

Review

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Member of the scientific jury according to Order R-109-421 / 03.10.2025 of the Rector
of MU-Varna

Regarding the application for the academic position of "Professor" in the field of higher education 7. "Healthcare and Sports", in the professional field 7.1. "Medicine" and specialty "Endocrinology" for the needs of the Second Department of Internal Medicine, Faculty of Medicine, MU-Varna; and the Clinic of Endocrinology and Metabolic Diseases at UMBAL St. Marina EAD Varna; announced in the State Gazette, issue 64/05.08.2025.

The candidate in the announced academic job, Assoc. Prof. Dr. Mira Valentinova Siderova, MD, has submitted the documents required in the PURPNSZADMU.

Brief presentation of the candidate

Dr. Mira Siderova, MD, graduated from the Medical University Varna in 2003 with full honors and the Golden Hippocrates Award. She worked for 2 years in the Department of Anesthesiology and Intensive Care, St. Anna Hospital, and then from 2006 to now she has been working successively as a full-time doctoral student, resident, assistant professor and associate professor (since 2017) at the Clinic of Endocrinology and Metabolic Diseases / Board of Endocrinology at St. Marina Hospital, Varna. Since 2022, she has also been the head of the Second Department of Internal Medicine, Faculty of Medicine, MU-Varna; and in 2023 she became the head of the Clinic of Endocrinology and Metabolic Diseases at the University Hospital. Since 2024 she has also been the Chairman of the State Examination Commission for the specialty "Endocrinology and Metabolic Diseases".

Dr. Mira Siderova has a specialty "Endocrinology and Metabolic Diseases" since 2011, and previously she also specialized in internal diseases (without completing the training cycle). In 2013 she successfully submitted a dissertation dedicated to immunohistochemical markers and ultrasound elastography (new diagnostic options in the specification of thyroid nodules), and in 2017 she published a habilitation work in the form of a monograph dedicated to thyroid-associated ophthalmopathy. She attended a total of 8 courses for additional qualification and specialized for 3 months in Italy (Erasmus program).

Major fields of the candidate's professional activity

SCIENTIFIC AND RESEARCH ACTIVITY. In this job application, Assoc. Prof. Mira Siderova, MD, presented the following publications: 1 dissertation, 2 participations in monographs (in one as an independent author, the second – outside BG), 3 contributions to textbooks, 65 full-text articles and 111 scientific participations (31 at international and 80 at national forums). Of these, 59 full-text publications from the period 2017-2025 are submitted for review in this job application - 35 in Bulgarian and 24 in English. Nine are independent works, the remaining 50 publications are co-authored (in 8 the candidate is the first author, and in 21 – the second). As a habilitation work, 11 full-text scientific publications that are referenced and indexed in world-renowned databases of scientific information (Scopus and Web of Science), recognized by NACID. They reflect the quintessence of the scientific research activity of Assoc. Prof. Mira Siderova, carried out after acquiring the academic position of "associate professor" (from the period 2017 -2025). 4 reviews, 2 clinical studies, 1 chapter in an international textbook and 4 clinical cases are included. Four of them are in Bulgarian; in almost half of them, Assoc. Prof. Siderova is the first author. The scientific activity presented in this way is reflected in a total of 29 citations - 20 citations in refereed and 9 in non-refereed publications. 17 issues are also found in the SCOPUS database. Therefore, the h-index of Assoc. Prof. Siderova's publications is 2. Thirteen of all publications by Assoc. Prof. Siderova are in journals with an impact factor (2 of them are international with Bulgarian participation, the rest are international). Four have already been reviewed in connection with the application for the academic position of "associate professor" and are in very prestigious magazines.

The **main areas** of Assoc. Prof. Siderova's publications are:

- Thyroid pathology: nodular goiter and thyroid carcinoma, autoimmune thyroid diseases and TAO, skeletal effects in thyroid dysfunction and drug-induced thyroid dysfunction. This area is the focus of her most numerous works, as well as the focus of her professional expertise.
- Parathyroid pathology: mainly the various forms of hyperparathyroidism, ultrasound diagnostics and bone markers.
- Diabetes mellitus: treatment guidelines, mainly in the field of diabetic sensorimotor neuropathy.

- Other metabolic disorders: sarcopenia in endocrine diseases (in thyrotoxicosis and androgen deprivation), non-secreting adrenal incidentalomas, etc. There are also several publications on the transition from pediatric endocrinology to that for those over 18.

The following **contributions** of Assoc. Prof. Siderova can be highlighted:

- Thyroid pathology: one of the main focuses is the in-depth presentation of the specific manifestations and treatment options for thyroid-associated ophthalmopathy. In principle, specialists in this field in our country are scarce and dr. Siderova is one of them. Therefore, her publications in this area have a significant scientific and practical impact. The other main focus for Assoc. Prof. Siderova is the skeletal manifestations of thyroid dysfunction. The influence of both hypothyroidism (for example, on bone growth in children) and thyrotoxicosis is affected. A particularly important theoretical contribution is the study of the relationship between TSH receptor antibodies and bone protection. It is also included in meta-analyses of other teams. In addition, the contribution to some rare thyroid tumors should be mentioned - in particular, primary thyroid lymphoma and metastases from other non-thyroid tumors. These are contributions with scientific and practical, as well as illustrative and educational value.

