



## REVIEW

on the materials submitted for participation in a competition for „Professor“ in the field of higher education 6. Agricultural sciences and veterinary medicine, Professional field 6.5 Forestry, scientific specialty „Technology, mechanization and automation of the woodworking and furniture industry“ in the discipline „Furniture Technology“

In the competition for professor, published in the State newspaper, issue 102 / 07. 12.2021 and on the site of the University of Forestry with the code WWI-P-1121-74 for the needs of the Department of „Furniture Production“ at the Faculty of Forest Industry, as a candidate participate Assoc. Prof. Dimitar Hristov Angelski Ph.D., Faculty of Forestry, Department of „Furniture Production“.

**Reviewer:** Andrey, Dimitrov, Kavalov Ph.D., Professor in a Professional Field 6.5 Forestry, from University of Forestry / retired

### 1. Brief biographical data for the candidate

Assoc. Prof. Dr. Eng. Dimitar Hristov Angelski was born in Sofia in 1975. In 1994 he graduated from the Technical School of Textile Engineering, majoring in "Automation of Production". In the same year he was accepted as a full-time student at the University of Forestry (UF). In 1999 he graduated as a magician. Eng. in the specialty Mechanical Technology of Wood, specialization Manufacture of furniture. In the academic year 2000/2001 he was a part-time assistant at UF, leading exercises in Furniture Technology for students majoring in Mechanical Technology of Wood (MTW). From the next academic year he is already a full-time assistant at the Department of Furniture Production (FP). He was a senior Assistant from 2005 to 2008. Since 2008 he has been a chief Assistant and in addition to exercises gives lectures in individual cases in the disciplines Wood and Furniture Technology (UFT), Furniture Production (FP), Materials and processes for the formation of film protective and decorative coatings. Already in 2003 he was enrolled as a full-time doctoral student at the Department of FP with the topic of his dissertation "Research on the processes of plasticization and bending of solid wood parts." After a successful defense in 2010 he was awarded the educational and scientific degree "Doctor".

Since the beginning of 2015 he has been elected associate professor at the Department of FP and is a regular lecturer in the disciplines FT, FP, TDDF (Technologies for decorative design of furniture). Since March 2016 and currently is vice Dean of the Faculty of Forestry (FF), responsible for the organization and management of the learning process. He has been a member of the Academic council of UF and of the Faculty council of DFP since 2011. Since 2021 he has also been a member of the Faculty council of FBA (Faculty of Business Administration).

Fluent in English and Russian. Fluent in and uses all forms and means of electronic communication and, above all, the Internet, working with specialized software in the field of education and science. He has accumulated reach experience and skills for working in research teams. He is known as a university lecturer not only in our country, but also in other

European countries. He has gained professional experience and authority as a young scientist, participant and leader of scientific and educational projects. He regularly takes an active part in international and national scientific forums. He has co-authored a monograph (2015), authored a textbook and textbooks for teaching students. He is the author and co-author of over 110 copies scientific publications. He is a member of international scientific organizations.

**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.**

From a thorough review of the documentation provided to me during the competition, including on paper and electronic media, I found that it is complete, detailed and comprehensive, thoroughly completed and neatly arranged. In this form, it meets all regulatory requirements for participation in the announced competition for "professor".

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

Associate Professor Dr. Dimitar Angelski participates with a schedule for all types of employment, which in the last 5 academic years significantly exceeds the minimum requirements for a university lecturer and in particular for the academic position of "professor". This is established by the copies of documents attached to the competition provided by the University of Forestry administration (folder 11, reference 11.1). He has co-authored a university textbook (Furniture Technology (2014)), used in the education of students majoring in Wood and Furniture Technology, Engineering Design, Computer Technologies in the Furniture Industry. He has developed 5 textbooks used for distance e-learning by students of the already mentioned specialties, especially now in the context of the Covid 19 pandemic. During the years as Ch. assistant and associate professor has supervised 55 successfully defended graduates. There is one PhD student defended in 2021 and another PhD student already in defense. Actively and regularly participates in the organizational preparation and implementation of all planned complex learning practices with students majoring in TDM, ID and BA (Business Administration). He is a regular member of the State Examination Commissions for conducting diploma theses of bachelors and masters in the specialties UFT and ID. In addition to this routine teaching and teaching activity, Assoc. Prof. Angelski most actively participates in various types of events to improve training in all specialties of Faculty of Forest Industry. Typical examples here are: participation in the development of three distance learning programs. He is one of the initiators and an active participant in the Program Council for the opening of the new specialty Computer Technology in the Furniture Industry - educational and qualification degree "Bachelor". He is a member and actively works (especially as Deputy Dean of the FFP) in commissions for periodic updating of curricula and study programs.

