

**UNIVERSITATEA TITU MAIORESCU BUCUREȘTI
ȘCOALA DOCTORALĂ
DOMENIUL MEDICINĂ DENTARĂ**



TEZĂ DE ABILITARE

**Tehnici moderne de reconstrucție osoasă și
reabilitare implantară în chirurgia dento-alveolară**

**CONF. UNIV. DR. ALEXANDRU BURCEA
Universitatea „Titu Maiorescu” București**

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ABSTRACT

The habilitation thesis reflects the evolution of my academic, clinical, and research activity following the completion of my doctoral studies in the field of dental medicine. My professional development has been focused on oral and dento-alveolar surgery and implant dentistry, areas characterized by rapid technological progress and strong interdisciplinary integration. The main objective of my work has been to combine clinical expertise with scientific research and academic teaching in order to improve therapeutic protocols and enhance the predictability of implant-supported treatments.

Since July 2022, I have been serving as Associate Professor at the Faculty of Dental Medicine of the Universitatea Titu Maiorescu in Bucharest, where I am actively involved in teaching, clinical practice, and research activities. My scientific activity is reflected in a Hirsch index (H-index) of 6 and in a growing body of publications in peer-reviewed journals indexed in international databases, including journals ranked in the Q1 and Q2 categories, with a cumulative impact factor of approximately 23.3.

My research portfolio includes a significant number of scientific publications addressing clinically relevant topics in implant dentistry, biomaterials, and reconstructive oral surgery. Several of these studies have been published in journals with recognized scientific impact, such as *Journal of Clinical Medicine*, *Biology*, *Medicina*, and *Materials*, reflecting a continuous commitment to evidence-based clinical practice and interdisciplinary collaboration.

One of the central research directions of my activity focuses on advanced implant surgery and regenerative procedures, including bone augmentation, sinus lift techniques, and staged surgical management of peri-implantitis. For example, the study entitled “*One-Stage Surgical Management of an Asymptomatic Maxillary Sinus Mucocele with Immediate Lateral Sinus Lift and Simultaneous Implant Placement*”, published in *Journal of Clinical Medicine* (Q1), demonstrates the feasibility and clinical effectiveness of complex surgical approaches combining sinus pathology management and implant placement in a single-stage procedure.

Another important research direction involves the use of modern biomaterials in implant-supported prosthetic rehabilitation, particularly materials based on polymethyl methacrylate (PMMA) and other advanced restorative materials.

These studies have contributed to the understanding of the biomechanical behavior and clinical performance of contemporary prosthetic materials used in implant dentistry.

My clinical activity has been closely integrated with research, allowing the management of a wide range of complex cases, including partially and completely edentulous patients requiring implant-supported rehabilitation, bone reconstruction procedures, and multidisciplinary treatment planning. This experience has supported the development of research projects aimed at improving treatment protocols and increasing long-term clinical success rates in implant therapy.

The scientific contributions presented in this habilitation thesis are structured around three major research directions developed after the completion of my doctoral studies:

- 1.1. *Implant surgery and peri-implant tissue regeneration*
- 1.2. *Implant-supported oral rehabilitation and immediate loading protocols*
- 1.3. *Biomaterials and prosthetic materials used in implant dentistry*

These research directions reflect the continuous evolution of implant dentistry and the need to develop safe, predictable, and evidence-based therapeutic approaches adapted to modern clinical practice.

The second, third, and fourth chapters of this thesis present the development of my academic career, professional activity, and future research perspectives. A central objective of my academic work is the consolidation of a modern educational and research framework in oral and implant surgery, based on interdisciplinary collaboration, clinical excellence, and continuous professional development.

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