

OPINION

by Prof. DSc Tech. Eng. Kolyo Tenev Dinkov, University of Food Technology – Plovdiv

Abstract: competition for occupation of academic position “professor” in the field of higher education - Technical Sciences, in the professional field of Mechanical Engineering, specialty - "Metrology and Metrology Assurance" (Quality Management Systems).

The competition for acquiring the “professor” position was announced in the State Gazette, issue 58 of 23 July 2019 and on the website of the Technical University of Gabrovo for the needs of the Department of Mechanical and Precision Engineering at the Faculty of Mechanical and Precision Engineering. Documents have been submitted by one applicant Assoc. Prof. Dr. Eng. Iliya Slavov Zhelezarov - Department of Mechanical and Precision Engineering, Faculty of Mechanical and Precision Engineering at the Technical University of Gabrovo.

1. Overview of the content and the outcomes of the works submitted

Assoc. Prof. DSc. Eng. Iliya Slavov Zhelezarov entered the competition for academic title “professor” by submitting the following academic works and outcomes: 1 monograph, 5 scientific publications in journals which have been referenced and indexed in world-wide scientific information databases, 23 scientific publications in peer-reviewed non-referenced journals or audited collective volumes, 1 textbook in the field of the competition, 1 training aid in the specialty and 8 other publications. Three of the articles presented are in Impact Factor journals and two more are in the SCOPUS base. The publications are mainly grouped in four thematic areas:

1. Publications for methods and means for measuring dynamic and static quantities. Systems and means for measuring dynamic and static quantities of moving objects such as cars, ships, aircrafts and other vehicles have been developed.
2. Publications for quality management systems, based on ISO standards, which present the evolution of quality management systems, their applicability in higher education institutes, as well as models for the internal and external evaluation of these systems. Methods for measuring, analyzing and evaluating quality management systems and tools for their implementation have been proposed.
3. Publications for statistic methods for quality management. Methods and tools for quality management. These publications analyze the applicability of statistic methods and tools for quality management, and provide tools and indicators for determining the effectiveness of a quality management system. Certain steps for risk planning and opportunities, related to the applicability of quality management systems, have been reviewed.
4. Publications for control and management systems, including systems for quality management and control as well as the metrological characteristics of the measuring systems and instruments. Various methods for controlling, development and implementation of test and calibration laboratory management systems, in accordance

with the ISO/IEC 17025 standard have been presented, as well as for optimization of quality measurement and control processes.

2. General characteristics of the applicant's activities

2.1. Educational and pedagogical activities (work with students and doctoral student)

The candidate's CV submitted in the competition shows that he started work at the TU of Gabrovo in 1995, first being an assistant and following a senior assistant until 2006, when after defending his dissertation for the Education Science Degree of "Doctor", he became chief assistant, and since 2007 he has been holding the academic position of "Associate Professor". He has participated in the development of curriculums and has delivered lectures in the disciplines of "Metrology", "Quality Management Systems", "Industrial Control Systems", "Quality Control and Management", included in the curricula of the Education Qualification Degree of "Bachelor", as well as "Quality Management Systems" and "Integrated Management Systems" for the Education Qualification Degree of "Master". For the needs of the educational process, a textbook on quality management systems and a manual for laboratory exercises in Metrology and measuring techniques have been published this year.

Assoc. Prof. Iliya Zhelezarov has directed over 50 graduates from the Education Qualification Degrees of "Bachelor" and "Master" and one doctoral student who defended the Education Science Degree of "Doctor" on the topic "Modeling of non-circular small-module gears with asymmetric tooth profile".

2.2. Scientific and applied scientific activities

For the purpose of entering the competition, the candidate submitted 1 monograph, 34 journal articles and conference reports, 1 textbook, 1 training aid and 2 manuals. Five of those publications are in referenced and indexed editions, 3 articles are in Impact Factor journals, and 2 conference reports are in the SCOPUS base. Of the 34 articles and reports, 12 are individual, 22 are co-authored: 7 with two authors, 10 with three authors and 5 with more than three authors, in 10 of which the candidate is the first author. There are 12 reports in scientific conferences in Bulgarian language, 2 in Russian language, and 20 in English language. The candidate is the author of 1 textbook, co-author of 1 training aid and 2 manuals. The publications do not replicate the articles, reports, textbooks and training aids for the Education Science Degree of "Doctor" or for the academic position of "Associate Professor" attached to the current competition documentation.