He has lectured to foreign students in Germany (Rosenheim) and Greece (Larissa). He has participated 4 times in the preparation of reports for accreditation of specialties at the FFP. He has copies of 16 certificates for his participation as a university lecturer in advanced training courses for university graduates. Organizes and conducts 5 classes with students, in which prominent lecturers from the furniture industry are attracted as lecturers. He has twice given courses at the Center for Continuing Education with the participation of employees from the

US Embassy. As a lecturer he has twice specialized in advanced training at universities abroad (in Zvolen, Slovakia and in Poznan, Poland).

In summary, a positive assessment can be given without hesitation about the teaching and teaching activities of Assoc. Prof. Angelski. It is mainly expressed in proven high professional competence, acquired skills for working with students, graduates, postgraduates, doctoral students, with a proven desire for self-improvement. These and many other of his positive qualities fully meet the requirements for participation in the competition for the academic position of "professor".

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

Candidate Assoc. Prof. Dimitar Hristov Angelski Ph.D. participated in the competition with:

- University textbook - 1 number;
- Teaching aids (distance learning materials) - 5 numbers;
- Publications (after being elected associate professor) - 50 numbers.
- Projects - 9 numbers.

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

Assoc. Prof. Dr. Angelski has participated in the development of 9 research projects, for which there are duly attached copies of official notes from University of Forestry. Five of them are funded by the research sector of UF and relate mainly to conducting experimental research related to the development of doctoral dissertations of doctoral students led by him. All projects were received with high marks for the level of development and usefulness. Two of them were led by Assoc. Prof. Dr. Angelski. He has participated in 4 national educational projects with the Ministry of Education and Science. There are also participations in 8 other projects, assigned by the training and experimental forestry of UF. Through them are solved tasks related mainly to the implementation of doctoral studies at the Department of FP.

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

The publications can be classified as follows:

###### **By type:**

- Publications in scientific journals - 31 numbers;
- Publications in proceedings of scientific - 18 numbers;
- Scientifically popular publications - 1 numbers.

###### **By significance**

- Articles in magazines with Impact Factor - 1 numbers [G7:16]\*;
- Articles in journals, referenced and indexed in Web of Science and SCOPUS - a total of 17 numbers. [B4: 1,2,3,4,5,6,7,8,9,10] = 10 numbers + [G7: 1,5,6,12,15,17,18] = 7 numbers.
- Articles in magazines without Impact Factor (unreferred) - a total of 22 numbers.  
a) abroad [G8: 14,15,16,17,18,19,20,21,22] = 9 numbers;

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\* All numerical designations of publications are identical to those specified in folder 8.1 of the documentation

b) in our country [D8: 1,2,3,4,5,6,7,8,9,10,11,12,13] = 13 numbers.;

- Papers in proceedings of international scientific forums - a total of 17 numbers;  
[B4: 3,4,6,7,9] = 5 numbers. + [G7: 15,17,18] = 3 numbers +  
+ [G8: 2,10,14,16,17,18,20,21,22] = 9 numbers.;
- Plenary reports - 0 numbers.

