



R E V I E W

on materials submitted for participation in a competition for Academic position “Professor” in the field of higher education 5. Technical science, Professional field 5.13. General Engineering, scientific specialty “Ergonomics and Industrial Design” in the discipline “Residential Interior Design and Furnishing” published by University of Forestry in State Gazette No 18/3.1.2024 г., Procedure Code WWI-P-0224-123 .

Candidate for participation in the competition is:

1. **Assistant Professor Pavlina Vodenova, PhD**, sole candidate.

Reviewer: Professor Regina Pavlova Raycheva, Arch, PhD , Professor in a Professional Field 5.13. General Engineering from the University of Forestry.

1. Brief biographical data for the candidate.

The Candidate Pavlina Minkova Vodenova is born in 1976. She graduated from her Secondary school education at the Financial-economic gymnasium in Sofia, with the qualification “specialist accountant”. She graduated the University of Forestry in 2000 with qualification “Engineer – master’s degree”, together with the first cohort of the new program with the following qualifications: “Residential Interior and Furnishing”, “Public Interior”, “Furniture Construction”, “Non-wood materials for Interior”, “Furniture Styles”, “Form-Building”, “Computer Furniture Design”, etc. Her professional activity started in several furniture companies, among them Cammarton Bulgaria where she had the position of product specialist in office furnishing and designer. Her teaching career started in 2009 as full-time Assistant, and from 2018 she is Chief Assistant, leading studio design classes in “Engineering Design (Interior and Furniture)”, Bachelor Program. From the defense of her thesis, she teaches also to Master Program. At the New Bulgarian University, the candidate lectured and lead studio classes as part-time teacher in “Techniques and Materials”, “Basics of Construction – Part I” and “Basics of Construction – Part 2” of Interior Design Program.

In 2003, Pavlina Vodenova was registered as part-time Doctoral student. In 2017 she defended her thesis work “System Approach for Children’s Ambience in Contemporary Dwellings” and was awarded PhD degree. In 2020, she acquired the academic position of “Associate Professor”. From 2024, she is the Head of Department “Furniture Production” at the Faculty of “Forest Industry”.

Pavlina Vodenova is an active participant in many science and educational projects at LTU, she is also member of accreditation committees for Doctoral and Institutional accreditations. She is a member of the Organizational Committee of the International Science Conference “Innovations in Forest Industry and Engineering Design” INNO.

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

The submitted documents and materials of the candidate Assoc. Prof. Pavlina Vodenova are in full compliance with the requirements required by the Rules for DAS in the LTU. Documents and publications are presented in an orderly manner and are excellently numbered in two folders, together with the following books: monograph “Social Design Focused at Children”, the monograph “Management of Design Process”, the book “Methodics for Children’s Furniture Design and Furnishings on the Basis of System Approach” and the textbook “Management of Design Process”.

3. Assessment of the candidate’s educational and pedagogical activities

The candidate began her teaching career at the LTU in 2009 in her capacity of assistant, and chief assistant since 2018. Pavlina Vodenova taught the following courses in Engineering Design (Interior and Furniture Design), Bachelor Program: Design of Residential Interior and Furnishing”, as well as “Management of Design Process”, “Design of Period Interior”, “Avant-garde Furniture Design” and “Lighting Fixtures Design” for students of the master’s degree Program. The candidate taught “Interior Architecture” studio classes for “Technology of Wood and Furniture” bachelor’s degree. She also taught at New Bulgarian University, lecturing and leading studio classes in “Techniques and Materials”, “Basics of Construction – Part I” and II, for “Interior Design” Program.

Pavlina Vodenova is an established teacher with excellent relations with students. She tutored 35 diploma

students, and one Doctoral Student, who has finished her studies.

4. Assessment of the candidate's scientific, applied- scientific and publication activity

Assoc. Prof. Pavlina Vodenova submitted for the competition the following materials in compliance with a group of indicators of Minimal Requirements for obtaining the academic position of Associate Professor, field of higher education 5. Technical Sciences, professional field 5.13 General Engineering. Of the submitted works, I am a co-author of 3, namely Γ 7.7, Γ 8.8, Γ 8.9, and I shall not review them.

