

POSITION

of Professor Dr MEng. Lidia Petrova Galabova, Technical University of Sofia

based on competitive selection procedure materials submitted
for awarding the academic rank of “Associate Professor”
higher education field – 5. Technical Sciences
professional field 5.13 “General Engineering”
scientific discipline – Industrial management

In the competitive selection procedure for Associate Professor, announced in the State Gazette No. 48 of June 13, 2025, and on the website of the Technical University – Gabrovo, for the needs of the Department of Management, Faculty of Economics, the candidate is Chief Assistant Professor Dr. Eng. Tsanka Marinova Zlateva-Petkova.

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

For participation in the competitive selection procedure, the sole candidate, Chief Assistant Prof. Dr. Eng. Tsanka Marinova Zlateva-Petkova, has presented 22 scientific works, including 19 publications in Bulgarian and international scientific journals and conference proceedings, 1 monograph, 1 textbook, and 1 study guide. Three of the publications are in editions referenced and indexed in SCOPUS, while the remaining sixteen are in peer-reviewed non-indexed journals or edited collective volumes, all in sole authorship. Evidence has been presented for 9 citations in scientific publications indexed in internationally recognized databases or in monographs and collective works.

The monograph, textbook, and scientific papers focus on identifying new elements in the theoretical approaches to the management of industrial enterprises – a highly relevant and significant research area addressing a real and important issue for both science and practice: enhancing competitiveness. Overall, the research topics correspond to the scientific discipline of the announced competitive selection procedure.

The documents submitted comply with the requirements of the Academic Staff Development Act, its implementing regulations, and the internal rules of TU – Gabrovo. The competitive selection procedure has been correctly followed.

2. General characteristics of the candidate’s activity

2.1. Teaching and pedagogical activity

Chief Assistant Prof. Tsanka Zlateva-Petkova is a lecturer at the Department of Management, Faculty of Economics, TU – Gabrovo. She teaches disciplines such as Engineering; Organizational Behavior; Business Planning; Economics of the Enterprise (Bachelor’s and Master’s); Production Layout Planning; Human Resource Management; Fundamentals of Management (Bachelor’s); and Personnel Management Systems; Organizational Culture and Leadership; Professional Standards

for Management and Development of Human Resources (Master's). She supervises course projects in Engineering and graduation theses for both Bachelor's and Master's degrees.

She graduated from TU – Gabrovo with a Master's degree in Industrial Management in 1998 and obtained a second Master's degree in Human Resource Management in 2007 from the same university. She specialized in Production Management and Flow Technologies in France. In 2013, she defended her PhD thesis on “Analysis and Evaluation of Human Resource Quality” at the International Business School – Botevgrad, in the scientific field 5.13 “Administration and Management.”

Chief Assistant Prof. Zlateva-Petkova has extensive pedagogical experience accumulated between 2006 and 2025. She is a researcher closely engaged in the educational process and the author of over 20 curricula for Bachelor's and Master's programs. Her monograph, the textbook “Business Planning,” and the study guide “The Business Plan – From Idea to Implementation” are used in her teaching activities at different levels of higher education.

2.2. Research and applied scientific activity

Chief Assistant Prof. Tsanka Zlateva-Petkova is recognized in community as a respected lecturer and researcher in the field of administration and management. Her scientific work can be grouped into the following areas: Management of Industrial Enterprises; Management of Projects, Processes, and Resources in Industrial Enterprises; Application of High-Energy Technologies for Marking Stainless Steel Samples.

She actively participates in projects funded by the National Research Fund and has worked as a researcher in 10 national and international projects. She was the leader of the project “Development of Innovative Management Products and Services for Companies in the Field of Mechatronics and Clean Technologies” (2021).

2.3. Implementation

The scientific results of the candidate are successfully applied in teaching and research projects, with potential for practical implementation in industrial enterprises.

The above gives grounds to assess with very good Chief Assistant Prof. Zlateva-Petkova in terms of her teaching, research, and applied scientific work, which meet the requirements for the academic position of Associate Professor.

3. Contributions (scientific, scientific-applied, and practical) and their research and practical significance

I accept most of the declared contributions and consider them well-founded and original. They are the personal work of the candidate and are presented in her scientific publications. The analytical review of her research allows the identification of significant contributions in the following directions:

Management of Industrial Enterprises: 1) Development of a theoretical framework substantiating the new management paradigm of Industry 5.0, based on a human-centered approach, ethical principles, and sustainability in managing industrial enterprises. A model has been proposed for the transition from Industry 4.0 to Industry 5.0, defining stages of digital maturity and strategies for achieving a balance between technology, human factors, and

sustainable development. 2) Strategies for innovation management and addressing innovation obsolescence in mechanical engineering processes and structures are presented.

Management of Projects, Processes, and Resources in Industrial Enterprises: Development of a model for assessing the impact of ERP systems on key performance indicators, presenting quantitative before-and-after comparisons for metrics such as order processing time, data accuracy, administrative costs, customer satisfaction, and return on investment (ROI).

Application of High-Energy Technologies for Marking Stainless Steels: Development of a methodology for determining temperature fields in the affected zone during laser marking of X6Cr13 stainless steel samples, analyzing the influence of power density, scanning speed, frequency, and raster step. The methodology enables quantitative analysis of thermal processes and optimization of parameters for high-energy laser technologies.

These contributions expand and enrich existing knowledge and demonstrate practical applicability of scientific achievements.

4. Evaluation of the candidate's personal contribution

The analyses, assessments, conclusions, and results presented in the candidate's publications are logical, clear, and precise. The candidate demonstrates the ability to systematize and critically evaluate existing theories and take well-argued positions. Considering that in 16 of the publications she is the sole author, the contributions can be regarded as entirely her own.

5. Critical comments and recommendations

Some of the publications of Chief Assistant Prof. Zlateva-Petkova have a predominantly review character, with empirical research and critical analysis presented to a lesser extent. It is recommended that the candidate increase the number of publications in reputable international journals in the future.

6. Personal impressions

The candidate possesses the necessary qualifications and professional competence required for holding the academic position of Associate Professor.

Conclusion

After reviewing the materials and scientific works submitted for the competitive selection procedure and analyzing their scientific value, I find original, relevant, and significant scientific, applied-scientific, and practical contributions that represent a contribution to the development of theory and the solution of practical problems in the following areas: Management of Industrial Enterprises; Management of Projects, Processes, and Resources in Industrial Enterprises; Application of High-Energy Technologies for Marking Stainless Steels.

Taking into account the significance of the candidate's contributions, her scientific and

pedagogical activities, and the fulfillment of the quantitative criteria, I conclude that Chief Assistant Prof. Dr. Eng. Tsanka Marinova Zlateva-Petkova meets all the legal requirements for being awarded the academic rank of Associate Professor.

I therefore propose that Chief Assistant Prof. Dr. Eng. Tsanka Marinova Zlateva-Petkova be awarded the academic rank of “Associate Professor” in higher education field 5. Technical Sciences, professional field 5.13 “General Engineering,” scientific discipline – Industrial Management.

31.10.2025

Member of the Scientific Jury: /signed/

Prof. Dr. Eng. Lidiya Petrova Galabova