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# The Relationship between Surfaces Coating and Biological, Mechanical and Clinical Behaviour

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### **Message from the Guest Editors**

Dear Colleagues,

This Special Issue is to investigate the dental materials, evaluating how different clinical/laboratorial parameters can influence the mechanical and biological characteristics of these materials.

- Theoretical and experimental research, knowledge, and new ideas on the evaluation of the modification of dental materials surfaces over time
- Recent developments in multi-functional organic, inorganic, and hybrid coatings
- Surface modifications produced by different processes, including, but not limiting to, additive and subtractive manufacturing processes, sandblasting, etching, thermal spray, laser and plasma processing, plating, etc.
- Mechanical evaluation of the surface's coating modification through dynamic loading and corrosion
- Biological and mechanical tests considering the interplay between the biological mechanical, chemical, and electrochemical interactions, and the ability to predict performance and/or reliability
- Analysis of the cytocompatibility and bioactive properties of different coating materials and coating morphology
- Computer modeling and simulation to predict coating properties, performance, durability, and reliability







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### Message from the Editorial Board

Now more than ever, research is called for to produce technologies and improve knowledge to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed at the center of most contemporary research. Surface science and engineering play a key role in this regard. Refining surfaces and their modifications provides new materials, architectures and processes with a huge potential to aid most societal challenges. Coatings is a well-established, peer-reviewed, online journal that focuses on the dissemination of publications in the field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers on the hottest topics.

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