

OPINION

authored by Prof. Iliya Slavov Zhelezarov, PhD

concerning materials submitted for participation in competition
for awarding the academic position of “Associate Professor”
in higher education area - 5. Technical Sciences,
professional field - 5.13. General Engineering,
scientific major - „Quality Management”.

Tsvetelin Kirilov Georgiev - Ph.D. and Senior Assistant Professor in the Department of “Technology of Mechanical Engineering and Machine Tools” at the Faculty of Mechanical Engineering and Technology of the University of Rouse has applied for participation in the competition for awarding the academic position of Associate Professor, announced in the State Gazette, issue 54 from 25.06.2024 and on the website of the Technical University of Gabrovo for the needs of department “Mechanical and Precision Engineering” which is a constituent unit of the Faculty of Mechanical and Precision Engineering.

1. Overview of content of the submitted materials

All the necessary documents submitted by Senior Assistant Professor Tsvetelin Kirilov Georgiev, Ph.D. for participation in the competition for awarding the academic position of “Associate Professor” correspond to the stipulations of the Academic Staff Development Act in the Republic of Bulgaria, the Rules for its implementation and the Rules for Acquisition of Academic Titles and Positions at TU- Gabrovo. The submitted materials include a monograph titled “Study and Applications of PDCA Cycle in Quality Management Systems”, published by Academic Publishing House of Rouse University, Rouse in 2023., 6 scientific publications in journals which are refereed and indexed in world renowned data bases with scientific information (Scopus и Web of Science), 11 scientific publications in non-referenced journals with scientific reviewing or in edited volumes of collections, a course book titled “Renewable Energy Sources and Technologies”. In 2013, the candidate defended a Ph.D. dissertation titled “Quality Assurance of Spheroidal Graphite Cast Iron”.

The quantitative indicators for the criteria to be awarded the academic position of “Associate Professor” comply with the Rules for Acquisition of Academic Titles and Positions at TU-Gabrovo.

The large number of citations of the publications in scientific journals, 7 of which in refereed and indexed in world renowned data bases, serve as evidence of the high quality of the research and applied research activity of the candidate.

2. General description of candidate’s activity

2.1. Teaching and pedagogical activity

Tsvetelin Georgiev began his teaching career as an assistant professor in the department of “Technology of Mechanical Engineering and Machine Tools” at the Faculty of Mechanical Engineering and Technology of the University of Rouse in 2003. He has been Senior Assistant Professor since 2009.

Senior Assistant Professor Tsvetelin Georgiev, Ph.D. has given lectures and conducted seminars in more than 30 academic subjects involved in Bachelor’s and Master’s degree courses as well as one academic discipline for a Ph.D. course. The subjects are very much related to the topic of the competition in the field of quality management (Introduction to quality, Quality assurance in design, Quality management systems, Statistical techniques in quality management systems, Total quality management and “Six Sigma”, Audit of quality management systems, Auditing Practice, Professional English, Special management systems, etc.). He has read lectures, as part of the Erasmus Program, in Belgium, Greece, Portugal, Romania, Serbia, Turkey and France. Under the same program he has taught students from Armenia, Estonia, Spain, Italy, Latvia, Romania, Turkey, Finland and France. He has been a CEEPUS program guest-lecturer in Kosovo. The academic subjects are closely related to the topic of the announced competition for awarding the academic position of Associate Professor.

For his teaching and pedagogical activity, in 2015, Dr. Tsvetelin Georgiev received the first award given by the Student Council at the University of Rouse – “Awakener”

The candidate’s teaching and pedagogical activity fully meets the requirements for the academic position of Associate Professor at the Technical University of Gabrovo.

2.2. Research and applied research activity

The candidate has participated in 8 international research projects and 19 in-house projects of the University of Rouse. He has also participated in BG-RRP-2.013-0001 “Research University of Rouse“as a researcher.

Senior Assistant Professor Tsvetelin Georgiev, Ph.D. has delivered plenary presentations at scientific conferences in Bulgaria, Turkey, Romania and the United Arab Emirates. He is a member of the scientific committees of 19 conferences and a reviewer of 21 conference and journal papers.

He is a member of professional organizations in the field of quality, metrology and innovation: Club 9000 Association (regional coordinator for Rouse), Union of Quality Specialists in Bulgaria, The American Society for Quality (ASQ), Union of Metrologists in Bulgaria (Member of the Board), The International Metrological Confederation (IMEKO) (member of the Supervisory Board and 2 technical committees), The International Society for Professional Innovation Management (ISPIM).

