

## OPINION

by **Nevena Stoyanova Mileva, PhD, Professor at Plovdiv University Paisii Hilendarski**

on the materials submitted for the competition  
to hold the academic post "**Professor**"  
**at Plovdiv University Paisii Hilendarski**  
in higher education 1. Pedagogical sciences, Professional field 1.3. Pedagogy of Training in ...  
(Physics Training Methodology)

In the competition for "Professor" announced in the State Gazette, issue 31 of 12<sup>th</sup> April 2019 and on the website of Plovdiv University Paisii Hilendarski for the needs of the Department of Educational Technologies at the Faculty of Physics and Technology, Associate Professor Dr. Zhelyazka Dimitrova Raykova, PhD, from Plovdiv University Paisii Hilendarski.

### **1. General presentation of the procedure and the applicant**

With Order No. P33-2886 of 11<sup>th</sup> June 2019 of the Rector of Plovdiv University Paisii Hilendarski (PU) I have been appointed as a member of the scientific jury of the competition for the occupation of the academic position of "**Professor**" at PU, in the field of Higher Education 1. Pedagogical Sciences, Professional field 1.3. Pedagogy of Training in ... (Physics Training Methodology), **announced for the needs** of the Department of Educational Technologies at the Faculty of Physics and Technology.

Only one applicant has filed in documents to participate in the announced competition, namely, Associate Professor Zhelyazka Dimitrova Raykova, PhD, a lecturer at the Faculty of Physics and Technology of Plovdiv University Paisii Hilendarski.

The presented set of materials in paper and electronic form, prepared by Associate Professor Zhelyazka Raykova, PhD **complies with** the Rules for the development of the academic staff of PU, and includes all necessary documents.

The applicant Associate Professor Zhelyazka Raykova, PhD has submitted 55 scientific works in the competition, which were not used in the competition for Associate Professor. Of which:

- one monograph;
- 17 articles in journals;
- 2 articles in scientific forums' collections;
- 4 textbooks;
- 4 books related to research results.

Associate Professor Raykova is the first author in 37 scientific papers and the only author in 13. Associate Professor Zhelyazka Raykova has been an Associate Professor at Plovdiv University Paisii Hilendarski for 10 years“.

**The professional biography of the applicant, as well as my personal impressions of the long-term collaboration with Associate Professor Raykova, show that the accumulated experience,**

**qualification and research potential is sufficient and convincing for occupying the academic position "Professor".**

## **2. General characteristics of the applicant's work**

### **2.1. Assessment of educational and pedagogical work and background of the applicant**

The applicant has been teaching at PU Paisii Hilendarski School for many years, leading mainly classes in the scientific fields of the competition.

Associate Professor Zhelyazka Raykova, PhD has 31 years of experience as a lecturer at the Faculty of Physics, restructured as a Faculty of Physics and Technology at Plovdiv University since two years ago. She has independently developed 16 lecture courses, which are offered to students from the pedagogical majors of Plovdiv University, as well as 3 courses, which are offered to students since 2017 at the Department for Qualification and Professional Development of Pedagogical Specialists at Plovdiv University. She participates in the competition with 5 textbooks and manuals. She has developed curricula for 3 Bachelor's and 4 Master's degree programmes. Since 2009, she has been the scientific advisor of 7 graduates and 4 doctoral students, 3 of whom successfully defended. She has been the Head of Laboratory for Audiovisual and Information Technology in Training at the Faculty of Physics and Technology at Plovdiv University since 2009. She has been a member of the Scientific and Organizing Committee of 5 National Conferences on Physics Training in 2014, 2016, 2017, 2018 and 2019. She has participated in 12 research projects, being the leader and coordinator of 3 international projects and 3 scientific projects funded by Plovdiv University.

### **2.2. Evaluation of the applicant's scientific and applied scientific activity**

Associate Professor Raykova works in the field of Methodology of teaching physics in the secondary school. The applicant's scientific contributions are in the field of modern trends in physics training in school - constructivist theory and its place in physics education; science literacy and physics training; a research approach in physics training; ICT in Physics Education, use of ICT in the Education of Future Physics Teachers.

An important scientific and applied aspect of her activity is the use of modern tools and technologies in teaching physics in high school - the use of mobile devices, the use of augmented reality technology, and the automation of tests in secondary education.

## **CONCLUSION**

The documents and materials presented by Associate Professor Zhelyazka Dimitrova Raykova, PhD, meet all the requirements of the Academic Staff Development Act of Republic of Bulgaria (ADSARB), the Regulations for the implementation of ADSARB, and the corresponding Rules of PU Paisii Hilendarski. The scientific output submitted meets the minimum scientific requirements for all groups of indicators for the academic position of 'Professor'.

The applicant has submitted a **sufficient** number of scientific works published after the materials used in the position of Associate Professor. The applicant's works have original scientific and applied and methodological contributions that have received international recognition and a representative part of them have been published in journals and scientific publications published by international academic publishers. Her research works are of practical use, some of which are directly oriented to the academic work and the academic community at home and abroad. The scientific and teaching qualification of Associate Professor Zhelyazka Dimitrova Raykova, PhD is **undoubted**.

The results achieved by Associate Professor Zhelyazka Dimitrova Raykova, PhD in the educational and research work **fully** comply with the specific requirements of the Faculty of Physics and Technology, adopted in connection with the Rules of PU for the implementation of the Academic Staff Development Act of Republic of Bulgaria.

After having acquainted with the materials and research works presented in the competition, an analysis of their importance and the scientific and applied contributions contained therein, **I find it justifiable to give my positive assessment and to recommend to the Scientific Jury to prepare a report proposal to the Faculty Board of the Faculty of Physics and Technology for the selection of Associate Professor Zhelyazka Dimitrova Raykova, PhD, for the academic position “Professor” at PU Paisii Hilendarski, in professional field 1.3. Pedagogy of Training in ... (Physics Training Methodology).**

01.10.2019

City of Plovdiv

**Opinion by:** .....

(Professor Nevena Mileva, PhD)