#### **REVIEW BY**

Prof., **Prof. Lucian Angelov Milkov** — **lecturer at** the UNWE — Sofia, Faculty of Management and Administration, Department of Public Administration, for holding the academic position "Docent" **at Plovdiv University "Paisii Hilendarski" (PU),** in the field of higher education 1. Pedagogical sciences, professional field 1. 2. Pedagogy (Innovation in Education)

In the competition for "Docent", announced in the State Gazette, No 92 of 18. 11. 2022 and on the website of Paisii Hilendarski University, about the needs of the Department of Botany and Biological Education, to the Faculty of Botanics and Biological Education, a candidate is, Dr. Zlatka Petkova Vakleva from PU "Paisii Hilendarski".

#### 1. General presentation of the materials received

By Order No P33-RD-21-327 of 15. 02. 2023, of the Rector of the Paisii Hilendarski University, I was appointed as a member of the scientific jury of a competition for holding the academic position "Docent" in the PU, in the field of higher education 1. Pedagogical sciences, professional field 1. 2. Pedagogy (Innovation in Education), announced for the needs of the Department of Botany and Biological Education, at the Faculty of Biological Education.

**Only** Dr. Zlatka Petkova Vakleva from PU "Paisii Hilendarski" has submitted documents in order to participate in the announced competition.

The paper-based set of materials presented by Dr. Vakleva is in accordance with the Rules for Development of the Academic Staff of PU. It includes 12 documents: diplomas, applications, complete list of publications, annotation of scientific works, information on minimum scientific requirements.

The candidate, Dr. Vakleva, has attached a total of 81 scientific papers, of which 2 monographs, 10 textbooks and teaching tools and a list of 69 research papers — scientific articles and materials from national and international conferences. For review are all scientific works that are outside the dissertation and are taken into account in the final evaluation.

The distribution of scientific works by relevant headings, at home and abroad, is as follows: two monographs issued in 2011 and 2022; 5 university teaching tools issued in the period 2008-2017; 1 textbook from 2019 used in the school network; 4 educational tools that are used in the school network and 69 scientific articles.

The monograph: "Ecological Education — Vision for the Future" presents current theoretical concepts and technologies for the realisation of environmental education. The highlights of environmental education are discussed: history, content of the basic concepts, an idea of contemporary trends internationally. The pedagogical aspects of the realisation of environmental education have been clarified. Information about modern educational technologies such as project- and situation-based training is studied and summarised.

## Dr. Vakleva formulated the following scientific contributions:

A detailed analysis of the game methods, modeling, group and team organisation of the educational process has been made.

— The structure of the lesson is analysed using interactive learning methods and techniques.

- The advantage of the educational portfolio, the application of science and the role of cooperation between the museum and the school in the environmental education process is described.
- The requirements for the preparation and structuring of the innovative technologies are examined, their advantages and disadvantages are outlined.

Special attention is paid to a system of models of pedagogical research, realised in practice and illustrated by examples.

— Variants of pedagogical technologies have been developed using innovative methods and techniques for environmental education.

In the monograph: "Innovation in Education" are addressed aspects of innovation in education that are supported by experimental research. They are in different areas: in the training of the students — future teachers, trained in the Faculty of Biology and the Faculty of Pedagogical School "Paisii Hilendarski", in raising the qualification of the pedagogical staff in formal and informal educational process, in the biological training of the students.

### The following contributions are presented:

The study follows the discussion of the problem in the international scientific community.

— A complex of theoretical-experimental pedagogical models was developed, with evidence of their effectiveness.

The monograph promotes conceptual ideas and educational practices.

2. Short biographical data (of the applicant)

Dr. Vakleva has extensive professional experience as a lecturer and researcher. Since 1993 she has been a lecturer at PU "Paisii Hilendarski", successively receiving the academic positions: assistant, senior assistant and chief assistant. She has also defended a doctoral dissertation.

#### 3. General characteristics of the applicant's activity

In my opinion, the presented scientific works are of high value because they are aimed at current problems of the modern educational system and its development, according to the requirements of theory and practice. Dr. Vakleva has serious scientific competencies, high erudition and knowledge of the contemporary problems of both pedagogical science and the modern methodology of secondary school education in Bulgaria.

I pay special attention to the work: Environmental Ethics. It is the second of its kind in Bulgaria and has been developed for the purpose of training at the University, in the disciplines "Ecological Ethics" and "Bioethics", for ecologists and teachers of biology. It presents the main highlights of the discipline. It contains current theoretical concepts about the problems of environmental ethics, practical themes and case studies.

