

REVIEW

**by Prof. Laura Stefanova Andreeva – Gurgurieva, PhD, DSc
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**Medical University – Faculty of Dental Medicine – Sofia,
regarding the competition for the academic position of "Professor",
announced in State Gazette, issue 101, dated November 29, 2024.**

**The competition has been announced for the needs of the Department of
Orthodontics – Faculty of Dental Medicine – Varna.
One candidate is participating in the competition – Associate Professor
Hristina Ivanova Arnautska, PhD**

Analysis of the Candidate's Career Profile

Assoc. Prof. Hristina Ivanova Arnautska was born on September 21, 1974. She completed her secondary education in Varna at the Third High School of Mathematics. She received her higher education at the Faculty of Dental Medicine – Sofia in 1999. After graduation, she began working at the First Dental Center Ltd. in Varna, where she remained until 2008, when she won a competition for the position of Assistant at the newly established Faculty of Dental Medicine in Varna. In parallel, from the time of her graduation to the present, she has also worked at a dental center with her own orthodontic practice.

I have known Assoc. Prof. Hristina Ivanova Arnautska since she was a student. I have witnessed her entire academic development. I have participated in the academic committees for the positions she has held. She is truly a brilliant asset to the Faculty of Dental Medicine – Varna, as she has developed her entire academic career solely within this young faculty. She has consistently progressed through the full hierarchy of academic positions – Assistant (2008), Senior Assistant (2014), and Administrative Assistant in Orthodontics at the Department of Prosthetic Dental Medicine – Faculty of Dental Medicine – Varna. Assoc. Prof. Hristina Ivanova Arnautska obtained her specialty in Orthodontics in 2006. In 2013, she successfully defended her dissertation titled *"Diagnosis and Prognosis of Canine Tooth Impaction,"* earning the educational and scientific degree of "Doctor" (PhD).

The development of Assoc. Prof. Arnautska's academic career is closely tied to the organization, implementation, and delivery of the full orthodontics

curriculum in the newly established faculty. Assoc. Prof. Hristina Arnautska began by teaching students across the entire core "Orthodontics" program, later expanding her teaching to include interns, and over the past 10 years – PhD students and orthodontic residents.

It is impossible not to highlight the characteristic diligence, enthusiasm, and dedication typical of pioneers, with which she single-handedly organized the educational process.

Alongside this, she never neglected her own professional development as an orthodontic specialist. This is evidenced by her participation in more than 50 professional training courses and the attainment of a second Master's degree in "Health Management."

General Overview of the Submitted Materials for the Competition

The candidate presents complete documentation, organized in both tabular and list format, for participation in the competition:

Publications prior to holding the academic position of "Associate Professor":

- Dissertation and abstract – **1 item**
- Actual publications in journals:
 - √ Conference proceedings and electronic editions – **32 items**
 - √ Educational manuals – **2 items**
- Participation with presentations and posters at national and international scientific forums – **11 items**
- Monograph: *"Diagnosis and Treatment Approaches in Eruption Disorders of Permanent Teeth"* – Varna, 2015

Publications after attaining the academic position of "Associate Professor":

- ☐ Actual publications in peer-reviewed journals: **9 items**
- ☐ Conference proceedings and electronic editions: **14 items**
- ☐ Full-text publications in scientific journals and proceedings, beyond the minimum scientometric requirements for the academic position of "Professor": **5 items**
- ☐ Participation with lectures, presentations, and posters at national and international scientific forums: **57 items**

□ **Monograph: "Postnatal Development of the Craniofacial Region and Prevention of Orthodontic Deformities"**

□ Citation index: 101 and h-index: 6

□ The total impact factor of the submitted publications is 3.11.

Evaluation of the Candidate's Scientific Work in the Context of Overall Academic Development

General Characteristics of the Scientific Output and Publication Activity –

Assoc. Prof. Arnautska's scientific interests are focused on challenges in diagnostics and prevention in orthodontics. I would group them as follows:

- Prevention and etiology of dentoalveolar and jaw deformities (DJD)
- Diagnosis of growth changes, their impact on the temporomandibular joint (TMJ), and their influence on the dentoalveolar complex
- Obstructive sleep apnea (OSA) and its implications in dental medicine
- The impact of posture on DJD
- Application of combined treatments: orthodontic–surgical and orthodontic–prosthetic approaches
- A particularly challenging field in orthodontics – orthodontic biomechanics – is a core scientific interest of Assoc. Prof. Arnautska

She is an active member of the International Biomechanics Club and serves as an international lecturer for the organization.

