REVIEW

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 **"Design History, Theory and Methodology"**

In the competition for "**Associate Professor**", announced in the **State Gazette, issue. 101 dated 27.12.2019** and on the website of the University of Forestry with procedure code **WWI-As-1119-31** for the needs of the **Department of Interior and Furniture Design** at the **Faculty of Forest Industry**, as the only candidate involved is Chief Assist. Prof. Dr Desislava Ivanova Angelova, Faculty of Forest Industry, Department of Interior and Furniture Design.

Reviewer: Corresponding Member of the Bulgarian Academy of Sciences, Doctor of Architectural Science Atanas Dimitrov Kovachev, Professor in a Professional Field **5.7. Architecture, construction and surveying,** scientific specialty **"Territorial and landscaping and urban planning", University of Forestry, Department of Landscape Architecture.**

1. Brief biographical data for the candidate

The only candidate competing for the academic position **"Associate Professor"** is **Desislava Ivanova Angelova**. She was born in 1976 in Pernik. She graduated her secondary school in 1995 in Sofia - Special Secondary School of Applied Arts "St. Luca", Specialty "Artistic Treatment of Metal" and basic knowledge in the field of Artistic Treatment of Metal; Drawing; Sculpture; History of Art; Theory of Composition; Form-Formation and more. In 2000 she graduated as Master of Engineering in "Interior and Furniture Design" at the University of Forestry with necessary skills in the fields of Interior and Furniture Design; Interior and Furniture Styles; Furniture Construction; Wooden and Non-wood Materials; Computer Design and more. In 2011, she acquired the Doctor's Degree in the scientific speciality "Technology, mechanization and automation of woodworking and furniture industry", professional field 5.13 "General Engineering" with Doctor thesis "A Research on Design Methods for Structural Construction of Sitting Furniture in Residential Buildings".

She started her work in 2002 as an Assistant Professor at the University of Forestry, Faculty of Forest Industry. In 2011, she was appointed as a Chief Assistant Professor. In the period of 2009 - 2011 she was selected as a part-time lecturer at the Higher School of Civil Engineering "Lyuben Karavelov" (seminars in discipline "Architectural Design - Interior I (Residential Buildings) for students of Architectural specialty) and New Bulgarian University, School of Basic Education (lecture in "Materials and Technology"; lecture and seminars in "Fundamentals of Furniture Structure" for the students of Interior Design specialty, Bachelor degrees). In the period of 2016-2018, Desislava Angelova holds the administrative position of the Vice-Dean for Scientific and development activities of the Faculty of Forest Industry.

She works in various teams and working committees related to both scientific work and representation of the University of Forestry, and in particular the Faculty of Forest Industry, at various forums and events. She has conducted several specialized pieces of training and works freely with multiple software programs. Fluent in English (B2) and Russian (B1).

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 Chief Assist. Prof. Dr Desislava Angelova fully comply with the requirements, according to the Rules of the Development of academic staff at the University of Forestry, Sofia.

The presented reference for the fulfilment of the minimum National requirements for the occupation of the academic position "Associate Professor" is correctly made and reflects the main scientific achievements (published books, monographs, articles and reports from conferences, and citations of scientific publications) of the candidate for Associate Professor Chief Assist. Prof. Dr Desislava Ivanova Angelova. The report shows that all the minimum requirements are met, including:

- The candidate has obtained a Doctoral degree with diploma № LTU-2011-02, issued on 13.12.2011 by University of Forestry.
- The candidate has a monograph on topic: "Textile Techniques in Furniture Design. Weaving and Knitting in Search of Form and Texture", co-authored with Prof. Dr Arch. Regina Raycheva, published in 2020 by LAP LAMBERT Academic Publishing, ISBN 978-620-0-56480-1, p.214, with reviews by Prof. Dr Marina Cionca and Assoc. Prof. Dr Arch. Valentina Varbanova.
- The candidate participates in the competition with two monographs (1 co-authored and 1 individual), 1 book based on a Doctoral thesis, 13 articles and 6 reports at international scientific forums.
- The candidate has indicated 17 citations (5 citations in scientific publications, monographs and collective volumes, referenced and indexed in world-famous databases of scientific information (Web of Science and SCOPUS); 7 citations in monographs and collective volumes with scientific review; 5 citations in reference Bulgarian and foreign scientific journal) and 1 review for copyrighted products in a specialist design journal.

