

# STANDPOINT



for participation in a competition for an academic position "Professor"  
in scientific field 5 Technical sciences  
professional field 5.5 Transport, navigation and aviation  
study discipline „Ecology of transport vehicles“  
posted in SG issue №56 от 19.07.2022

with a single applicant: Assoc. Prof. Eng. Zdravko Dinchev Ivanov, PhD  
Member of the scientific jury: Assoc. Prof. Eng. Radostin Dimitrov Dimitrov, PhD  
According to Rector's Order №716 от 04.10.2022

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

Assoc. Prof. Eng. Zdravko Dinchev Ivanov, PhD graduated Technical University of Varna, speciality "Transport Engineering and Technologies" in 1983. He defended his PhD thesis in 2004, on topic "Investigating noise from the working process of automotive diesel engines". In 1988 he was appointed to the position of assistant at the Department of "Transportation Engineering and Technologies" at TU-Varna, in 2007 was reappointed to the position of associate professor in the same department. In 2016 was elected for head of Department in "Transport Engineering and Technologies", a position he holds to until now.

The following works are submitted for participation in the competition for "Professor:

1.1 According to indicator B.4. - 10 publications, indexed in world renowned database Scopus;

1.2 According to indicator Г.7. - 7 publications, indexed in world renowned database Scopus, показател, Г.8. - 25 publications not indexing in Scopus;

1.3 According to indicator Д.12. 27 citations of the candidate's works are presented, from publications, indexed in world renowned database Scopus.

1.4 According to indicator E.17. a supervisor of a successfully defended doctoral student is presented;

1.5 According to indicator E.18. the candidate's participation in 3 national and scientific projects is presented;

1.6 According to indicator E.20. the candidate shows participation in 11 projects of which he was the leader;

1.7 According to indicator E.23. и E.24. – three textbooks and two handbook issued.

For evaluation, I accept 42 papers in which the candidate's participation is as follows:

- First author in 21 papers.

- Second author is in 13 papers.
- Third author is in 2 papers.
- Fourth and next author is in 6 papers.

All publications are on the topic of the competition, 17 articles are in Bulgarian and 25 articles are in English. Seventeen of the articles have been published and indexed in the world-renowned Scopus databases.

For the period 2007 - 2022, Assoc. Prof. Dr. Eng. Zdravko Dinchev Ivanov participated in more than 14 scientific projects, of which he was the leader of eleven. He has participated in three projects under external competitions for TU-Varna - projects under FNI, operational programs and other national projects.

As a project manager, Assoc. Dr. Eng. Zdravko Dinchev Ivanov has attracted funds to the university and the department in which he works in the amount of BGN 98,230.

He is a member of the Territorial Organization of Scientific and Technical Unions (NTS) - Varna and the Polish Scientific Society of Combustion Engines (PTNSS).

Assoc. Prof. Eng. Zdravko Dinchev Ivanov, PhD has participated in 15 meetings in commissions of scientific juries for holding academic positions, educational-scientific and scientific degrees.

**Conclusion** - Assoc. Prof. Eng. Zdravko Dinchev Ivanov, PhD fulfills the minimum national requirements for all groups of indicators for "Professor", some of which have been significantly exceeded - groups Г, Д, Е and Ж.

## ***2. Assessment of the pedagogical preparation and activity of the candidate:***

For the last three years, Assoc. Prof. Eng. Zdravko Dinchev Ivanov, PhD has led and is leading lectures on 9 disciplines with students from the "Bachelor degree" and "Professional Bachelor degree" with students from TU-Varna and KSTU-Varna. He also led and is leading lectures on 8 disciplines at the Master degree of Education in several specialties.

Assoc. Prof. Eng. Zdravko Dinchev Ivanov, PhD has carried out two mobilities under the Erasmus+ program abroad in two different European leading universities in Romania and Turkey.

The candidate has been the supervisor of one PhD student who has successfully defended his thesis and supervises three more PhD students in nowadays. Also, under his leadership, 71 graduates of "Master degree" from specialties: Internal Combustion Engines, Transport Engineering and Technologies, Internal Combustion Engines and Automotive Technology defended their theses. Assoc. Prof. Eng. Zdravko Dinchev Ivanov, PhD was also a

reviewer for 85 students graduating from the Master's program in the department.

**Conclusion** – I assess the pedagogical qualification of the candidate at a very high level for the required academic position "Professor".

### ***3. Main scientific and applied contributions***

In the presented 42 scientific works of the candidate, scientific contributions related to the following thematic areas can be singled out:

**Thematic direction 1.** - Noise and vibration environmental characteristics of internal combustion engines and transport equipment - 8 articles;

**Thematic direction 2.** - Studies of the working process of an internal combustion engine and the factors affecting its development - fuel additives, use of alternative fuels with improved environmental characteristics - 15 articles;

**Thematic direction 3.** - Study of fuel supply parameters for internal combustion engines, as the main factor determining the environmental characteristics of transport equipment in operational conditions - 8 articles;

**Thematic direction 4.** - Reducing carbon emissions by optimizing the design of internal combustion engines and studying the dynamic processes during car movement - 11 articles;

The contributions contained in the candidate's works can be attributed to the following groups:

- Scientific contributions - 5;
- Scientific and applied contributions - 12;
- Applied contributions - 5;
- Citations - 27.

**Conclusion** - as can be seen, there are significant scientific, scientific-applied and applied contributions, a large part of which are the personal work of the candidate or were obtained with his decisive participation. The citations of these works by various Bulgarian and foreign scientists speak of the recognition of the candidate by the scientific circles in the field of engines and cars at home and abroad.

### ***4. Significance of the contributions to science and practice:***

The large number of scientific, scientific-applied and applied contributions enrich the theory, teaching material and practice in the field of the announced competition. Taking into account that the candidate presents 42 works with his participation, 17 of which have been published in international scientific conferences and journals, indexed in the world-famous Scopus database, shows that the candidate is at a high scientific and technical level.

The candidate is the chairman and member of the Organizing Committee of

