



CURRICULUM VITAE ELIADES GEORGE

George Eliades graduated from the University of Athens, School of Dentistry in 1982 and earned his Doctoral Degree from the same University in 1985. He received his postgraduate education in Biomaterials at the University of California, Los Angeles (UCLA). For 12 years he served as Head of the Quality Control Laboratory of the Greek Notified Body for Medical Materials and Devices (EKEVYL). In 2000 he joined the University of Athens, School of Dentistry. Currently he is Professor, Director of the Department of Biomaterials. He has given more than 450 presentations at national and international conferences, has authored 210 papers in peer-review journals, 18 chapters in textbooks, and he is co-editor of three international books. He is a member of the editorial board of 4 international journals, reviewer in more than 30 international journals and member/fellow in many scientific societies and groups. His work has been honored with 11 international awards including the 2005 IADR Wilmer Souder Award, considered as the highest distinction in the field of dental materials. His research interests are focused on the characterization of interactions between material surfaces and tissues.

ABSTRACT RISK MANAGEMENT IN ADHESIVE RESTORATIVE DENTISTRY

Adhesion to dental hard tissues and restorative materials has been of fundamental importance for the clinical application of highly aesthetic restorations with a wide range of materials (resin composites, ceramics and ceramic hybrids). The diversity in the properties of these materials and the need to shorten the steps of adhesion protocols, have led to the development of simplified adhesive treatments. Nevertheless, many of these treatments were found to create new problems related to the interfacial strength, the setting capacity and the properties of adhesives and luting agents. Typical examples were the inadequate bonding to enamel of self-etch adhesives, the incompatibility of mild and strong self-etch adhesives with the self-curing mode of dual-cured materials, the low degree of conversion of many dual-cured self-adhesive cements and core build-up materials when not photopolymerized, the depth of cure limitations in several bulk-fill composites, the presence of polymerized silanols in many modern universal silane primers/adhesives, etc.

To solve most of these problems additional steps were advised transforming thus the modern “single-step” approaches to multistep ones, matching in several cases the original multistep materials. Despite these emerging issues associated with materials and procedures, the quality of the substrate and especially of the dental hard tissue

(hypoplastic, hypermineralized, cervical, root canal dentine) still remains a challenge for strong and durable adhesion, despite that several protocols introduced.