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

The candidate for an "Associate Professor" at the time of the applying for participation in the competition is a principal lecturer of the following disciplines: "Design History, Theory and Methodology", "Innovative and Strategic Design" and "Graphic Design". In addition to the basic courses, Desislava Angelova is part of the teaching team of the disciplines: "Interior architecture" and "Interior and Furniture Styles". The applicant has one co-authored and one self-published textbook.

She has developed 6 training modules in the university's electronic system Blackboard (lectures in the disciplines "Design History, Theory and Methodology ", "Innovative and strategic design" and "Graphic design" and seminars in the discipline "Graphic design"). She has developed a syllabus on the subject "Materials and Technology" at NBU, where 15 lectures were presented. She presented a lecture at Mendel University, Brno, Czech Republic.

The candidate is a **diploma supervisor of 52 successfully defended graduates** in the specialities "Engineering Design" and "Technology of Wood and Furniture", Bachelor's and Master's degrees. Desislava Angelova has prepared 116 reviews of diploma theses and has been an academic mentor to 45 students in the speciality of Engineering Design under Project BG051PO001-3.3.07-0002, "Student Practices".

4. Assessment of candidate's scientific, scientific-applied and publishing activities

General description of the presented materials

Candidate Chief Assistant Professor Dr Desislava Ivanova Angelova, participated in the competition with:

- Monographs - 2 number (s);
- Books - 1 number (s);
- Publications - 19 number (s).

4.1 Participation in scientific, scientific-applied and educational projects

The candidate Desislava Ivanova Angelova had participated in **9 educational projects** (funded by program Socrates-Erasmus; Erasmus sector program; Operational programme "Human resources development" co-financed by the European Social Fund of the European Union; Operational programme "Science and education for Smart Growth" co-financed by the European Union through the European Structural and Investment Funds) **3 applied projects** (infrastructure project No 49/2009, infrastructure project No 54 / 06.02.2014 and FGP-2018-B-5 project) and **2 projects for partial funding** of the International Scientific and Technical Conference organized by the Faculty of Forest Industry.

4.2 Characterization of published scientific results

The publications can be classified as follows:

By type:
- Publications in scientific journals – 12 number (s);
- Publications in proceedings of scientific forums - 6 number (s);
- Scientific popular publications – 1 number (s);
- Monographs – 2 number (s);
- Books – 1 number (s).

By significance:
- Articles in magazines with Impact Factor – 0 number (s);
- Articles in journals referenced and indexed in Web of Science and SCOPUS - 1 number (s);
- Articles in journals without Impact Factor – 12 number (s);
- Papers in proceedings of scientific forums - 6 number (s);
- Plenary reports - 0 number (s);
- Monographs – 2 number (s);
- Books – 1 number (s).

Place of publication:
- Articles in Bulgarian and foreign journals referenced in Web of Science and SCOPUS - 1 number (s);
- Articles in reference Bulgarian and foreign journals referenced outside the Web of Science and SCOPUS - 11 number (s);
- Articles in non-referenced Bulgarian and foreign journals - 0 number (s);
- Publications in proceedings of international scientific forums - 6 number (s);
- Publications in proceedings of national scientific conferences, sessions and seminars - 0 number (s);
- Publications in scientific annals of universities and institutes - 1 number (s);
- Monographs – 2 number (s);
- Books – 1 number (s).

Publish language:
- In Bulgarian – 7 number (s);
- In a foreign language – 15 number (s).

Number of co-authors:

- Stand alone - 9 number (s);
- With one co-author – 8 number (s);
- With two co-authors - 3 number (s);
- With three or more co-authors - 2 number (s).

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

- Total - **17 citations.**
- Review of realized author's products in specialized edition in the field of design - **1 number.**

By type of citations:

- In scientific publications, monographs and collective volumes, referenced and indexed in world-famous databases of scientific information (Web of Science and SCOPUS) - **5 citations;**
- In monographs and collective volumes with scientific review - **7 citations;**
- In reference Bulgarian and foreign scientific journal - **5 citations.**
- Review for copyrighted products in a specialist design journal - **1 review.**

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

When developing problems with scientific and scientific-applied character in areas such as Design History; Design Theory; Design Methods - Theory and Practice; Interior and Furniture Design; Innovative Teaching Methods in Higher Education, the candidate Desislava Angelova opens up opportunities for the use of established scientific facts in the applied aspect. Many pieces of research on the results of the research work have been adapted for training students at the University of Forestry - Sofia.

