

## P O S I T I O N

Regarding competition for academic position „Associate Professor“ in professional area  
**Power engineering, specialty Industrial heat engineering**

Announced in State Gazette issue 13/07.02.2023,  
candidate **Assistant Professor Dr. Eng. Krastin Krasimirov Yordanov**

Member of the scientific jury: **Professor Dr. Eng. Totyo Ivanov Totev**

### 1. General information for the career development of the candidate

The sole candidate for the current competition – Dr. Eng. Krastin Krasimirov Yordanov is an Assistant Professor in the Thermal Engineering Department, Shipbuilding Faculty at Technical University – Varna. His scientific research interests are directed entirely in the field of the announced competition and applies with the following assets: 10 scientific papers, referred and indexed in world-renowned data bases (group B4); another 26 scientific papers from: group G7 – 3 and G8 – 23. The candidate also meets the requirements of indicator group D with 60 points out of a required minimum of 50 points. Furthermore, he significantly exceeds the requirements under group G with 345 points out of a required minimum of 30 points. Despite the fact that in the "Report on the fulfillment of the minimum requirements" he did not indicate specific points from the E group, it is clear from the applicant's documents that his assets in this part are also adequate for a teacher position at a university.

### 2. Assessment of the educational activities

The candidate is a long time teacher at the Technical University – Varna. He was appointed as an assistant in February 2013 and before that he had four years of experience as a designer in the professional field for which the current competition is held. In 2017 he received his PhD in “Theoretical Thermal Engineering”. In 2018 was appointed as assistant professor in the department. For the past three years, he has been a leading teacher in fields corresponding to the current competition (Heat exchangers, Thermodynamics and heat transfer, Thermotechnical measurements, Thermal part of TPP, Gas supply systems etc.). The total teaching hours (including lectures and exercises) led by Dr. Eng. Yordanov over the last three years average over 500 hours per year. He was a supervisor for bachelor’s and master’s theses.

The stated facts assures me that Assistant Professor Dr. Eng. Yordanov is a well-rounded teacher with the necessary practical and teaching potential, which he can successfully implement in his activities.

In addition, I would also like to point out his participation in the development of the facilities at the department, namely the preparation of a RES laboratory which has 12 workplaces as well as a research complex for measurements of heat engineering quantities.

### 3. Main scientific and applied contributions

In a reference, Dr. Eng. Krastin Yordanov has divided his publication activities into two groups.

The first group of papers (10 papers) are joined under the general title “Research and modeling of heat and mass transfer in various industrial processes”. This group of publications is equivalent to a monographic work. All papers are referenced and indexed in the world database for scientific information.

The candidate, Dr. Eng. Yordanov is a co-author as in 5 of them he is in first place, in 4 he is in second place and in 1 he is in third place. This gives me reason to assume that his contribution to the research is significant.

I would like to make one recommendation to the formulation of the group title, namely that modeling is a means of studying various processes. It seems to me that a certain tautology has taken

place. The candidate's claims for contributions are defined as "scientifically applicable" and "applicable", which I acknowledge and accept as such.

The second group of papers (26 papers) are systematized in 5 areas as scientifically applicable and applicable contributions for each area are indicated. From this group, the candidate has 2 independent publications; in two of them he is in first place, in ten of them – second place, in nine of them he is third and in three of them he is fourth. I accept the self-assessment of the scientifically applicable and applicable contributions in the individual areas with one recommendation: it would be better if these areas were 2 or at most 3 in total. A large part of the publications are related to process modeling, which indicated that the candidate has a good handling over the modern research tools, obtains extensive database for the various studied technological processes and manages to evaluate the obtained data and interpret it.

The candidate has the required number of points for group D as in 3 of the publications in which he is a co-author are cited 2 times.

Dr. Eng. Yordanov has a sufficiently active participation in various research projects, which is an indicator of his aspiration for constant self-improvement.

#### **4. Scientific and practical significance of the contributions**

The candidate's contributions, as I indicated above, are of the scientifically applicable and applicable type. They confirm known scientific facts, and in most cases modern means of proving them have been sought.

Assistant Professor Krastin Yordanov through his work and publication activity, is a recognized specialist in the country. Furthermore, he participates in scientific forums abroad.

#### **5. Critical notes and recommendations**

Although I have made some recommendations above, overall I have no significant objections to the applicant's work evidence presented. I accept his activities as sufficient for his participation in a competition for "Associate Professor". He meets all the minimum national requirements, as well as those of Technical University - Varna for this academic position.

### **CONCLUSION**

In conclusion, on the basis of the presented scientific works, their significance, the scientifically applicable and applicable contributions in them, I find it reasonable to propose Assistant Professor Dr. Eng. **Krastin Krasimirov Yordanov** for the academic position **ASSOCIATE PROFESSOR** in professional area 5.4. Power engineering, "Industrial heat engineering".

**Date: 05.06.2023**

**MEMBER OF THE JURY:**

**/Prof. Dr. Eng. Totyo Totev/**