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Restorative Dentistry: Emerging Trends in CAD-CAM Biomaterials

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Message from the Guest Editors

Resin-based composites with dispersed fillers, polymer-infiltrated ceramic network materials (PICNs), glass ceramics, and oxide ceramics are gaining prominence in computer-aided design and computer-aided manufacturing (CAD-CAM) biomaterials for fabricating various dental restorations, including inlays, onlays, veneers, and crowns. While resin-based composites and PICNs offer improved machinability and increased resistance to edge chipping, ceramic materials possess high esthetic qualities, exceptional strength, or both.

Despite their benefits, challenges persist. To achieve strong bonding with CAD-CAM materials, these materials necessitate specialized surface pretreatments to enhance adhesion. There is an urgent need for in-depth research to better understand their adhesion properties and to develop methods for achieving durable bonding.

This Special Issue is dedicated to compiling and showcasing reviews and reports from clinical, in vitro, and in silico studies that stand out for their creativity, importance, and methodological rigor at an international level













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Message from the Editor-in-Chief

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