The Candidate submitted a total of 21 (without the textbook) works, as follows:

A. Dissertation Thesis for obtaining PhD Degree – **50 pt.**

B3. Habilitation work – monograph, single-authored, 166 pages, 1 – **100 pt.**

Γ 5. Monograph, published with two co-authors, which is not submitted as habilitation work, 247 pages, 1 – **30 pt.**

Γ 6. A published book based on the defended PhD Thesis for Doctor Degree, 145 p., 1 – **30 pt.**

Γ 7. Science papers in science journals, peer-reviewed and indexed in world-renown databases of scientific information (Web of Science and SCOPUS), 9 – **166,66 pt.**

Γ 8. Science papers in non-referenced journals with scientific reviewing or edited collective volumes, 9 – **139 pt.**

Γ 9. Published chapters from co-authored monographs: none

Γ 10. Implemented author's designs in the field of architecture or design, 1– **30 pt.**

Note: Under this point, there was only a company certificate; there should have been submitted part of the design.

The submitted Statement Self-Assessment for Compliance of Scientific Production with Minimal National Requirements" under no 9 in the documents list, is correctly compiled and informs of the basic scientific achievements (published monograph, books, papers and reports from conferences at home and abroad as well as quotations of the science papers.

Total of points under group A of indicators – **50 pt.**

Total of points under group B of indicators – **100 pt.**

Total of points under group Γ of indicators – **395,66 pt.**

Total of points under group Δ of indicators – **150 pt.**

Total of points under group E of indicators – **240 pt.**

The total of points under all indicators sums up to **935,66**. This significantly exceeds the required 600 points for the academic position "Professor" with more than 300 points.

4.1. Participation in Scientific, Scientific-Applied and Educational Projects

The candidate Pavlina Vodenova is an active participator in four national educational projects, financed under Operative Program "Development of Human Resources", co-financed by the European Social Fund of the European Union. They are listed in Supplement 27 of the candidate's documents. She has also actively participated in educational projects: Intensive Programs under Erasmus, in 2011 (Zvolen, Slovakia), 2012 (Brno, Czech Republic), 2013 (Seineiki, Finland), 2014 (Barcelona, Spain) and other places. In Supplement 27, 5 more applied projects under Contracts of the University Plan. Under this indicator („E“), the candidate scores **240** points.

4.2. Characteristics of Published Scientific Results

In total, Assoc. Prof. Pavlina Vodenova has submitted for this competition 22 works, classified in type as follows:

1 habilitation work – monograph; 1 published monograph, which is not presented as the habilitation work, 1 published book based on the defended PhD Thesis for obtaining the PhD Degree, 1 published textbook, and 18 scientific papers in science reviews as follows: papers in IF science journals: none, papers in science journals referenced in Web of Science and SCOPUS – 9, in non-referenced scientific journals – 9.

Classification by significance of the candidate's works is as follows: science papers in scientific journals with IF – none; science papers in scientific journals referenced in Web of Science and/or SCOPUS – 9, in non-referenced scientific journals and Proceedings from science conference – 9.

According to place of publication, the monograph, the book and the textbook, as well as science papers, published in Bulgaria total 19; those published abroad – 3, that sum up to 22 in total.

According to language of publication, in Bulgarian are 12, in English are 10. According to number of co-authors: single-authored are 9, with 1 co-author are 6, with 2 co-authors are 3, with 4 co-authors are 3 and with 5 co-authors is 1 publication.

Under group of indicators Г, Assoc. Prof. Pavlina Vodenova scores a total of **395,66 pt.**, which exceeds the required minimum of 200 pt. according to the Rules of Development of Academic Staff at the University of Forestry.

