



OPINION

on the materials submitted for participation in a competition for "Associate Professor" in the field of higher education **5. Technical Sciences**, Professional field **5.13. General Engineering**, scientific specialty "Ergonomics and Industrial Design" in the discipline "Residential Interior Design and Furnishing"

In the competition for "Associate Professor", announced in the **State Gazette**, issue. **32** dated **03.04.2020** and on the website of the University of Forestry with procedure code **WWI-AsP-0320-39** for the needs of the **Department of Furniture Production** at the **Faculty of Forest Industry**, as the only candidate involved is Chief Assist. Prof. Pavlina Minkova Vodenova, PhD, Faculty of Forest Industry, Department of Interior and Furniture Design.

Prepared by: Professor Maria Dimitrova Evtimova, PhD in a Professional Field **5.13. General Engineering**, scientific specialty "Ergonomics and Industrial Design", Technical University of Sofia, Faculty of Mechanical Engineering (FME), Department of Engineering Design.

1. Brief biographical data for the candidate

The only candidate competing for the academic position of "Associate Professor" Chief Assistant Professor Pavlina Minkova Vodenova was born on August 7, 1976 in Sofia. Biographical data show her professional interests related to the theoretical foundations of design, student education and creative pursuits. Her diploma of higher education from the University of Forestry has registration number №10870/2000, a five-year training course in the specialty "Interior Design for Furniture" with "Master" qualification degree. In 2017 she acquired the educational scientific degree "Doctor", diploma №LTU-ONS-2017-35 issued on 31.10.2017, with the topic of the dissertation "Implementing the Systematic Approach in Children Environment Design for the Contemporary Dwelling", scientific specialty „Technology, Mechanization and Automation of Woodworking and Furniture Industry “. She was an assistant professor from 15.08.2009 to 12.04.2018; she has been a chief assistant professor at the University of Forestry since 12.04.2018 until now with a work experience of 10 years 7 months and 25 days. In different periods of time - 2009 so far, conducts classes with students in the disciplines "Residential Interior Design and Furnishing", "Design of Public Buildings Furnishing" for III and IV year of study, "Design Project", "Management of the Design Process", "Design of Period Style Interior", "Design of Avant-garde furniture", "Serial and Mass Production Furniture Design", as well as "Lighting Design". From 2019 until now - lectures on "Design of Environment for Disabled People" with students majoring in "Engineering Design" at the master's level. She is a member of the lecturers' team, conducting a practical module "Project Week" for students majoring in "Engineering Design" at the bachelor's level. At New Bulgarian University she conducts lectures and classes in the disciplines: "Furniture Construction Basics" Part I and II and "Techniques and Materials". She works as product specialist office furniture in KAMMARTON BULGARIA EOOD, Sofia, and as a furniture and interior designer in AGON OOD Sofia, AVEL - 52 EOOD, Sofia and SCS Unidesign, Sofia.

2. Correspondence of the submitted documents and materials of the applicant according to the Rules of the Development of academic staff at the University of Forestry.

Chief Assistant Professor Pavlina Minkova Vodenova presents strictly arranged documents accompanied with concrete evidence, written materials and applications related to the competition, certifying her professional and creative performances within the meaning of paragraph 63, subparagraph 2.

The attached self-assessment- reference for minimum requirements under paragraph 2a, subparagraph 2, 3 and 4 for the academic position "associate professor" according to the model of University of Forestry proves her right to participate in the competition, namely:

Indicator A: Dissertation work for educational and scientific degree "Doctor" (defended - 50 points / required 50 points);

Indicator B: Monograph 100 points (required - 100 points);

Indicator D: Scientific publications - 343.31 points (200 points required);

Indicator E: Citations - 87 points (50 points required).

Total number of points from indicators A + B + D + E - 580.31 (400 points required), exceed the minimum national requirements for research and teaching activities of the candidate for the academic position "Associate Professor" in the field of Higher Education **5. Technical sciences**, professional field **5.13 "General Engineering"**.

The candidate Chief Assistant Professor Pavlina Minkova Vodenova participates in the competition with:

- Monographs - 1; Books - 1;
- Publications - 23.
 - **Publications in scientific journals:** publications in journals with impact factor; foreign referees referred to outside the Web of Science and Scopus - 1; in Bulgarian referred outside Web of Science and Scopus - 10.
 - **Publications in international proceedings of scientific forums** - 4.
 - **Popular science publications** - 5.
 - **Place of publication** - 23: in Bulgaria - 19; abroad - 4.
 - **Language in which they are published:** in Bulgarian - 12; in English - 11.
 - **Number of co-authors** - 23: individual - 12; with one co-author - 6; with two co-authors - 3; with three co-authors - 2;

3. Reflection of Candidate's Scientific Publications in Literature (known citations)

It should be noted that indicator E, which is part of Table 1. Minimum required points by groups of indicators for different scientific degrees and academic positions, Area 5. Technical Sciences, 50 points are needed for an associate professor, and the candidate presents - 87 points. Chief Assistant Professor Pavlina Minkova Vodenova is cited in scientific journals - referenced and indexed in world databases with scientific information or in monographs and collective volumes, as the authors emphasize the importance of her thesis. Citation in non-peer-reviewed journals with scientific review presents it as an author with a recognized opinion according to the thematic area considered by the author quoting it.

