



جامعة محمد بن راشد  
للطب والعلوم الصحية  
MOHAMMED BIN RASHID UNIVERSITY  
OF MEDICINE AND HEALTH SCIENCES

**Professor Theodore Eliades**  
University of Zurich, Switzerland

## HAMDAN BIN MOHAMMED COLLEGE OF DENTAL MEDICINE

### Orthodontic Materials and Orthodontic Treatment: The WHAT, WHEN, HOW and WHY of their use made simple

Theodore Eliades is Professor and Director of the Clinic of Orthodontics and Pediatric Dentistry, Director of Research, and Interim Director of the Institute of Oral Biology at the University of Zurich, Switzerland.

He qualified from the School of Dentistry, University of Athens, completed the Orthodontic Specialty and the Master of Science programs of the Ohio State University, and earned a Doctorate Degree from the University of Athens, and a PhD from the University of Manchester.

His research has generated 250 papers and chapters and he has edited 11 textbooks including "Eliades T, Brantley WA, eds. Orthodontic Applications of Biomaterials – A Clinical Guide. Cambridge, MA: Woodhead Publishing, Elsevier, 2017". He co-supervised more than 50 doctorates and Master's at the Universities of Athens, Thessaloniki, Marquette, Manchester, Bonn and Zurich.

He is an elected Fellow of the Institute of Materials, Minerals and Mining, and the first dentist who was awarded the Fellowship grade of membership from both, the Royal Society of Chemistry, and the Institute of Physics (UK).

Professor Eliades is Visiting Professor at King's College London, Editor-in-Chief of the Journal of Dental Biomechanics and Associate Editor of the European Journal of Orthodontics, the American Journal of Orthodontics and Dentofacial Orthopedics, and the Progress of Orthodontics.

He was the 2014 Northcroft Memorial lecturer for the British Orthodontic Society Conference, the 2015 Jan Taylor Visiting Lecturer of the Australian Foundation for Orthodontic Research and Education, and has been offered the 2018 Milton Sims Visiting Professorship at the University of Adelaide. Work under his supervision has won the Bengt Magnuson prize of the International Association of Pediatric Dentistry, the European Federation of Orthodontics award, 2 best poster prizes and 3 WJB Houston research poster awards of the European Orthodontic Society.

**Date:** Friday, 3rd November 2017

**Time:** 9:00 am to 5:00 pm

**Venue:** MBRU Auditorium  
Ground Floor  
Building 14  
Dubai Healthcare City  
Dubai, UAE

**CME: 5 hours**

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## Synopsis:

The course is structured around the following axes: structure/property foundational information about biomaterials used in Orthodontics, relevant properties and clinical effects of orthodontic alloys, bonding to enamel with resin adhesives, and orthodontic aligners.

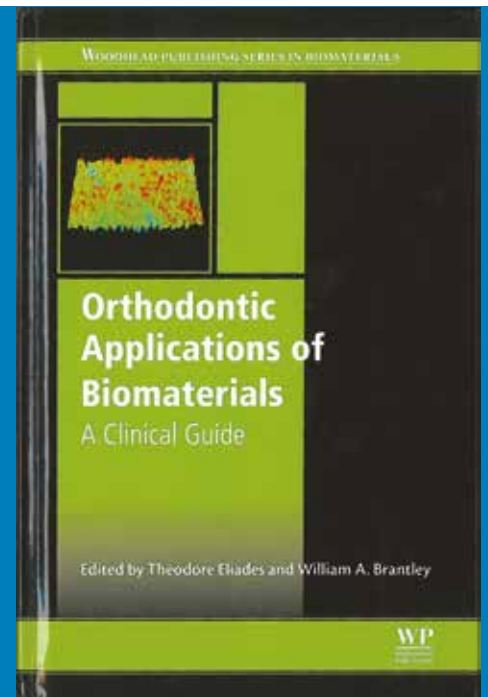
The participant is introduced to engineering aspects of materials, followed by presentations of the relationships among the composition, structure, morphology, and properties of specific orthodontic materials. The interactions of orthodontic materials with other dental materials and dental hard tissues in the oral cavity are also discussed. This approach enables both the resident and specialist to develop a background for rational material selection in order to furnish efficient orthodontic mechanics, to understand scientifically the interplay among the complex factors in the oral environment that profoundly affect the properties of materials, and to review knowledgeably the current issues in the literature of biocompatibility, cytotoxicity, and mutagenicity for both patients and operators posed by orthodontic materials.

The level of understanding of the clinician who has only received a few credit hours on the foregoing topics during undergraduate and postgraduate education cannot keep up with the pace of new polymeric, metallic, and ceramic orthodontic materials being introduced to the profession. Another important factor is the increasingly critical role of the orthodontic industry in education, which has sometimes been accompanied by unfavorable consequences dealing with the validity of evidence presented for products because of the potential conflict of interest with independent evidence-based results.

The objective of the course is to provide a thorough, concise, independent, and clinically oriented guide to the applications of materials in Orthodontics, targeting residents and clinicians who have a limited spectrum of knowledge in the field and wishes to comprehend the mechanisms and effects underlying their use. The course reviews the applications of biomaterials and their effects on the enamel preparation, bonding, bracket and archwire ligation, mechanotherapy, debonding, and long-term enamel structural, color and surface effects. It provides a step-by-step analysis of the phenomena occurring, their clinical importance, and their underlying causes, generally without complex mathematical or physicochemical analyses, with the goal of providing clinically relevant information.

**The new book "Orthodontic Applications of Biomaterials – A Clinical Guide" by T. Eliades and W.A. Brantley is a clinician-friendly textbook, which addresses the applications of biomaterials in the contemporary orthodontic practice. It provides the information, knowledge and evidence in order to maximize the benefits of using the great range of excellent materials in the most appropriate manner during the daily practice of orthodontics.**

Professor Athanasios E. Athanasiou  
American Journal of Orthodontics and Dentofacial Orthopedics, 2017



## Registration Fee (including coffee breaks and lunch)

For Participants

1,200.00 AED

For Students

700.00 AED

Contact: [reena.john@mbru.ac.ae](mailto:reena.john@mbru.ac.ae)

For online registration please visit: <http://Events.dhcc.ae>

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