4.3. Impact of the candidate's publications on scientific literature (quotations)

In her Statement of Self-Assessment, Assoc. Prof. Pavlina Vodenova has stated 150 pt in the group of indicators from Д12 to Д15, which are distributed as follows:

- Д12: Quotations or Reviews in science journals, referenced and indexed in world-renown database with scientific information or monographs and collective volumes – 100 pt.
- Д13: Quotations in monographs or collective volumes with scientific reviewing – 42 т.
- Д14: Quotations or Reviews in non-referenced science journals with scientific reviewing – 8 pt.

The total in this group of indicators Д is **150 pt** and exceeds the required 100 pt, thus proving that Assoc. Prof. Pavlina Vodenova is known among scientists in high schools, where architecture and interior design is taught, at home and abroad.

4.4. Contributions in the candidate's science works (scientific, applied-scientific, applied)

The candidate's contributions might be grouped into the following groups: **theoretic**: establishing and proving importance of contemporary design's developments; **applied-scientific**: improvement of already existing and developing of new models of implementation for educational design modules by means of applying design thinking as economic concept; and **applied**: the implementation of knowledge for design composition in professional practice; demonstrating the potential for design education of collaboration between social science professional and engineering professionals.

In listing contributions, I have not included certain stated contributions by the candidate under no Г6.1, a book based on already defended PhD Thesis, which under the Law of Development of Academic Staff of Republic Bulgaria, 29.a pt3, and Rules of Development of Academic Staff for LTU, candidates cannot repeat proofs (publications) submitted for obtaining PhD Degree or Associate Professorship.

a. SCIENTIFIC-THEORETIC CONTRIBUTIONS

1. The Scientific Contribution of the candidate includes analysis and establishment of the theme "Social Design for Children" in professional design literature at home and constitutes a continuation of previous research of the candidate. In the habilitation monograph, a definition of 'social design for children' is established, as, I quote, "a process for creating products, services or initiatives aiming at solving problems or preventing social problems (B3.1)".

2. In the habilitation monograph, are established and classified basic principles of social design for children, such as complying with children's rights, needs and desires, the collaboration principle with children in all phases of design process, the encouraging for innovation and creativity etc. In the habilitation work and other publications, the candidate points out the importance of the process of creating innovative sustainable solutions by including all interested parties and addressing the needs and desires of end customers. (B3.1; Г7.4; Г7.5)

3. Established and analyzed is the design thinking concept as universal methodology, important for different industries and a successful tool, basis for development of new products, services, systems, etc. Demonstrated are live implementations in education (Г5.1; Г7.5; Г7.9; Г8.5; Г8.7).

4. Research and comparative analysis are made of the design phases for interior by means of researching authors from Bulgaria and other countries. A potential is established for complementary additions in existing practice and documents (Г7.2, Г7.6; Г7.8).

b. APPLIED-SCIENTIFIC CONTRIBUTIONS

1. The importance of social design for children is established and its development is followed in different contexts and cultures. Important stages and events in its history are outlined, followed and systematized are the factors for its emergence (B3.1). It is proven that social design can have an impact on social, emotional and physical well-being of children. Leading aspects are outlined for the participation of children in design process and prioritizing their needs, models of implementation are researched, that have acquired sustainability. (B3.1)

2. Factors are analyzed and systematized that influence contemporary furniture design and interior composition. Interconnection between color, form, composition, material and lighting, is established (Г7.2; Г 8.1; Г8.2; Г 8.3; Г8.4) . Interior space composition is analyzed by means of systematizing the interrelation between its elements, the perception, color and the implementation of design principles. (Г7.2; Г 8.1; Г8.2; Г 8.3; Г8.4)

3. Selection and systematizing of cases for adapting or rebuilding contemporary living environment and different aspects covered in compliance with contemporary requirements (Г7.1, Г7.6).

4. The Concept of Design Thinking and its importance are proven and their specifics are defined (Г5.1; Г8.5; Г8.6; Г8.7). Ways of integrating Design Thinking are considered with the aim development of professional skills of students. An educational model is proposed, which is approved by a specific educational assignment and an example (Г5.1; Г8.5; Г8.6; Г8.7).