4.1. Assessment of the candidate's educational and pedagogical activities (work with students and PhD students)

The disciplines that the applicant teaches with bachelor's and master's degree students characterize her as a teacher with extensive knowledge in the field of design. In addition to the traditional methods and techniques of teaching in higher education, Chief Assistant Professor Pavlina Minkova Vodenova is part of lecturers team conducting the practical module "Project Week" for students majoring in "Engineering Design" at the bachelor's level, which in the current situation, allows to supplement with new data - positive and/or negative, the experiments mentioned in her publications.

Using not only traditional methods and techniques of teaching in higher education, Chief Assistant Professor Pavlina Minkova Vodenova is part of lecturers team conducting the practical module "Project Week" for students majoring in "Engineering Design" at the bachelor's level, which in the current situation. It allows her to supplement with new data - positive and/or negative, the experiments mentioned in her publications.

She supervises students in developing term projects, assesses students' knowledge and prepares reviews for graduates. The modern methodology of teaching and mastering the basic knowledge in the learning process is a topic covered in the reports, which theoretically substantiate the innovative methods that she applies in her teaching. In addition, she is part of a team that developed the electronic forms of distance learning in 2014 and implements the training modules "Furnishing the "Day" area in the dwelling" and "Furnishing the "night" area in the dwelling", which proves her innovative interests and capabilities in this direction.

4.2. Scientific and scientific-applied activity

The defended dissertation on "Implementing the Systematic Approach in Children Environment Design for the Contemporary Dwelling" (A1) and the monograph (B3) "Design Methodology in Interior Design", indicates her professional interest in the problems of contemporary design. It is necessary to indicate the realized project "Single-family residential building in Sofia, 2017-2018." which also emphasizes her creative potential as a designer. All publications can be traced in (NACID) and are the basis for the professional attitude of Pavlina Vodenova to the theoretical foundations of design, as well as for her opportunities as a teacher and implementer of creative projects.

4.3. Participation in scientific, applied and educational projects

Chief Assistant Professor Pavlina Vodenova presents a list of participation in 9 scientific, applied and educational projects.

Under the Lifelong Learning Program IP, 76946-IC-I-207-IBG Erasmus EUC-1 she participated in 3 projects as a lecturer and team and students' mentor at Mendel University, Brno, Czech Republic in 2012; SeamMk University, Seinäjoki, Finland and Elisava University of Barcelona, Spain. In 2011 she participated in an international workshop at the Technical University in Zvolen, Slovakia.

In the period 2013-2014 she is a member of a target group under the project BG051P0001-3.1 2019 - "System for Qualification and Career Development of Teachers in Higher Education", implemented with the financial support of Operational Programme "Human Resources Development", co-financed by the European Social Fund of the European Union. Pavlina Vodenova participated in project BG051P0001-3.3.06-0056 - "Support for the Development of Young People at the University of Forestry", as a post-doctoral student and the project BG051P0001-4.3.04-0052 - "Development of a Centre for Electronic Forms of Distance Learning at the University of Forestry". She participated in the Project BG05M20P0001-2.009-0034 - "Support for the Development of Scientific Capacity at the University of Forestry".

Develops 3 applied projects: "Modernization of CEC for the transfer of scientific knowledge in accordance with the needs of practice" – 2014; "Development of a Project for Furnishing of Conference Hall of the Petrohan Training and Experimental Forest Range – the village of Barzia" - 2018, as a member of the author's team and "Design of partition and decorative elements for the interior of Training and Experimental Forest Range "Yundola" – 2020.

4.4. Contributions to the candidate's work (scientific, scientific-applied, applied)

I believe that it is necessary to add METHODOLOGICAL CONTRIBUTIONS to the contributions. The reason for this is the results of distance learning, the practical module "Project Week" for students majoring in "Engineering Design" at the bachelor's level, and special attention deserves the experiment with the inclusion of a designer, team member of the company - sponsor of the event and the conducted workshops, where it is emphasized that to the acquisition and realization of knowledge and skills of students, a significant role is played by the emphasized emotional and aesthetic attitude of students to the tasks. The conducted experiments prove that in modern student learning innovative approaches have their place in the educational process in higher education and it is necessary to pay attention to every emotional moment of learning. Regarding scientific, scientific-applied and applied contributions, I believe that they should be summarized.

Scientific-theoretical contributions:

1. A theoretical model and methodological guidelines for the design of single products and environments designed for children with continuous consideration of the influence of function, construction, material and objective features of this type of interior are created (D6.1).
2. In the process of interior design new phases have been added. In the context of the modern technological development of the design process new connections between phases have been discovered (B 3.1).