Scientific Activity – Dissemination and Application of the Candidate's Scientific and Practical Achievements within the Scientific Community

Assoc. Prof. Arnautska's scientific activity is evident through her numerous lectures presented at various scientific forums.

Her work can be grouped as follows:

1. Prevention and Etiology of Dentoalveolar and Jaw Deformities (DJD)

Assoc. Prof. Arnautska's scientific efforts are focused on the prevention and elimination of etiological factors leading to severe DJD. To this end, she studies and systematizes deviations in the growth and development of the facial region. The application of early treatment makes it possible to eliminate the causes that would otherwise aggravate the abnormal development of the orofacial system.

2. Interdisciplinary Clinical Approach

In her clinical practice, Assoc. Prof. Arnautska integrates the expertise of specialists in oral surgery, otorhinolaryngology, and prosthetic dental medicine. These collaborative teams enable a precise diagnostic and therapeutic approach to treating severe dentoalveolar and jaw deformities (DJD).

Her first monograph presented the team-based approach in the diagnosis, planning, and treatment of impacted and ankylosed primary and permanent teeth. As an orthodontist, Assoc. Prof. Arnautska studies anatomical cranial deviations and their effects on the temporomandibular joint (TMJ) and occlusion.

In recent years, a team of prosthodontists and orthodontists has conducted an in-depth study on the relationship between body posture and DJD. Additionally, a collaborative team of ENT specialists and orthodontists has been researching children with oral breathing. The aim of this study is to address this anatomical or functional issue early on, in order to prevent the development of the serious condition known as obstructive sleep apnea (OSA).

3. Orthodontic Biomechanics

The success of the treatment outcome is highly dependent on the understanding of biomechanical principles in orthodontics. Proper planning of orthodontic treatment and the elimination of harmful and undesirable tooth movements require a solid knowledge of physics and mathematics. The correct application of biomechanics in treatment planning and the design of orthodontic appliances allows for personalized treatment, which reduces the risk of root and bone resorption, prevents undesirable movements, and optimizes the duration of treatment.

Comprehensive Quality Assessment of Educational and Teaching Work

Assoc. Prof. Hristina Arnautska has progressively advanced through the full development of an academic and teaching career. The academic record shows her teaching the full lecture course in the core specialty – orthodontics, in both Bulgarian and English, instructing residents, and participating in semester and state exams. She is a member of the State Exam Committee for the specialty “Orthodontics.”

Assoc. Prof. Arnautska is the scientific advisor for 6 doctoral graduates. It is likely that her collaboration with these young colleagues has guided their focus towards challenging topics in orthodontics.

Overall Evaluation

I have known the candidate for the position of „ Professor“, Assoc. Prof. Hristina Arnautska, since she was a student. I have witnessed her overall development. As a reviewer of her dissertation, I highly appreciated the choice of topic and have observed its systematic development. I am pleased that my recommendation was followed, as the methodology for predicting the possibility of retention of the upper canines was included in an educational manual and is now taught to dental medicine students.

In her academic growth, Assoc. Prof. Hristina Arnautska has successfully navigated all stages of development and has excelled in her teaching responsibilities, contributing significantly to the advancement of the orthodontics department at the Faculty of Dental Medicine (FDM) – Varna, which ultimately grew into the Department of Orthodontics. She helped build the department by introducing and implementing the "Specialization Program in Orthodontics."

In addition to all her responsibilities as the Head of the Department, she has patiently and skillfully mentored all doctoral students within the department. I can only congratulate the Medical University and the Faculty of Dental Medicine – Varna, for having such young and capable orthodontists who have grown under her guidance.

Her most recent monograph, *"Postnatal Development of the Craniofacial Region and Prevention of Orthodontic Deformities,"* is the result of her many years of clinical work, the qualities of which I have highlighted in my review. Along with her scientific interests and teaching skills, Assoc. Prof. Hristina Arnautska possesses the necessary organizational qualities for the academic position of Professor.

I must also emphasize her moral qualities. As a person, she is attentive, diplomatic, and appreciative. As a colleague, she is caring, dedicated to her peers and patients, and an excellent orthodontic specialist.

Conclusion

After reviewing the materials presented by the candidate, Assoc. Prof. Hristina Arnautska, I believe that she MEETS the mandatory and specific conditions and scientometric criteria for the academic position of “PROFESSOR.”

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Sofia

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