5. In already existing study modules in the Engineering Design Program, factors are established and proven, such as the creating of specific creative ethos and relations between teachers and students. The use of non-traditional methods of teaching, interdisciplinary collaboration between professionals of different spheres, the assignment of socially important briefs and the use of professional Internet platforms for design and their proper methods are demonstrated. (Г7.3; Г7.4; Г7.5; Г7.7; Г7.9; Г8.8; Г8.9)

6. A patented model was created as a system of sensors for analysis and assessment of interior spaces, zones and furnishings (Г7.8; E26.1). This Sensor Method is applicable both in researching the dynamics of residential and corporate interior design and is instrumental for creating design concepts (Г7.8; E26.1).

c. APPLIED CONTRIBUTIONS

1. Organizations, approaches and movements for design for children are outlined in global scale with a strong social focus. World and Bulgarian examples are selected, concentrated on social changes with children, that brought about positive changes in their life. Cases from the practice of social design are considered, whose results can be implemented in the real world (B3.1).

2. After analysis of Design Thinking Methodology (Г5.1; Г8.5; Г8.6; Г8.7; E23.1) teaching methods are introduced and approved by means of the use of online design platform, such as Mural; the gamification principle, etc., to the aim to improve motivation and efficacy of student's work during their study process (Г7.3; Г7.4; Г7.5; Г7.7; Г7.9; Г8.8; Г8.9).

5. Assessment of the candidate's personal contribution

After getting acquainted with all works, submitted by the candidate for the competition for academic position Professor, I am convinced that the candidate has a good proportion of works, created in co-authorship (13) and her single-authored works (9). There are no division protocols for her co-authored works, which means that her participation is equal to the rest of co-authors. I am also convinced that the personal contribution of the candidate is evident and is her own work. Assoc. Prof. Pavlina Vodenova, PhD, is an established author in Industrial Design and its problematic, and is quoted both at home and abroad, and has proven, with her works, her importance as a scientist.

6. Critical Remarks

In some of the submitted documents, some technical mistakes are made, as well as in the submitted science works. The impressions of some papers is ruined by a number of spelling mistakes in English, or by

incorrectly translated terms, both to and from English, such as, for example “Project Brief”, “Architectural Survey”, “Layout”, “Architectural Project” etc., in the paper no Г7.2., which have been incorrectly translated into English, while in papers No Г8.3 and Г8.1, the English terms “elements and principles of design” and “Complementary colors” have been erroneously translated from English. This leads me to believe that in certain papers no English Language Proofing was done or have not been considered.

My recommendation for any future work of the candidate is to be more active in publishing single-authored papers in international science journals with IF abroad. Also, the candidate should tutor more doctoral students, and manage science projects and research in her field, to create followers and future teachers.

7. Personal Impressions

I know the candidate Pavlina Vodenova, Assoc. Prof, in my capacity of university teacher since her undergraduate, and later doctoral studies. She has excellent teaching skills. Being communicative, energetic, strict and disciplined, she contacts well with students; and is good at organizing them and lecture the study content and have positive results. The candidate demonstrates hard-working, consistency as a scientist, writing well and eager to participate in diverse science projects. Ethical and friendly relations with colleagues help her to work single-handed or in teams, taking up large undertakings (monographs and books) or research for publications in prestige publishers, which is the base for an excellent academic career.

8. Conclusion

Despite some technical remarks that do not aim at underestimating the work and contributions of the candidate and in connection with the above said, I am well convinced to PROPOSE the candidate Assoc. Prof. Pavlina Minkova Vodenova, PhD, to obtain the academic position “Professor” in the discipline “Residential Interior and Furnishing Design” in Professional Field 5.13. General Engineering.

Signature of Reviewer: . 

(Regina Raycheva, Prof. PhD, Arch.)

Review submitted on: 8.7.2024.