

MODULE 2 PRINCIPLES OF ADHESION

DR SALVATORE SAURO
Speaker

This course provides an in-depth understanding of the principles of adhesion and cementation for various aesthetic dental materials. Participants will explore the chemical and mechanical bonding mechanisms between aesthetic materials and tooth structure, as well as strategies to optimize long-term clinical outcomes. The course will cover key aspects of adhesive systems, preparation protocols, and the selection of appropriate cementation techniques for different restorative materials, including ceramics, composites, and hybrid materials. Emphasis will be placed on evidence-based approaches to achieve predictable, durable, and aesthetically pleasing restorations.















MODULE 2 PRINCIPLES OF ADHESION

DR SALVATORE SAURO
Speaker

About the speaker

Dr. Salvatore Sauro is currently a professor in dental biomaterials and minimally invasive dentistry at the "Departamento de Odontología, Facultad de Ciencias de la Salud, Universidad CEU-Cardenal Herrera", coordinator of the "Dental Research" and Director (Principal Investigator) of the research group "In Situ Dental Tissues Engineering and Minimally Invasive Therapeutic Adhesive Rehabilitation".

He is also visiting senior lecturer, at the Faculty of Dentistry, King's College London Dental Institute (KCLDI). Dr. Sauro has been working in dental biomaterials, adhesive, and minimally invasive dentistry research for more than 15 years (H-Index: 45) and he has published more than 190 articles in international peer-reviewed journals in the dental biomaterials/bioactivity field, along with several research abstracts and lectures in international conferences.















· Historical background about adhesion.

• Understand the Fundamentals of Adhesion:

- Explain the scientific principles of adhesion and their relevance to dentistry.
- Discuss the role of adhesive forces at the microscopic level in bonding to tooth structure.

Speaker

• Explore Tooth Structure Composition:

- Analyze the properties of enamel and dentin and their implications for bonding.
- o Identify challenges in adhesion to different substrates of the tooth structure.

Classify Adhesive Systems:

Learning Objectives

- Differentiate between etch-and-rinse, self-etch, and universal adhesive systems.
- Highlight the advantages and limitations of each system in clinical applications.

• Explain and illustrate the adhesion to different substrates, dental tissues, and to materials for indirect restoration:

 Identify the obstacles and challenges of adhesion to dentin and how to overcome.

Address Clinical Factors Affecting Adhesion:

- Discuss the impact of isolation, surface preparation, and contamination on bonding success.
- Review strategies to optimize clinical outcomes with adhesive materials.





Learning Objectives

DR SALVATORE SAURO

Speaker

Material-Specific Adhesion:

- Analyze the adhesive protocols for ceramic, composite, and hybrid aesthetic materials.
- Evaluate the factors influencing adhesive performance with different substrates.

Cementation of Indirect Restorations:

- Outline the steps for the proper cementation of indirect restorations, including veneers, inlays, onlays, and crowns.
- Discuss the role of surface treatments (etching, silanization, etc.) and their compatibility with cement types.

• Adhesion Challenges and Failures:

- Identify common challenges in adhesion and cementation and propose solutions.
- Review the clinical implications of adhesive failures and their prevention.

Integration with Clinical Workflow

- Demonstrate how to integrate adhesive protocols and cementation techniques seamlessly into daily practice.
- Highlight case selection and patient-specific considerations to ensure longterm success.

• Bridge Theory to Clinical Practice

- Analyze case studies to illustrate the practical application of adhesion principles.
- Encourage critical thinking for troubleshooting adhesion challenges in realworld scenarios.







MODULE 2 PRINCIPLES OF ADHESION

DR SALVATORE SAURO
Speaker

About the FDI Master CE Programme on aesthetic and adhesive dentistry

This comprehensive programme comprises five modules, each meticulously crafted to provide a blend of insightful lectures and hands-on training:

- Aesthetic Diagnosis & Analysis
- Principles of Adhesion
- Minimally Invasive & Preventive Aesthetic Treatment
- Direct Aesthetic Restorations
- Indirect Aesthetic Restorations



By participating, you will earn CE credits and receive a FDI certificate of participation for each completed module.

The course on Principles of Adhesion delivered by Dr. Sauro qualifies for:



FDI World Dental Federation is an ADA CERP Recognized Provider. ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by boards of dentistry.