Scientific-applied contributions:

1. The historical development of children's furniture and interior in the XIX - XX century is studied. The main factors influencing the construction of modern children's furniture and interiors have been extracted and systematized.
2. All processes – children's characteristic, according to the age range - psychological, physiological and anthropometric point of view, are analyzed in development, and an author's classification of the children's furniture in tabular form has been developed. The considered parameters are monofunctionality, transformability, bifunctionality, possibility for adaptation to the changing growth of the child, etc. Perspective guidelines on the construction of a children's environment and the furniture used for its furnishing are summarized. (D6.1; D8.9; D8.13).
3. The areas of application of the main design methods are defined - design of complex sites, design of product programs, classical method of design of single products and a systematic approach to building a living environment. (D6.1). (B3.1) The algorithm of work in the separate phases of the analysis and design of the children's furniture and interior is systematized and determined. (D6.1; D8.13).

Applied contributions:

1. The possibility of ecodesign as an approach to be integrated into modern design methods to minimize the harmful effects, save resources and stimulate the human-nature relationship has been proven. (B3.1; D6.1; D8.2; D8.9; D8.20), as well as the interaction between the elements of the three-dimensional composition, in the context of

functionality, utilitarianism, way of perception and compositional principles (B3.1; D8).15; D8.17).

2. The role of design thinking is substantiated, which leads to the creation of solutions with visible added value for the client and is guaranteed a positive result for the organizations, which also influences the decisions for changes in the spatial organization of the dwelling. (D8.12; D8.16; D8.19)
3. Publications on the researched topics can be the necessary theoretical basis, which combined with all specific requirements (functional, ergonomic, aesthetic, economic, etc.) and social and cultural influences, contributes to the development of a good design concept.
4. The proposed design methods for designing a children's environment have been tested. (D6.1; D8.13). The premises intended for children's rooms in the residential planning schemes in the country have been studied and analyzed. (D6.1). It has been established the existence of new furniture products for children, in unison with modern technologies and communications, sports and physical activity. (D6.1)
5. New methods for research and design of certain functions, characteristic for the everyday life of the children of the respective age, have been introduced in the education of the students. (B3.1)
6. The systematized and defined algorithm of work in the separate phases of analysis and interior design will be useful both in the educational process of the students and of all specialists in the field of interior design. (B3.1)

The results of the theoretical and methodological research represent a modern contribution in the field of interior design and can be useful for both design students and designers, architects and all non-specialists with interests in these fields. (B3.1; D 6.1)

METHODOLOGICAL PRINCIPLES

1. The areas of application of the main design methods are defined and determined - design of complex sites, design of product programs, classical method of design of single products and a systematic approach to building a living environment. (D6.1)
2. Systematized methods of work in the various phases of interior design can support the stages of the actual implementation of the design process, and can be used by students and practitioners in the field of interior design.
3. Based on the theoretical research, a methodology for consistency in the study of the individual building blocks of the interior composition and their practical application is proposed. (B3.1)
4. A methodology for conducting a new module in the training course of students majoring in "Engineering Design (Interior and Furniture Design)", called "Project Week", has been tested and developed, which is a kind of change in the basic model of education, in response to the needs of modern society, which is paramount to creative design thinking. (D7.1; D8.3; D8.10; D8.11; D8.14)
5. The need to update the methods of interior design based on a study of the opinion of established specialists in this field has been proven. A methodology has been developed for conducting project-based design of the participants under conditions as close as possible to the real ones, and aiming to find a solution to a certain problem in a short time.

5. Assessment of the applicant's personal contribution

The presented scientific papers are related to solving theoretical and practical problems in designing residential interior and furniture, as well as the specific design of children's environment, as well as innovative methods that can be part of the methodological structure of teaching in higher education regarding design education. The personal contribution of the candidate for associate professor Ch. Assistant Professor Pavlina Minkova Vodenova is the successful use of theoretical research in the actual education of students at LTU. This interconnectedness is also supported by her creative design projects.

6. Critical remarks

The realized design projects and the methodical substantiation of the conducted experiments with students, give me grounds a reason to recommend the publication of a catalog with own realizations, accompanied by theoretically substantiated design principles.

7. Personal impressions

I know Chief Assistant Professor Pavlina Minkova Vodenova as a very precise and correct teacher who knows how to work in a team. This fact confirms my opinion that hard work and natural resources help the realization of young teachers.

8. Conclusion

The materials presented in the competition - the research and implementation activities of Chief Assistant Professor Pavlina Minkova Vodenova PhD meet the requirements of the ZRASRB, its Regulations and the regulations of the University of Forestry in this field.

In connection with the all above, I I give my positive vote "YES" and propose Chief Assistant Professor Pavlina Minkova Vodenova PhD to be elected as an "Associate Professor" in the discipline "Residential Interior Design and Furnishing" in the Professional field 5.13. General Engineering, scientific specialty "Ergonomics and Industrial Design".

Signature of the reviewer:.....
Professor Maria Dimitrova Evtimova, PhD

Review submitted to: