OPINION

by Prof. Julieta Slavcheva Mancheva, PhD, Eng.
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member of the scientific jury appointed by Order No. 603/30 September 2026 of the Rector of Varna Free University "Chernorizets Hrabar" to conduct the competition for the academic position of Professor in the field of higher education 5. Technical Sciences, professional field 5.7. Architecture, Civil Engineering and Geodesy, scientific specialty "Construction Materials, Products and Technologies for Their Manufacture", announced in the State Gazette, issue No. 69 of 31 July 2026.

Candidate: **Assoc. Prof. Rositsa Veselinova Petkova-Slipets, PhD, Eng.**

1. General Overview of the Procedure and the Candidate

One candidate is participating in the competition for the academic position of Professor – Assoc. Prof. Rositsa Veselinova Petkova-Slipets, PhD, Eng.

The submitted documentation contains materials concerning the candidate's education and professional development, teaching and research activities, scientific output, scientific and applied scientific contributions, citations, and compliance with the minimum national requirements.

Assoc. Prof. Rositsa Petkova-Slipets, PhD, Eng., holds the educational and scientific degree of Doctor (PhD), awarded in 2004 in the scientific specialty "Materials Science and Technology of Mechanical Engineering Materials". Since 2011, she has held the academic position of Associate Professor at Varna Free University "Chernorizets Hrabar". Her professional development includes successive appointments as Assistant Professor, Senior Assistant Professor and Associate Professor, as well as the performance of academic administrative functions as Scientific Secretary, Vice-Dean and Dean of the Faculty of Architecture.

The submitted documents demonstrate extensive teaching and academic activity and accumulated professional experience relevant to the scope of the competition.

2. Teaching Activities

The teaching activities of Assoc. Prof. Petkova-Slipets are directly related to the subject area of the competition. She teaches courses in construction materials, materials science and materials technologies to students from various degree programmes at Varna Free University "Chernorizets Hrabar".

Her teaching activity covers bachelor's and master's programmes, including courses such as "Energy-Efficient Construction", "Materials for Additive Technologies" and "Low-Carbon Products and the Green Deal". Syllabi and teaching materials have been developed for the courses taught and made available to students electronically. The candidate has also developed and delivered lectures in English for international students and Erasmus programme participants, further supporting the positive assessment of her teaching activity.

A significant component of the candidate's teaching activity is the submitted second electronic edition of the textbook *Construction Materials*, published in 2026 by the University Publishing House of Varna Free University "Chernorizets Hrabar", ISBN 978-954-715-814-6, and peer-reviewed by Prof. DSc Eng. Hristo Skulev and Assoc. Prof. PhD Eng. Rumyana Zaharieva.

The textbook covers the main groups of construction materials, their properties, production technologies and applications, and has been developed in accordance with the syllabi for the relevant course at VFU. The main teaching content comprises approximately 402 standard pages of 1,800 characters including spaces per page, excluding publication details, the table of contents, indexes and bibliography. In terms of volume, the textbook exceeds VFU's minimum requirement of 120 standard pages of individual authorial contribution.

The teaching literature submitted is directly related to the candidate's teaching activity and the scientific specialty of the competition, and contributes to the provision of teaching and learning resources in the field of construction materials.

The candidate's teaching activity also includes the scientific supervision of student papers presented at scientific conferences. This activity encourages student involvement in research and develops their skills in analysing and presenting research results.

3. Research Activities and Scientific Output

The candidate's research activities are focused on materials science, construction and thermal insulation materials, structure formation and phase stability of materials, their thermophysical characteristics, energy efficiency, and contemporary methods for the investigation and testing of materials.

The scholarly output submitted for the competition comprises a habilitation monograph, 23 scientific articles, and two editions of the textbook *Construction Materials*. Some of the articles included in the list are indicated as accepted for publication or in press. The list includes publications in journals and proceedings abstracted and indexed in internationally recognised databases, including Scopus and Web of Science, as well as publications in journals ranked in quartiles Q1, Q2 and Q3.

As her principal habilitation work, the candidate has submitted the monograph: Petkova-Slipets, R. "Structure of Materials: Hierarchical Levels, Research Methods, Relationship with Properties", Varna Free University "Chernorizets Hrabar", Varna, 2026, ISBN 978-954-715-818-4.

The monograph examines the various hierarchical levels of material structure, the methods used for their investigation, and the relationships between structure and properties. Its subject matter establishes a link between the fundamental aspects of materials science and the engineering interpretation of the properties and behaviour of materials.