**Place of publication:**

- Articles in Bulgarian and foreign journals referred to in Web of Science and SCOPUS - a total of 17 numbers;  
[B4: 1,2,3,4,5,6,7,8,9,10] = 10 numbers. + [G7: 1,5,6,12,15,17,18] = 7 numbers.;
- Articles in refereed Bulgarian and foreign journals refereed outside Web of Science and SCOPUS - 10 numbers; [G8: 3,4,5,6,7,8,9,11,12,13];
- Articles in unrefereed Bulgarian and foreign journals - a total of 22 numbers;  
[G8: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22];
- Publications in collections of international scientific forums - a total of 18 numbers;  
[B4:3,4,6,7,9] = 5 numbers + [G7: 15,17,18] = 3 numbers +  
+[G8: 2,10,14,15,16,17,18,20,21,22] = 10 numbers;
- Publications in proceedings of national scientific conferences, sessions and seminars - 0 numbers;
- Publications in scientific papers of universities and institutes - a total of 32 numbers;  
[B4: 1,2,5,8,10] = 5 numbers + [G7: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,16] =  
15 numbers+ [G8: 1,3,4,5,6,7,8,9,11,12,13,19] = 12 numbers;

**Publishing language:**

- In Bulgarian - 6 numbers [B4: 7] = 1 numbers + [G8: 1,10,11,18,19] = 5 numbers;
- In a foreign language (in English) - 44 numbers; [all other publications up to 50];

**Number of co-authors:**

- Stand alone total - 6 numbers;  
[B4: 7] = 1 number + [D8: 1,10,18,19,20] = 5 numbers;
- With one co-author in total - 9 numbers;  
[B4: 2,6,9,10] = 4 numbers + [G7: 15] = 1 numbers + [D8: 11,16,21,22] = 4 numbers;
- With two co-authors in total - 13 numbers;  
[B4: 1,3,4,5,8] = 5 numbers + [G7: 9,17,18] = 3 numbers + [G8: 12,13,14,15,17] =  
= 5 numbers;
- With three or more co-authors in total - 22 numbers.  
[G7: 1,2,3,4,5,6,7,8,10,11,12,13,14,16] = 14 numbers + [G8: 2,3,4,5,6,7,8,9] =  
= 8 numbers.

Common features of all publications presented in the competition are: theirs requires appropriate structuring, comprehensive graphic, tabular and photographic (where it is necessary) visualization; the sparing and at the same time scientifically substantiated textual description of the facts; explanations of phenomena and processes; persuasiveness in the formulated hypotheses, evidence and conclusions. Impressive is the good awareness of the issues discussed in the publications, visible from in-depth literature reviews and references to

other authors, correctly cited and cited in the relevant references. The publications in which Assoc. Prof. Angelski is the sole author fully meet these indicators.

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

The reference prepared by me for the known citations of the candidate's publications shows the following: in the presented 50 publications a total of 25 citations were found and coincide with the ones indicated in the competition documentation, 11 of which were made by foreign authors.

##### **By type of citations:**

- In reference journals and proceedings of scientific forums - 16 citations.

4 of them are in Impact Factor (Switzerland) and the rest in Impact Magazines (SJR) from Web Science and SCOPUS;

- In teaching aids, monographs, dissertations, etc. - 7 citations, and one of the authors is from Slovakia.
- Cited in unrefereed journals - 2, one of which is by a foreign author (Slovakia).

These citations show that through his scientific and publishing activities Assoc. Prof. Angelski has already gained fame not only in our country but also among scientific circles abroad.

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

The review of the documentation submitted for the competition shows that contributions are contained in all the main areas of research activities of the candidate for professor. These directions can be systematized with some approximation in the following 3 groups:

##### **1. Plasticization and bending of assortments of solid wood.**

In-depth theoretical and experimental research related to clarifying the specifics of thermal energy processes (heat capacity, thermal conductivity, specific energy capacity, etc.) that characterize them can also be included here. As a result of these studies, a methodology for mathematical modeling of the processes of heating assortments of solid wood and wood panels has been developed. Based on it, by applying modern mathematical methods, a large number of problems related to the modeling of various types and purposes of technological processes (plasticization of wood, one-sided heating of furniture parts and panels and many others).

##### **2. Improving the surfaces of elements of wood, wood materials and their direct substitutes used in the manufacture of furniture and other similar products.**

In this wide-ranging group of researches, significant contributions have been made, related to: creation of scientifically-based regimes for lining furniture panels; the preparation of surfaces for the formation of lacquer coatings; the formation of such coatings and in particular of methods and processes related to their layering and hardening, as well as other specific technological processes. Among them the most important are the proposed complex solutions to the problems related to the application of new, unknown to science and practice methods and technologies for deformation smoothing of wood surfaces (by lapping), for effective UV hardening of coatings of new types varnishes (so-called nanovarnishes), for the formation of high-quality bent furniture panels by applying vacuum pressing and others.

