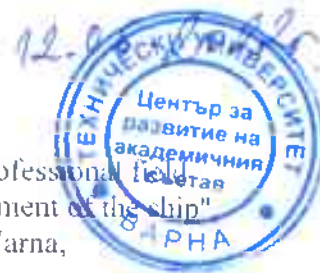


## STANDPOINT

on a competition for the academic position "Associate Professor" in a professional field 5.5 "Transport, Shipping and Aviation", scientific specialty "Electric equipment of the ship" to the "ESEE" department at the EF of Technical University -Varna, announced in the State Gazette № 13/ 07.02.2023 with a candidate: Chief Assistant Eng. Ginka Hristova Ivanova, PhD  
Member of the scientific jury: Professor Eng. Ivaylo Stefanov Stoyanov, PhD – Angel Kanchev University of Ruse



### 1. General characteristics of the candidate's research and scientific-applied activity.

The only candidate for participation in the competition is Assistant Professor Eng. Ginka Hristova Ivanova, PhD from the Department of "Electrical Supply and Electrical Equipment" of the Faculty of Electrical Engineering at the Technical University-Varna. The presented materials, which are the result of the research and scientific-applied activity of chief assistant professor, PhD. eng. Ginka Hristova Ivanova, include 24 scientific publications, of which: 10 according to indicator B.4 (204 points), 5 according to indicator Г.7 (180 points), and 9 according to indicator Г.8 (38 points). The candidate has 12 citations visible in the Scopus platform (indicator Д.12), as well as 5 others (indicator Д.13). The candidate's SCOPUS profile shows that her h-index is 2.

The publications can be classified as follows:

#### - In order of significance

- Referred and indexed in Scopus – 15 items [B.4-1...B.4-10; Г.7-1...Г.7-5].
- In non-refereed scientific publications - 5 items [Г.8-1...Г.8-9]

#### - According to the language in which they are written:

- In English - 17 items [B.4-1...B.4-10; Г.7-1...Г.7-5; Г.8-8, Г.8-9];
- In Bulgarian - 3 issues [Г.8-1...Г.8-7].

#### - By number of co-authors:

- Independent - 4 items [Г.7-1, Г.7-3, Г.7-4, Г.7-5];
- With one co-author - 7 items [B.4-4, B.4-5, B.4-6, Г.7-2, Г.8-7, Г.8-8, Г.8-9].
- With two or more co-authors - 9 issues [B.4-1, B.4-2, B.4-3, B.4-7, B.4-8, B.4-9, B.4-10, Г.8-1, Г.8-2, Г.8-3, Г.8-4, Г.8-5, Г.8-6].

Assistant Professor Eng. Ginka Hristova Ivanova, PhD is a member of the team under Project BG05M2OP001-1.001-0008-C02 "National Center for Mechatronics and Clean Technologies", laboratory 4 "Transport Engineering", Section 4 "Energy-efficient electric transport", 2018-2024 at Varna Technical University. He is a member of the Scientific and Technical Union - Varna, section "Electrical supply, electrical equipment and lighting equipment". She participated in the implementation of the activities of 4 projects under the Scientific Research Fund of TU - Varna.

The content of the above-mentioned articles and reports fully corresponds to the scientific field of the competition. The publication activity of Assistant Professor Eng. Ginka Hristova Ivanova, PhD exceeds the requirements for occupying academic positions at the Technical University - Varna.

### 2. Assessment of the candidate's pedagogical training and activity.

Assistant Professor Eng. Ginka Hristova Ivanova, PhD has the necessary teaching experience. The candidate's scientific research, engineering and pedagogical activities develop in a balanced and simultaneous manner, complementing each other. In the last 3 years, she has lectured and led exercises in 8 study disciplines for the Educational Qualification Degree "Bachelor" and 2 study disciplines for the Educational Qualification Degree "Master" from professional direction 5.5 "Transport, shipping and aviation", specialty "Electrical equipment of the ship". She has developed

lecture notes and exercise manuals for 3 academic disciplines. Assistant Professor Eng. Ginka Hristova Ivanova, PhD has carried out international mobility on passenger liner mv "Sovereign" Spain, Italy, Malta and Greece.

### 3. Basic scientific and scientific-applied contributions.

I accept the contributions announced by the Assistant Professor Eng. Ginka Hristova Ivanova, PhD. They can be classified as follows: formulation and justification of a scientific thesis and/or problem; formulating and/or substantiating a theory or hypothesis; proving with new technical means essential new aspects of already existing scientific fields, problems, theories, hypotheses; synthesis of models and development of classifications, methods, constructions, technologies; development of technical means for data registration and verification of the adequacy of the developed models, etc.

The main scientific, scientific-applied and applied contributions of Assistant Professor Eng. Ginka Hristova Ivanova, PhD in the submitted publications for the competition can be classified according to the fulfillment of the scientometric criteria as follows:

Group of metrics	Requirements for the academic position "Associate Professor"	Implementation
A	50	50
B	100	204
Г	200	218
Д	50	85
Ж	30	570

I define the presented contributions as scientific, scientific-applied and applied. I believe that the requirements for the quantitative indicators of the criteria for occupying the academic position "Associate Professor" have been met.

### 4. Significance of contributions to science and practice.

A way to evaluate the resulting reduction in the consumption of a primary energy carrier - marine fuel, due to the expedient implementation of the relevant technical means - is presented. An approach is proposed to determine the energy efficiency index EEOI in the operation of ships and compare it with the design indices EEDI and EEXI. A model for comparative analysis and evaluation of reliability indicators in conventional (AC) and hybrid (AC-DC-AC) ship electric power systems is proposed and the study is based on the existing type schemes and ship architecture. A hybrid SAVE CUBE ship electrical power system was investigated and parameterized against an existing ship. A simulation model implemented in the Sim Power System (Matlab) environment was synthesized to study the synchronization of ship generators with different power. Experimental studies of the light technical parameters of LED based navigation lights for vessels have been carried out. A system has been developed to control the ventilation of cargo platforms of Ro-Ro ships and ferries.

Some of the developed models are also used in the educational process. All the criteria for occupying the academic position "Associate Professor" have been met.

### 5. Critical notes and recommendations.

I have no comments on the documents, scientific production and teaching activity presented by the candidate. From indicator Г.8, of Scientific publications in non-refereed peer-reviewed journals, I have not taken into account 4 publications. Due to the fact that the same 4 publications were submitted in the competition for the candidate's academic position "Chief Assistant Professor". Here I will focus only on some recommendations for the future work of Assistant Professor Eng. Ginka Hristova Ivanova, PhD:

- to activate its participation in projects under European Union programs, as well as in other international and regional specialized programs;
- to publish their results in scientific journals;
- to participate more actively in international conferences abroad;
- to issue educational literature on the disciplines it supervises.

### **CONCLUSION**

The submitted documents and materials meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for its implementation, as well as the Regulations for the terms and conditions for occupying academic positions at the Technical University - Varna. The presented scientific works are characterized by clearly expressed scientific, scientific-applied and applied contributions.

Based on my acquaintance with the presented scientific works, their significance, and the scientific, scientific-applied, and applied contributions contained in them, I find it reasonable to propose Chief Assistant Eng. Ginka Hristova Ivanova, PhD to occupy the academic position "Associate Professor" in the professional direction 5.5 "Transport, shipping and aviation", scientific specialty "Electrical equipment of the ship".

**Заличена информация  
по Регламент (ЕС)  
2016/679**

**Date: 12.06.2023**

**JURY MEMBER**

**/Prof. Ivaylo Stoyanov, PhD/**