

## REVIEW

On the materials for participation in the competition for an academic position **"Professor"** in the field of higher education **5. Technical Sciences**, professional direction **5.13 General Engineering**, scientific specialty **"Ergonomics and Industrial Design"** in the discipline **"Design of Residential Interior and Furnishing"**, procedure code WWW-P-0224-123.

**The candidate for the competition is:**

**1. Assoc. prof. Dr. eng.-design Pavlina Minkova Vodenova**, the sole candidate.

**Reviewer: Prof. Dr. Penka Angelinova Dimitrova**, professional direction 5.13 General Engineering, Technical University - Sofia, Faculty of Mechanical Engineering, Department of Engineering Design.

### **1. Brief biographical data for the candidate**

The only candidate in the competition for the academic position of "professor" assoc. prof. dr. Pavlina Minkova Vodenova was born on 07.08.1976 in Sofia, with a higher education diploma from the University of Forestry with registration N: 10870/2000, a five-year course in the specialty "Interior and Furniture Design" with a qualification degree "Master."

In 2017, she obtained an educational and scientific degree "doctor" with the dissertation topic "Systematic Approach in Designing the Children's Environment in Contemporary Housing", supervised by assoc. prof. dr. Yancho Genchev, in the scientific specialty "Technology, Mechanization, and Automation in Wood Processing and Furniture Industry." She has been an assistant from 15.08.2009 to 12.04.2018, chief assistant at the University of Forestry from 12.04.2018 to 01.10.2020, and an associate professor from 01.10.2020 until now, with work experience of over 14 years.

**2. Compliance of the candidate's submitted documents and materials with the requirements of the Regulations for the Election and Promotion System at the University of Forestry**

Candidate assoc. prof. dr. Pavlina Minkova Vodenova has accurately prepared her documents.

She has submitted documents and written materials supporting her professional and creative activities in accordance with Article 63, paragraph 2, including an information card and a summary of works, for the academic position of "professor" in Bulgarian and English.

### **3. Evaluation of the candidate's teaching and lecturing activities**

Assoc. prof. dr. Pavlina Vodenova conducts lectures on the disciplines "Residential Interior Design and Furnishings" with students from the "Engineering Design" specialty at the bachelor level, as well as "Design Process Management" and "Design of Environment for People with Disabilities" with students from the "Engineering Design" specialty at the master's level.

She conducts exercises on the disciplines "Residential Interior Design and Furnishings," "Design Process Management," "Design of Environment for People with Disabilities," "Lighting Design," "Stylish Interior Design" with students from the "Engineering Design" - bachelor's and master's degrees, and exercises on "Interior Architecture" with students from the specialties "Timber Technology and Furniture" and "Construction Engineering: Architecture," bachelor's degree, both in full-time and part-time study.

She conducts semester exams, supervises diploma students (42 in total), reviews diploma theses (115 in total), and supervises one doctoral student who has been dismissed with the right to defend.

### **4. Evaluation of the candidate's scientific, scientifically applied, and publication activities**

The document presented by assoc. prof. dr. Pavlina Minkova Vodenova regarding meeting the minimum national requirements is specific and meets the requirements, including:

- Indicator A: Doctoral dissertation for the educational and scientific degree "doctor" (defended - 50 points / required 50 points);
- Indicator B: Monograph - 100 points (required 100 points);

- Indicator  $\Gamma$ : Scientific publications - 395.66 points (required 200 points);

- Indicator  $\Delta$ : Citations - 150 points (required 100 points).

The total points for indicators A+B+ $\Gamma$ + $\Delta$  amount to 645.66 points (required 400 points), exceeding and surpassing the minimum national requirements for the candidate's scientific research and teaching activities for the academic position of "professor" in the field of higher education 5. Technical Sciences, professional direction 5.13 "General Engineering".

Notable is assoc. prof. dr. Pavlina Vodenova's participation in published university textbooks and teaching materials, the copyright certificate for a recognized utility model application, as well as the realized authorship project in the field of architecture and design.

All of the above, along with Indicator E - 240 points, make a total of 935.66 points, significantly exceeding the required 600 points for the professorship.

#### **4.1. Participation in scientific, scientifically applied, and educational projects**

Assoc. prof. dr. Pavlina Vodenova presents a list of participation in the following 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 leader of students at Mendel University, Brno, Czech Republic in 2012, SEAMK University, Seinajoki, Finland, and Elisava University, Barcelona, Spain.

In 2011, she participated in an international workshop at the Technical University in Zvolen, Slovakia.

In 2014, she was part of project BG051P0001-3.1 2019 "Qualification Systems and Career Advancement for Teachers at the University of Forestry," participating in distance courses - methods for e-learning.

She participates as a doctoral student in project BG051P0001-3.3.06-0056 "Support for the Development of Young People at the University of Forestry," as well as in project BG051P0001-4.3.04-0052 "Development of an Electronic Distance Learning Center at the University of Forestry."

She participates in project BG05M20P0001-2.009-0034 "Support and Development of the Scientific Capacity at the University of Forestry."

She develops 3 applied projects:

- "Modernization of the PSC for the transfer of scientific knowledge in accordance with the needs of practice" - 2014.

- Developed a project for furnishing a conference hall at UOSG, village Barysa - 2018, as a member of the authoring team.

Her entire implementation activity is reflected in Indicator E - 240 points (required 150 points), participating in scientific educational and international educational projects (E.18, E.19).

