

STATEMENT

on the competition for the academic position “Associate Professor” in the professional field
4.1 Physical Sciences / Particle Physics /
at the Faculty of Physics, Sofia University St. Kliment Ohridski
announced in the State Gazette, issue 93 / 26.11.2019

Candidate: Ch. Asst. Prof. Dr. Peicho Petkov, Faculty of Physics, SU

Member of the Scientific Jury: Prof. Georgi Rainovski, DSci, Faculty of Physics, SU

The only candidate for this competition graduated from the Faculty of Physics at the University of Sofia in 2001 in the master program “Nuclear and particle physics”. In 2009 he defended his dissertation for the scientific degree "Doctor" on the topic "Study and optimizing the characteristics of Resistive Plate Chambers for the CMS detector" with scientific supervisor Assoc. Prof. Dr. Leander Litov.

From 2006 to 2009 Dr Peicho Petkov was a physicist/analyst in computer systems and networks at the Institute of Nuclear Research and the Institute of Parallel Information Processing, BAS, and Sofia University Kliment Ohridski, Faculty of Physics, Department of Atomic Physics. His career at Sofia University began in 2013, when he was selected as an Assistant Professor at the Department of Atomic Physics. During all his academic years as a university teacher, the candidate had a full academic load. Over the years and at present Assistant Professor Peicho Petkov has lectured and/or conducted seminars on General Physics 8, "Accelerators and detectors of ionizing radiation in medicine", "Programing in UNIX environment", " Programing in UNIX environment - Practicum", "Information Technology", "Modeling the interaction of biological molecules and others. The candidate was a scientific supervisor of 5 successfully defended diploma thesis works. In general, the teaching activity of the applicant is intensive and extensive. On this indicator, Dr. Peicho Petkov, is fully qualified for the academic position of Associate Professor.

The scientific interests and achievements of the candidate are in the field of experimental high energy physics. Dr Peicho Petkov presented for the competition 20 scientific works in the field of elementary particle physics, all of which are published in refereed, international scientific journals. Of these, 3 publications are in Q2 journals and the rest are in Q1 journals. The total number of citations of these publications is 149. The applicant's major scientific interests and contributions are related to the design and construction of resistive-plane cameras that are part of the muon system of the CMS detector. The applicant has been involved in this collaboration from the very beginning and has significant contributions to the development of cameras, the optimization of their characteristics, the installation and operation of the chambers in the CMS detector. In essence, it is a long-standing physics-engineering project whose successful implementation has been and is essential for the fundamental physical results obtained with CMS. The total number of publications and the number of citations of the candidate is impressive, but this is not unusual in the field of experimental particle physics, where every result is achieved by huge scientific teams. This has also led to a large number of co-authors in most of the presented publications. On the other hand, the fact that the candidate submitted only a selected set of publications for the competition makes a very good impression and it gives me the right to think that Dr. Peicho Petkov has essential contributions to the published results. This impression is also firmly confirmed by the letters of Dr. Pugliese, CMS RPC project manager.

The foregoing and the attached reference for meeting the minimum national requirements allow me to conclude that the experience and scientific production of Dr. Peicho Petkov fulfill the national requirements and the requirements of the Faculty Council of the Faculty of Physics for the occupation of the academic position "Associate Professor".

The applicant meets all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the regulations thereto and the Rules of the Sofia University for the implementation of this law for the occupation of the academic position "Associate Professor". Therefore, I strongly recommend that the Faculty Council of the Faculty of Physics selects Dr. Peicho Petkov for the academic position of Associate Professor.

09.03.2020
Sofia

/Prof. DSci Georgi Rainovski/