Assoc. Prof. Mira Siderova has applied and evaluated most diagnostic and therapeutic applications of neck ultrasound – histography, elastography, fine-needle biopsy with immunohistochemistry and DNA analysis, sclerosing therapy. In her scientific development, she has gradually built up her knowledge in this field – starting with individual publications to participating in an international guideline for the evaluation of thyroid nodules. A great advantage is the combination of modern ultrasound methodology with other imaging methods and the clinical-laboratory constellation, which ensures completeness.

- Parathyroid pathology: the main contributions are related to the possible severe bone changes in primary hyperparathyroidism (forgotten today in the era of normocalcemic and oligosymptomatic PHPT), as well as on the changes in bone turnover markers (in particular bone alkaline phosphatase, osteocalcin and vitamin D) within the framework of secondary hyperparathyroidism in terminal CKD and renal replacement therapy. These contributions are also mainly of an practical and confirmatory nature.

- Diabetes mellitus: the main contribution of Assoc. Prof. Siderova is in the assessment of the oncological risk in type 2 diabetes mellitus (which is increased per se), as well as in the course of the treatment of type 1 diabetes mellitus with insulin analogues. Attention is also paid to the possible protective role of metformin treatment. These are contributions of an important scientific and theoretical nature.

- Metabolic disorders in adrenal and gonadal pathology: as an important contribution I consider the pilot study of metabolic changes in men with androgen deprivation due to prostate cancer. In this case, it is an original and internationally significant contribution.

Scientific projects. Assoc. Prof. Dr. Mira Siderova, MD, has participated in 2 projects of the Science Fund at MU - Varna. She is a member of the European Thyroid Association (ETA), the International Osteoporosis Foundation (IOF), as well as the Bulgarian Society of Endocrinology, the Union of Scientists and the Bulgarian Academy of Medicine. She participates as an independent expert for scientific and ethical evaluation of projects at the European Research Council in Brussels. She is the supervisor of a total of 6 doctoral students in endocrinology - three active and three have already successfully defended their dissertations. She has received 2 ETA travel grants - 2011 and 2014, as well as a BDE award for a young endocrinologist in 2015.

Compliance with regulatory requirements. With the production presented in this way, Assoc. Prof. Mira Siderova covers and exceeds the required minimum scientometric requirements. She has collected 295 points for indicator B4 (habilitation work), and 647.6 points in total for indicators G5-G9 (with a minimum requirement of 200 points). There are also 345 points for indicator D10-12.

TEACHING ACTIVITIES. Assoc. Prof. Dr. Mira Siderova, MD, teaches at all levels of medical education – to 5th and 6th year medical students and students of pharmacy and medical cosmetics (Bulgarian and English-language education), to internal medicine and endocrinology residents. She also participates in various forms of classroom and extracurricular employment, basic and thematic courses. From 2008 to 2015, she was a part-time assistant, later - a full-time assistant, and since 2017 - an associate professor at the Second Department of Internal Medicine. In the academic year 2021/2022, she was assigned 184 hours of exercises, for 2022/2023 - 126 hours; in 2023/2024 - 231 hours, and in 2024/2025 - 291 hours (with a standard according to the decision of the AC of 110 hours). She conducts all forms of training - lectures, seminars and exercises. She participates in examination committees for students (semester and state exams), is the chairman of a committee for acquiring a narrow specialty. She has three doctoral students who have defended their dissertations. She is fluent in English, German, Greek and Russian. In conclusion, Dr. Mira Siderova, MD, meets the regulatory requirements for classroom and extracurricular employment and has repeatedly proven her pedagogical qualities and skills.

DIAGNOSTIC AND TREATMENT ACTIVITY. Assoc. Prof. Mira Siderova has a specialty and dissertation according to the nomenclature of the Ministry of Health for the field of the competition. She has acquired skills in many highly-specialized areas such as ultrasound examination of the thyroid gland and surface structures, FNA of cervical structures, clinical osteodensitometry and others. In the field of the thyroid gland, she has certificates for the highest possible level of qualification in our country. As a member, and for 3 years - as the head of the team of the Endocrinology Clinic of St. Marina University Hospital, she has developed master and leader skills, and teaches daily many of the aspects and methods currently available in our country in the diagnosis and treatment of diabetes mellitus, obesity, metabolic syndrome, thyroid diseases, bone metabolic pathology and other endocrine diseases. It should be emphasized again that at the present time Assoc. Prof. Mira Siderova is one of the Bulgarian thyroidologists with great potential for future development with contributions to maintaining modern and innovative diagnostic and therapeutic behavior. She will also be one of the drivers for the future development of endocrinology and internal medicine in our country.

Conclusion and final recommendation

All the above facts show the accordance of the achievements of Assoc. Prof. Dr. Mira Siderova with the qualitative and quantitative criteria for acquiring the academic position of "Professor". **I strongly recommend that the Scientific Jury's vote is a "YES" for awarding the academic position of "Professor" to Assoc. Prof. Dr. Mira Siderova, MD.**

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(Prof. Dr. Mihail Boyanov, MD)