Based on the content of the scientific production presented in the competition, the main contributions can be summarized in the following three groups:

The first group - scientific-theoretical:

1. A new trend in furniture design is revealed related to the great interest of designers towards weaving and knitting techniques during the second decade of the 21st century. Revealing the said tendency leads to defining future directions in the development of furniture and encourages research in the field of furniture design. .(B3.1)
2. Basic concepts in Design Theory and the historical development of Design Methodology are researched, systematized and theoretically explained. A large array of theoretical material has been assembled to serve as a reliable basis for conclusions. (D6.1)
3. The influence of certain design methods on the efficiency of the creative process has been investigated and established. The main accents are on eliminating the negative and unproductive "barriers" to thinking; helping to generate a large number of ideas quickly; use of group potential when working in a team; emphasizing the communicative and collaborative side of the contemporary design process. (D6.1; D8.1; D8.2; D8.5; D8.7; D 8.8)
4. Based on an extensive complex research on the factors influencing the design of contemporary sitting furniture, major factors have been extracted and systematised, which are essential for the development of theory in the field of furniture design. (B 3.1; D5.1; D8.4)
5. A new functional chair has been discovered and described - for working with a laptop whose shape and function are different from the standard ones. (D5.1)

The second group - scientific-applied

1. By means of classification, visual identification and comparative morphological analysis of numerous examples, the great creative potential possessed by the textile techniques and from there the variety of possibilities for constructing the forms of furniture they provide are proved. It has been found that designers' interest in the use of knitting techniques is a comparatively new phenomenon and leads to the creation of furniture example with innovative design, completely new shapes and improved qualities. (B 3.1; D 8.18)
2. The active follow-up and creative use of well-known stylistic and plastic trends from the recent past are revealed, which are cleverly combined with the possibilities offered by the new industrial methods and production technologies. The role of craft traditions, abstract art, organic sculpture, etc. in the development of contemporary design has been proven. (B 3.1; D5.1; D 8.4; D8.10; D8.14; D 8.18)
3. The psychologically conditioned link with historical legacy and tradition that influence the contemporary need for emotional and value-added design is revealed. The terms "psychology" and "emotionality" have been found to be key to the design of the 21st century. (B 3.1; D 6.1)
4. Based on studies conducted on the current understanding of the sitting activity, it has been found that there is a new way of thinking about the sitting process, including the term "dynamic sitting", which shows a different path for the development of "functional" design. In addition to the known methods of seating, another fifth, semi-reclining seating position has been identified, which necessitates the design of a fundamentally new type of seating furniture. (D5.1; D8.13)
5. The leading trends and main directions in furniture and interior design have been identified: achieving maximum comfort and well-being through multifunctionality, transformation, mobility and "dynamic sitting"; emotionality; environmental friendliness; the need for simplification and reduction of structural details; striving for individuality; applying the potential of new materials and technologies; mixing of heterogeneous materials; new functionality; striking a balance between economic, social goals and the environment. (B 3.1; D5.1; D8.4; D8.9; D8.12; D8.15; D8.16)
6. Ways to increase habitat utilisation and quality of life have been analysed to encourage a rethinking and improvement of the urban environment by integrating materials, technology and aesthetic intelligence innovations into one. (D8.3; D 8.16)
7. A model for the designing seating furniture has been developed, which aims to facilitate and increase the efficiency of the design process related to their production, as well as to create end products with high social, functional, operational and aesthetic qualities. (D 6.1)
8. It has been found that in the conditions of strong competition in the field of education, the main factor for the development of design speciality is a change in the basic model of training. We should also emphasise on factors such as understanding the essence of the creative profession of the "designer"; creating a specific creative atmosphere and student-teacher relationships; new, non-traditional teaching methods; creating self-esteem and professional skills for students. (D 6.1; D8.1; D 8.6; D8.11; D8.17)
9. It has been found that creativity is the main factor influencing the process of improving products and the environment. Thus, in addition to acquiring other basic

knowledge in the training of future designers, it is of paramount importance to develop the ability to think creatively. In this regard, the most appropriate design methods are systematised in terms of their application in the training of students studying design speciality. Creative thinking has been proven to provide many opportunities for students, enhancing their natural abilities, improving teamwork, productivity and output. (D8.5; D8.7; D8.1; D8.2; D 8.8)

