E. Faulques and defended in 2014 with two supervisors with a thesis entitled Phonons in complex oxides.

He has been working at the Faculty of Physics since his bachelor's degree (2008). In 2013 he became an assistant, and in 2015, as soon as he completed his doctorate, he won a competition for chief assistant. The attached documents show that the candidate has extensive teaching experience, having led a variety of lecture courses, seminars and workshops.

At the same time, he works actively as a scientist. His first scientific publication appeared in 2007, when he was still a bachelor's student. Already as a master he is a member of a research project, subsequently participated in 12 more projects, of which 1 under the Horizon program 2020, 3 major projects of the NSF and two for international cooperation. He works as a member of various teams, where we meet the names of prominent scientists, both from the Faculty of Physics, BAS and abroad.

After 2010, but more actively after 2015, Neno Todorov began to participate in school and student Olympiads in physics. The biography shows numerous participations as an organizer, coach and leader of Bulgarian team in several Bulgarian and international competitions.

3. General characteristics of the scientific works and achievements of the candidate

The scientific works of the candidate are in the field of Raman spectroscopy of solid materials, provided to the candidate by colleagues from FzF, BAS and others. The spectra obtained under different conditions are accompanied by modeling of the crystal lattice dynamics. Apparently, the candidate has mastered the technique of Raman spectroscopy in one of the best laboratories of the Faculty of Physics, has a good command of the theoretical apparatus needed for spectrum analysis and modeling of crystal structures. It is good to note that in 6 of the articles in the competition after the beginning of the PhD study among the co-authors does not appear the head of his dissertation - Prof. Abrashev. For me, this is an indicator that Ch. Assistant Professor Dr. Todorov has formed an independent young scientist.

The candidate participated in the competition with 12 publications in journals from Q1 and Q2, the other three are conference papers in full text. In addition, three additional articles documenting the candidate's activities around the Physics competitions were attached - they referred to the arguments in favor of the candidate's teaching activities.

In Scopus, 21 works and 288 citations can be seen for N. Todorov. After excluding the self-citations of all co-authors, the citations decreased only to 272. The results in Web of Knowledge are similar. The H-index is 7 (with self-citations excluded).

Although a reference to the scientific contributions is attached to the documents, I believe that this is rather a brief description of the content of the candidate's scientific papers. From the report I expected to learn what are the personal contributions of the candidate in the presented publications. The presence of a significant contribution is an important requirement for holding academic positions in the Faculty of Physics, so I expect during the final meeting of the jury, N. Todorov to give brief information on the issue.

4. Characteristics and evaluation of the teaching activity of the candidate

As I have already mentioned, the candidate's teaching activity is impressive. In addition to seminars and workshops on General Physics and Probability and Statistics, as a chef assistant Neno Todorov already gives lectures on the same subjects, as well as a specialized course - Raman spectroscopy. The awarding of lectures in general physics for 1st and 2nd year students to a young assistant shows that the department has highly appreciated his qualification as a specialist and lecturer. Confirmation of this is the involvement of N. Todorov in student Olympiads, and even more such confirmation are the awards brought by Bulgarian students from the International Physics Olympiads. It should also be noted the supervision of the two master theses.

5. Conclusion on the application

I give my positive assessment of the candidacy.

OVERALL CONCLUSION

Based on the above, I recommend the scientific jury to propose to the Faculty Council of the Faculty of Physics at Sofia University "St. Kliment Ohridski" to elect Ch. Assistant Professor Dr. Neno Todorov to take the academic position of "Associate Professor" in a professional field 4.1. Physical sciences.

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