The Contributions: The theoretical foundations of a new discipline have been developed at the University. It provides enrichment of the professional competence of the specialist — teacher, biologist and ecologist. Environmental ethics is an innovation in the field of environmental education, enriching it in an eco-ethical context.

"Man and Nature" is a teaching aid for students.

The book includes a system of fundamental knowledge about living nature, which is the basis for the training of teachers for teaching the subjects Native Microworld, World and environment and Human and Nature. The structure of the work tracks the thematic sequence of the information components included in the curriculum and lecture course in the discipline.

Supports the overall work of the student during the semester classes, as well as in the preparation for the semester exams.

The Contributions: The teaching manual presents the didactically processed scientific knowledge, with current accents of the biological sciences. The pedagogical design of the lecture resources is suitable for organising interactive lectures and active independent work of students on a given topic, in the context of the discipline.

The article: "Traditions and Innovations in Environmental Education" looks at the acute problems of modern life, both on the individual and on a planetary scale. In a global (worldwide) context, environmental education is seen as a key, central part of a broad societal movement, with the aim of optimising the use and conservation of nature and achieving sustainable development of individual countries and the world as a whole. The Ecocentric Paradigm is imposed in the content of modern ecological education. This paradigm establishes a holistic and ethically oriented approach to discovering the objective universal value of nature, emphasising its uniqueness and objective self-worth. Environmental Ethics is a doctrine of people's ethical relations to nature, based on the perception of nature as a member of a moral community, a moral partner, equal and equally valuable, which also involves limiting the rights and needs of people.

The Contributions: Operationalisation of the goals of environmental education and their orientation towards universal human values.

# 4. Assessment of the applicant's personal contribution

After getting acquainted with Dr. Vakleva's publications from 2008 to-date, I have established absolute continuity in terms of style, scientific language, researched problems, which shows an independent style of work. I don't see any signs of plagiarism. All sources used are properly and correctly quoted.

#### 5. Critical remarks and recommendations

I don't have any critical remarks to the candidate. I allow myself to wish to shorten as much as possible the term for obtaining the academic position "Professor", because, in my opinion, Dr. Vakleva has a serious scientific potential and her professional growth will be of undoubted benefit, both of the Department and the Faculty in which she works, and for the University. It is certain that with the qualification, erudition and competence, she can also focus on the development of a dissertation for obtaining the scientific degree "Doctor of Sciences".

#### 6. Personal impressions

I do not know Dr. Vakleva personally, but I have met her name as an author in a number of scientific publications in Bulgaria: the "Civil Education" magazines; "Vocational education"; "Scientific works of PU" etc. My acquaintance, however, with her publications revealed a creative and creative colleague looking for realisation of significant goals and goals.

### THE CONCLUSION

The documents and materials presented by Dr. Vakleva. meet **all the requirements of the** Law for the Development of Academic Staff in Re Public Bulgaria (ZRASRB), the Rules for Implementation of ZRASRB and the respective Regulations of the PU "Paisii Hilendarski".

The candidate in the competition **has** submitted **a significant** number of scientific papers published after the materials used in the defence of the NSA Doctor and the acquisition of the academic position of Chief Assistant. In the work of the candidate there are original scientific and applied contributions that have received international recognition, and a representative part

of them are published in journals and scientific collections issued by international academic publishers. Its theoretical developments have practical applicability, some of which are directly oriented towards learning work.

Dr. Vakleva's scientific and teaching qualifications are unquestionable.

The results achieved by Dr. Zlatka Petkova Vakleva in the academic and scientific research activities **fully** comply with the minimum national and additional requirements of the Faculty of Pedagogy, adopted in connection with the Rules of the PU, for application of the ZRARARB.

After having acquainted myself with the materials and scientific works presented in the competition, analysis of their significance and contained in them scientific, applied and applied contributions, I find it reasonable to give my **positive** assessment and **recommend to** the Scientific Jury to prepare a report-proposal to the Faculty Council of Faculty of Pedagogy for the selection of Chief Assoc., Dr. Zlatka Petkova Vakleva for the academic position "Docent" at the PU "Paisii Hilendarski" in the field of higher education 1. Pedagogical sciences, professional field 1. 2. Pedagogy (Innovation in Education).

12. 03. The year 2023	
	Reviewer:
	(Prof., D.c. Lucian Milkov)