#### **4.2. Characterization of the published scientific results**

Assoc. prof. dr. Pavlina Vodenova presents the following works, classified by type:

A. Doctoral dissertation for the award of the educational-scientific degree "doctor" - **50 points**.

B3. Habilitation work - monograph, 220 pages, 1 edition - **100 points**.

Г5. Published monograph, not presented as the main habilitation work, co-authored with two authors, 250 pages, according to the division protocol, 1 edition - **30 points**.

Г6. Published book based on the defended doctoral dissertation for the award of the educational-scientific degree "doctor," 1 edition - **30 points**.

Г7. Scientific publications in editions indexed in world-renowned databases with scientific information, 9 publications - **166.66 points**.

Г8. Scientific publications in non-indexed journals with scientific review or in edited collective volumes, 9 articles - **139 points**.

Г10. Implemented authorship projects in the field of architecture and design, 1 edition - **30 points**.

The presented "Self-Evaluation Report on the Compliance of Scientific Output with Minimum National Requirements" is correctly done and reflects the key scientific achievements.

The total points amount to **935.66**, significantly exceeding the required 600 points for the academic position of "professor."

### **4.3. Reflection of the candidate's scientific activity in literature (citation impact)**

The quality of scientific output is judged by citations.

Citations in scientific editions indexed in world databases with scientific information or in monographs and collective volumes - Д.12 - 100 points.

Citations in non-indexed journals with scientific review – Д.13 - 42 points

Citations in collective volumes with scientific review – Д.14 - 8 points

The total points for group indicators Д - 150 points (required 100).

### **4.4. Contributions in the candidate's works**

A report on the scientific and scientifically applied contributions of assoc. prof. dr. Pavlina Vodenova is presented.

#### Scientific contributions

1. The theoretical and practical issues related to design methodology in the field of social design, residential and public interiors, furnishing interior spaces, innovative teaching methods, design thinking, and process management are addressed through the publications (B3.1).
2. The emergence of social design for children concerns society as a whole in creating sustainable design.
3. The design phases of the children's interior have been systematized and extracted (Г7.2, Г8.1, Г8.2, Г8.3, and Г8.4).
4. Social design is considered as an approach to improvement, organization of systems and processes (Г5.1, Г7.9, Г8.5, E2.3).
5. Design thinking is focused on all users (Г5.1, Г8.5, Г23.1).
6. An innovative model for student education is implemented (Г7.3, Г7.4, Г7.5, Г8.8, Г8.9).
7. A sensory method applicable in studying the dynamics of residential and public interiors is developed (Г7.8, Г26.1).

#### Applied contributions

1. Different manifestations of social design for children - development, innovations, social change have been systematized (B3.1).
2. Examples leading to positive changes in children's lives have been extracted (B3.1).
3. The publications, together with practical methods, can lead to social and cultural influences and changes and contribute to the development of a good design concept.

## **5. Evaluation of the candidate's personal contribution**

Publications on the researched topics can be the basis that combines all specific research towards social design, furniture design, and all processes (functional, ergonomic, aesthetic, technological, economic, etc.). The design concept evolving in the works of assoc. prof. dr. Pavlina Vodenova is beneficial not only to design students but also architects and designers.

The presented scientific works are related to theoretical and applied-practical problems in designing residential interiors and furnishing children's environments, but also serve as innovative methods in education and higher education. The personal contribution of the candidate for "professor," Pavlina Minkova Vodenova, has been successfully implemented in teaching at the University of Forestry.

The monograph "Social Design Focused on Children" draws attention to the most humane design. Children are the future of the nation, and the more we care about their mental, physical, and spiritual development, the more successful our nation will be. The creative growth, awareness, developing mental and spiritual growth promise the future development of design for children and with children.

The structure of the applied theoretical model in this monograph is a result of the strong aspects of assoc. prof. Pavlina Vodenova's accumulated knowledge and skills, finding a new form, role, and functionality in contemporary engineering design. As an experienced teacher for many years, she introduces us to new horizons and makes us think about the important challenges in design. Our society needs to open its hearts and reveal a new specialty, "Social Design," which is overdue.

## 6. Critical notes and recommendations

I have no critical remarks and would like to congratulate assoc. prof. dr. Pavlina Vodenova for showing herself as a profound scholar, an innovator in science and design.

## 7. Personal impressions


Assoc. prof. dr. Pavlina Vodenova is a recognizable and erudite scholar and lecturer in the academic community. My impressions of her are as a young and hardworking scholar, an innovator in design science, an active researcher who can pose and solve contemporary design and teaching problems. She possesses prominent organizational and communication skills, as well as presentation and mentoring skills related to her work with students.

I am convinced that all the qualities mentioned above fully meet the requirements for awarding the academic position of "professor."

## 8. Conclusion

**Assoc. prof. dr. Pavlina Minkova Vodenova's scientific-teaching and educational-teaching activities meet the requirements of the ZRASRB and its regulations, as well as the normative requirements of the University of Forestry.**

In connection with this, I recommend her **to be selected** for the position of "**professor**" in the discipline "Residential Interior Design and Furnishings" in the field of higher education 5. Technical Sciences, professional direction 5.13 General Engineering and scientific specialty "Ergonomics and Industrial Design" at the "Furniture Manufacturing" Department.

Reviewer's Signature: 

(Prof. Penka Angelinova Dimitrova, PhD)