The submitted scientific output demonstrates the consistent development of the candidate's research interests. It includes studies concerning the structure and thermal conductivity of materials, thermal insulation materials, lightweight concrete, thermophysical characteristics of construction materials, and issues related to energy efficiency.

The presence of publications in internationally indexed scientific journals is a positive indicator of the visibility and recognition of the candidate's research.

4. Scientific, Applied Scientific and Practical Contributions

In the submitted materials, the candidate has systematised her contributions into three main groups – scientific, applied scientific and practical contributions.

A significant area of the scientific contributions is the systematisation and development of an approach to the multilevel investigation and engineering interpretation of the relationship "composition – technology – structure – properties – service behaviour" of materials.

The submitted works investigate the relationships between structure at different hierarchical levels and the physical, thermophysical and service properties of materials. I positively

assess the candidate's efforts to link the results of structural and materials science research with practical engineering tasks and with the assessment of the behaviour of construction materials.

The applied scientific results are focused on the investigation and assessment of thermal insulation and other construction materials, the determination and analysis of their properties, and the possibilities for their application in the context of building energy efficiency.

The thematic focus of the presented results is consistent with the scientific specialty for which the competition has been announced.

5. Citation Impact and Recognition of the Research Results

According to the citation report submitted by the candidate, her scientific publications have received a total of 87 citations, including 60 in publications indexed in Scopus and Web of Science, 23 in non-refereed publications, and 4 in monographs or edited volumes. Of the citations in indexed publications, 22 are in Q1, 11 in Q2, 3 in Q3, and 1 in Q4.

Citations by authors and research teams outside the candidate's institution, including those in international scientific publications, demonstrate the recognition and scientific impact of her work. The data presented provide a basis for a positive assessment of the dissemination and use of the research results obtained.

6. Compliance with the Minimum National Requirements and the Additional Requirements of Varna Free University "Chernorizets Hrabar"

According to the submitted statement on compliance with the minimum national requirements, the candidate has achieved the following results:

Group of Indicators	Minimum Requirement	Result According to the Submitted Statement
А	50	50
В	100	100
Г	200	267.99
Д	100	658
Е	150	475
Total	**600**	**1550.99**

The submitted data demonstrate compliance with the minimum national requirements in each of the required groups of indicators. According to the submitted statement, the candidate has achieved a total of 1550.99 points compared with the minimum requirement of 600 points, thus considerably exceeding the minimum thresholds. This gives me grounds to conclude that the candidate complies with the minimum national requirements for holding the academic position of Professor.

According to the submitted teaching experience report, the candidate has been registered with the National Centre for Information and Documentation (NACID) as a habilitated academic with scientometric indicators since 2014. In the summaries of her works, the candidate states that the publications summarised for the present competition have not been used in previous procedures.

7. Overall Assessment of the Submitted Materials

The submitted scientific output demonstrates the consistent development of the candidate's research interests in the field of materials science, with a significant proportion of the works

focusing on construction materials, their structure, properties and service behaviour, thermal insulation materials, lightweight concrete, and building energy efficiency.

The scientific, applied scientific and practical results demonstrate an effort to link materials science research with practical engineering tasks, combining methodological generalisation and systematisation with results that have a clearly expressed applied scientific focus and relevance to engineering practice.

Overall, the submitted materials demonstrate sustained teaching and research activities, publication activity, and recognition of the scientific results, which provide grounds for my positive assessment of the candidate's academic development in relation to the requirements for holding the academic position of Professor.

8. Conclusion

Based on my review and assessment of the materials submitted for the competition, I consider that Assoc. Prof. Rositsa Veselinova Petkova-Slipets, PhD, Eng., possesses the necessary qualifications, teaching and academic experience, and research activity required for holding the academic position of Professor. The submitted materials demonstrate compliance with the minimum national requirements, the existence of a habilitation work, scientific output in publications abstracted and indexed in recognised databases, citations of the candidate's scientific results, and teaching and methodological activities thematically related to the field of the competition.

Based on the foregoing, I give a positive assessment of the candidacy and support the election of Assoc. Prof. Rositsa Veselinova Petkova-Slipets, PhD, Eng. to the academic position of Professor in the field of higher education 5. Technical Sciences, professional field 5.7. Architecture, Civil Engineering and Geodesy, scientific specialty "Construction Materials, Products and Technologies for Their Manufacture".

Julieta Slavcheva Mancheva
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MEMBER OF THE SCIENTIFIC JURY: .....
/ Prof. Julieta Mancheva, PhD, Eng /

28 October 2026