10. A methodology for carrying out project-based design tasks has been developed, which helps to properly carry out these design tasks and ensures a good result. The methodology developed is an important support for university professors as well as people involved in other fields where design thinking can be applied as a successful way of solving problems. (D7.1; D8.6; D8.8; D8.17)

The third group - applied contributions:

1. A model for the application of a design methodology for the design of seating furniture has been developed, which sets out methods that can and should be used during the various stages of the design process. The model developed has been tested in the design of a program of sitting modules, filling out documents, waiting, working with a laptop, etc. within the framework of the development of the theme: "Architectural and design layout and interior landscaping of public spaces" at the NIS of the University of Forestry № 49/2009. (D6.1)
2. A methodology for conducting a module "Project Week" in the course of training of students in the speciality "Engineering Design (Interior and Furniture Design)" was developed and probated. Its effectiveness in solving several cases involving students and professors, breaking down existing stereotypes and reaching several original solutions to a problem has been proven. (D 7.1; D8.6; D 8.8; D8.17)
3. The new generation of design methods was studied, analysed and implemented in the teaching process of students in the speciality "Engineering Design (Interior and Furniture Design)", master's level of training, in the discipline "Innovative and Strategic Design" (D6.1; D8.1; D8.2; D8.5; D 8.7)
4. Weaving and knitting techniques were explored in an experiment organized with students on the theme: "Knitwear: from Clothing to Furniture"(B3.1)
5. Publications on the topics studied may be the source and reference literature for design research and feasibility studies. The information is systematised and chronologically structured. (B3.1; D 5.1; D 6.1)

5. Assessment of the applicant's personal candidate

The submission of the applicant's publications shows the leading role and the main contribution to the submitted works. **Chief Assis. Prof. Dr Desislava Angelova is the author of 9** stand-alone publications. In the collective publications, she is in the first place in 8 papers, in the second place in 3 articles, in the third in 2 papers.

This information confirms the applicant's personal contribution.

6. Critical remarks

I have no critical remarks.

Recommendations:

1. The candidate should emphasize in her future job of developing and publishing articles in **Impact factor** journal.

7. Personal impressions

I know my colleague Desislava Angelova and I have excellent direct impressions of her scientific and teaching activities as well as her personal qualities.

I believe that she is an erudite, experienced teacher who possesses all the qualities and skills to occupy the academic position of **Associate Professor.**

8. Conclusion

The competition complies with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), the Regulations to it and the normative documents of the University of Forestry regarding both its announcement and the presented materials.

The research and teaching activity of Chief Assist. Prof. Dr Desislava Angelova **meet the requirements of the ZRASRB, its Regulations and the regulations of the University of Forestry in this field.**

The minimum National requirements for the research and teaching activity of the applicant in the competition for the occupation of the academic position **"Assistant Professor"** in the field of higher education **5. Technical Sciences**, professional field 5.**13. General Engineering** (Minimum required points by groups of indicators for different academic degrees and academic positions and Number of points achieved by indicators) have been fulfilled.

The presented scientific production of Chief Assis. Prof. Dr Desislava Angelova in the competition gives the following picture, expressed in points:

Indicator A: Thesis for the award of the Doctorate (defence) - **50 points (required - 50 points);**

Indicator C: Monograph - **100 points (100 points required);**

Indicator D: Scientific publications - **306.65 points (required - 200 points);**

Indicator E: Citation in - **91 points (required - 50 points).**

The total number of points received with the applied scientific production is 547,65 points (required - 400 points), which fulfils and exceeds the minimum National requirements for the research and teaching activity of the candidate for the occupation of the academic position "Associate Professor" in field of higher education: 5. Technical Sciences, Professional field: 5.13. General Engineering.

In connection with the above, I propose that Chief Assis. Prof. Dr Desislava Ivanova Angelova be elected as a "Associate Professor" in the discipline "Design History, Theory and Methodology" in the Professional field 5.13. General Engineering, scientific specialty "Ergonomics and Industrial Design".

Signature of the reviewer::.....

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Foreign Member of the Russian Academy of Architecture and Construction Sciences

Review submitted to: 10 04 2020