STATEMENT

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regarding the materials submitted for participation in a competition for the academic position of **"Professor" in professional field 5.7. Architecture, Civil Engineering and Geodesy (Construction Materials, Products, and Production Technologies)**

As a candidate in the competition for the position of Professor, announced in the State Gazette, Issue 69 of July 31, 2026, and on the website of Varna Free University "Chernorizets Hrabar". is participating **Assoc. Prof. Dr. Eng. Rositsa Veselinova Petkova-Slipets.**

1. Brief biographical information

Assoc. Dr. Eng. Rositsa Petkova-Slipets graduated with a master's degree in "Metal Technology and Metalworking Technology" at the Technical University - Varna in 1999. Also in 2000, he acquired the professional qualification "Teacher", and in the period from September 2002 to February 2003 he specialized in the field of materials science at the "Genie de Materiaux", Ecole Polytechnique de l'Universite de Nantes, Nantes, France.

Since 2003 until 2006 she held the position of Research Engineer at the Accredited Structural Analysis Laboratory, Technical University, Varna, and her academic career began in 2006 as an Assistant professor. Since 2009 until 2011 he held the academic position of "Chief assistant professor", and from 2011 was elected to the academic position of "associate professor" at VFU "Chernorizets Hrabar".

He successively held the positions of Scientific Secretary of the Faculty of Architecture, Deputy Dean of the Faculty of Architecture, as of September 2000 she is the Dean of the Faculty of Architecture of the VFU "Chernorizets Hrabar".

2. General description of the presented materials

The candidate Assoc. Prof. Rositsa Petkova-Slipets participated in the competition with one monograp entitled "Structure of materials. Hierarchical levels, research methods, relationship with properties", twenty-three publications and two university books.

Publications can be classified as follows:

- scientific publications in journals that are referenced and indexed in world-renowned databases with scientific information - 12 articles;
- scientific publication in non-refereed journals with scientific review or in edited collective volumes - 11 articles.

I accept that in publications with coauthors, the candidate has a personal contribution and equal participation with the co-authors.

3. Impact of the candidate's scientific publications in the literature (known citations)

Assoc. Prof. Petkova-Slipets has presented a list of 87 citations. A large part of them (60) appear in scientific publications that are refereed and indexed in internationally recognized scientific databases, while 27 appear in monographs, peer-reviewed edited volumes, and peer-reviewed (though non-indexed) journals. The provided documentation demonstrates the significant visibility of her scientific work in authoritative publications, as well as the value of the candidate's research. Its importance has also been highly recognized by the university administration, as evidenced by the certificates and awards presented.

4. General overview of the candidate's activities

4.1. Educational and pedagogical activity

The presented reference shows that Assoc. Prof. Petkova-Slipets actively participates in the educational and pedagogical activities of the Faculty of Architecture at the VFU "Chernorizets Hrabar", leading lecture courses and exercises on the disciplines included in the curricula for the Bachelor's and Master's degree programs as follows: "Construction materials - 1 part"; "Building materials - part 2"; "Construction materials and technologies"; "Building materials and their condition in case of fire"; "Design materials and technologies"; "Machine elements"; "Energy efficient construction"; "Materials for additive technologies"; "Low Carbon Products and Green Deal"; "Modern building materials"; Building materials and their condition in case of fire", etc., including in English.

Assoc. Prof. Rositsa Petkova-Slipets actively participates in the preparation of young staff through academic supervision of PhD students, as well as through methodological guidance of students for participation in scientific conferences.

4.2. Scientific and Scientific-Applied Activity

The candidate's research activity is focused on the modern problems of construction products and the technology of their production, which fully corresponds to the theme of the announced competition. The main directions include the study of the relationship "composition - technology - structure - properties - operational behavior" of building materials, the study of the thermophysical characteristics of building materials, the use of waste products in the production of building materials, etc. The overall scientific and scientific-applied activities provides an opportunity for analysis and development in the field of building materials and their practical application.

An essential part of the scientific, scientific-applied, as well as directly related to the teaching-pedagogical activity, are the created specialized laboratories for "Structural Analysis", "Thermophysical Research", "Mechanical Testing" and the Laboratory Complex for Additive Technologies at VFU "Chernorizets Hrabar", as well as the participation in a number of scientific and educational projects.

4.3. Contributions

The contributions in the candidate's works are clearly scientific, scientific-applied, and applied in nature.

They can be categorized into the following main directions: the development of an integrative methodological framework for the multi-level investigation of construction materials; the derivation of relationships between the structure and the thermophysical properties of

various construction and insulation materials; the development of an approach utilizing a modified method for the comprehensive determination of the thermophysical characteristics of construction materials; the comprehensive assessment of eco-friendly composites—incorporating natural additives and waste materials—for use in energy-efficient building envelope elements; the development and validation of a simulation methodology for predicting the thermal behavior of building envelopes constructed from alternative and innovative materials; the derivation of relationships linking production technology, structure, and thermal degradation in polyester non-woven insulation materials; the utilization of waste products as additives in clay bricks and wall composites to reduce thermal conductivity and increase thermal capacity; and the derivation of comparative engineering data and recommendations regarding the application of lightweight concretes in energy-efficient buildings, among others.

5. Critical remarks

I have no significant critical remarks regarding the materials submitted for the current competition for the academic position of "Professor."

I recommend that the candidate continue the good practice of training young scholars—with an emphasis on providing methodological support to young lecturers and fostering their subsequent academic development—as well as the publication of up-to-date educational literature.

6. Personal impressions

I know Associate Professor Petkova-Slipets from participation in conferences and other scientific forums, as well as from joint discussions on the problems of building materials, products and energy efficiency. My personal impression is that she approaches her research and teaching activities with a high degree of professionalism and depth.

7. Conclusion.

In view of the above, I propose that Assoc. Prof. Eng. Rositsa Veselinova Petkova-Slipets,PhD to be elected to the position of "Professor" in Professional Field 5.7 Architecture, Civil Engineering and Geodesy (Construction Materials, Products, and Production Technologies) at the Faculty of Architecture of Varna Free University "Chernorizets Hrabar".

03.11.2026 Member of the Scientific Jury:

/Assoc. Prof. Lachezar Hrischev/