He is a winner of Danubius Young Scientist Award 2018 awarded by the Austrian Ministry of Education and Research and the Institute for the Danube Region and Central Europe (IDM).

He has also been the Head of the Center for Technology Transfer and Intellectual Property at the Rouse University “Angel Kanchev”.

2.3. Implementation activity

The materials submitted for the competition contain documents for implementation in 3 organizations: „*Vitte Automotive Bulgaria*“ *EOOD, Rousse* (training on topics related to quality management in Automotive Industry, such as: Risk Analysis (FMEA), Advanced Product Quality Planning and Control Plan (APQP & Control Plan), Measurement System Analysis (MSA), Statistical Process Control (SPC), Product Part Approval Process (PPAP), Root Cause Analysis (RCA) and Paper 8D), „*Osam*“ *AD, Lovech* (control plan, statistical process control, cause and effect diagrams, risk analysis, analysis of the financial effect of the implementation of a quality management system) and „*Ralomex*“ *AD, Zavet* (development and incorporation of organoleptic quality control methods into the company’s production).

A significant part of the results of the candidate’s teaching, pedagogical, research and applied research activities have been incorporated into the theoretical and practical training of students tutored by Senior Assistant Professor Tzvetelin Georgiev, Ph.D.

3. Contributions. Significance of contributions for science and practice.

There are scientific, research and applied research contributions presented in the monograph “Study and applications of PDCA cycle in quality management systems” and the publications of the candidate Dr. Tsvetelin Georgiev.

The scientific contributions include a creation of a methodology for analysis and determination of interrelations between the processes of a quality management systems and the development of unique digital model of the interactions between the processes of the ISO 9001:2015 standard, including a diagram of the relations between the processes in a quality management system.

Research contributions involve a comparative analysis of the basic structure of ISO 9001:2015 standard with other ISO organizational standards for management systems, as well as ISO 19011:2018 auditing guidance and application of statistical instruments from ISO 10017:2021; systematization of the quality management system requirements to be monitored and measured, the applicability of management cycle (PDCA) in many areas, such as industry, education, standardization, finances, administration, etc.; the implementation of ISO 9001:2015 requirements, the resulting commitments and expected outcomes related to key terms; systematization of the requirements related to the competences and training of quality, metrology and logistics engineers.

Research applied contributions enable better implementation of the management cycle PDCA at system, process and activity levels; study and evaluation of the impact of IWA 2 and ISO 21001 documents on the quality management systems in higher education; proposals for updating the internal university system for evaluation and maintenance of the quality of teaching and academic staff at the University of Rousse, as well as the creation of a new methodology for organizing the processes of the quality management system at Rouse University “Angel Kanchev”, including the process of “internal audits” in an educational organization through the application of SIPOC diagrams.

4. Evaluation of candidate's personal contribution

The results of the research and applied research activities, published in prestigious scientific journals and presented at national and international scientific forums, lead me to believe that the contributions are the result of the personal research efforts of Senior Assistant Professor Tsvetelin Georgiev, Ph.D.

5. Critical remarks and recommendations

I have no particular remarks or objections concerning the materials submitted by Senior Assistant Professor Tsvetelin Georgiev, PhD and my assessment is completely positive.

6. Personal impressions

I have known Senior Assistant Professor Tsvetelin Georgiev, PhD as a colleague from the University of Rouse for more than 20 years. I am well familiar with his research activity in the field of quality management and metrology. I have reviewed his dissertation for acquiring a Ph.D. degree and the monograph included in the materials submitted for the competition. I am familiar with his publication record and the strong positive reception of his findings within the scientific community in the fields of quality management and metrology. I am highly impressed by his collaborative efforts in research and educational projects.

7. Conclusion:

Drawing upon the content of the materials submitted for participation in this competition, the topicality and significance of accomplished research and applied research contributions, I propose to the esteemed jury that Senior Assistant Professor Tsvetelin Kirilov Georgiev, PhD be awarded the position of Associate Professor in the higher education area of Technical sciences, professional field “General Engineering”, scientific major “Quality Management”.

Gabrovo, 15 November, 2024

Member of jury: /signature/
/Prof. Iliya Zhelezarov /