The list of citations for participation in this competition presents 8 pcs. of scientific publications, which were referenced and indexed in world-wide scientific information databases, 9 in monographs and peer-reviewed collective volumes and 12 in non-referenced peer-reviewed journals.

The scientific publications and research work of Assoc. Prof. Iliya Zhelezarov are thematically relevant to the announced competition for academic position "professor" and are related to his teaching activity.

The project reference list shows that the candidate has managed and participated in a large number of national and international scientific and educational projects. It also evidences the leading role of Assoc. Prof. Iliya Zhelezarov in projects under the Operational Programme “Science and Education for Smart Growth” 2014-2020, Operational Programme “Innovation and Competitiveness” 2014-2020, Operational Programme “Human Resources Development” 2007-2013, Operational Programme “Development of the Competitiveness of the Bulgarian Economy” 2007-2013, the EU PHARE Programme and others.

2.3. Implementation activities

As an expert in management systems, as evidenced by the large number of certificates referred to in his CV, Assoc. Prof. Iliya Zhelezarov has managed projects in over 200 organizations for the development, implementation and improvement of quality management systems, environmental management systems, health and safety management systems, energy management systems, test laboratory management systems, and others under the ISO standards. In 2005 Assoc. Prof. Zhelezarov led the implementation of a system for automated processing of questionnaires and systematization of the accumulated information at the University of Food Technology - Plovdiv.

3. Contributions – (Scientific, scientific-and-applied and applied activities). The importance of contributions to science and practice.

The candidate has submitted a copyright contribution report which includes 3 scientific contributions, 9 scientific-and-applied and 4 applied ones. The contributions are in acquiring new and confirmative facts and their application in practice. I accept the contributions submitted by Assoc. Prof. DSc Eng. Iliya Slavov Zhelezarov as corresponding to the academic position of professor.

The importance of contributions to science and practice is evident from the citations of the candidate's scientific publications in prestigious journals that have been referenced and indexed in world-wide scientific information databases, in monographs, in collective volumes with scientific reviews, in other journals with scientific reviews. At the same time some of the contributions have been successfully implemented in practice which generated incomes of over one million levs. The latter gives me reason to consider that the applicant's publications have gathered wide popularity and positive feedback in the professional scientific communities in Bulgaria and worldwide.

4. Assessment of the applicant's personal contribution.

The above-mentioned data confirms the positive assessment and the personal contribution of the applicant in the materials submitted for the competition.

5. Critical notes and recommendations.

I have no critical notes or recommendations.

6. Personal impressions.

I have known Assoc. Prof. DSc. Eng. Iliya Slavov Zhelezarov as Vice-Rector for Research at TU-Gabrovo and as Chairman of the Organizing Committee of the annual UNITEH International Scientific Conference. I consider he has the necessary theoretical knowledge, competence, practical skills, organizational and managerial experience, and communicative skills to occupy the academic position of "professor".

Based on the analysis and the assessment of the presented research, teaching and educational activity of the candidate, it is evident that there is correspondence of the characteristics both in quality and quantity of the materials submitted by him with the requirements for fitting the academic position "professor" as per the Act for the development of the academic staff in the Republic of Bulgaria, the Statute for the implementation of the Act for the development of the academic staff and the Regulations for acquisition of a scientific degree and occupation of academic positions at the Technical University - Gabrovo.

7. Conclusion:

In view of the foregoing, I propose that Assoc. Prof. Dr. Eng. Iliya Slavov Zhelezarov to be elected as a "Professor" in the field of higher education - Technical Sciences, in the professional field of Mechanical Engineering, specialty - "Metrology and Metrology Assurance" (Quality Management Systems).

14.11.2019

Member of the jury: /signature/

/ Prof. DSc Tech. Eng. K. Dinkov /