### 3. Other heterogeneous research.

They mainly concern research on traditional and advanced processes and technologies related to: machining and gluing; by establishing the quality of wood surfaces after a similar type of impact; with the form stability of structural elements for furniture; with the atmospheric resistance of lacquer coatings; with the development of updated technologies for the production of intricately bent elements for furniture and other furnishing products.

Here, too, can be noted the scientific and applied contributions made, such as compiling and finding solutions to mathematical models, which create conditions for the application of rational regimes for milling and grinding in the production of furniture in accordance with the requirements of harmless health of operators working environment. The textual formulation by Assoc. Prof. Angelski of all contributions, their reference to scientific, scientific-applied and applied-practical is successful and reliable. In view of this, I accept the systematization made by him without remarks. Distributed by type and number, the contributions are grouped as follows: scientific - 9; scientific and applied - 19; applied-practical - 9. Evaluated by the scope and importance for the development of science and practice in the field in which this competition is announced, they fully meet the requirements for the academic position of "professor" in Technology, mechanization and automation of woodworking and furniture industry. It is obvious that these scientific and applied achievements of the candidate leave a lasting mark in the specified scientific specialty. I am confident that they will continue to expand and deepen with his active participation and assistance.

### 5. Assessment of the applicant's personal candidate

The competition documentation does not contain information about the individual share distribution of the participation of the individual co-authors in the collective works, which are predominant. This circumstance is quite sufficient to assume that it is equivalent. The personal participation and personal contribution of the candidate is best seen in the qualities of his 6 independent publications, as well as in the qualities of the 5 textbooks - lecture materials for distance learning, of which he is the sole author. Evaluated comprehensively, they are not inferior to all other collective works on the competition list. The lack of such differences is sufficient reason to assume that the personal contribution of Assoc. Prof. Angelski is obvious, equivalent and at a suitably high level.

### 6. Critical remarks

I do not have specific critical remarks regarding the content of the publications and all other materials included in this competition, their quality, manner of design and visual presentation. Only as a collegial recommendation to the future research activity of the candidate I would recommend to shorten the scope of the areas in which he undertakes research and participates in projects at the expense of deepening the essence of the observed processes and phenomena.

### 7. Personal impressions

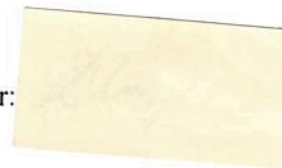
I have known Assoc. Prof. Dr. Dimitar Angelski since he was a student and graduate, and later as an assistant and doctoral student. During all these years he stood out with commendable diligence, correctness, precision and purposefulness in carrying out assigned tasks. He showed organization and skills to work independently and especially in a team with

his colleagues. He also has such positive qualities as tolerance, depth in the issues of teaching and research work. In the submitted documents related to the competition, there is a lot of information that directly or indirectly confirms the existence of its listed qualities. Suffice it to mention as a positive example his nomination for participation in the competition "Annual Rector's Award for contribution to the development of research in University of Forestry " (folder 11.1, position 17). All this shows that currently Assoc. Prof. Angelski speaks convincingly as an established university lecturer, erudite researcher, experimenter and analyst, recognized not only in Bulgaria but also abroad. He already has experience as a good administrator and organizer. Through his constant activity he leaves lasting traces in the complex development of the woodworking and furniture industry. I am convinced that these are all qualities that fully comply with the requirements for awarding the academic position of "professor".

#### **8. Conclusion**

**In connection with the above, I propose that Assoc. Prof. Dr. Dimitar Hristov Angelski be elected as a „Professor“ in the discipline „Furniture Technology“ in the Professional field 6.5 Forestry, scientific specialty „Technology, mechanization and automation of the woodworking and furniture industry“.**

Signature of the reviewer:



Review submitted to: 16.03.22