

**BM-I-1****SYNTHESIS AND CHARACTERIZATION OF HYBRID CERAMIC-POLYMER COATING FOR DENTAL APPLICATIONS**

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A novel hybrid polymer-ceramic coating was synthesized by using PMMA-PAAc copolymer and nanosized silica particles. The coating was applied to actual human molar teeth and tested against staining by coke soda and solutions of coffee and tobacco. The changes in color, indicative of the degree of chemical attack on the surface of the teeth, were minimal when this hybrid coating was used, especially when compared with blank (no-coated) samples and with teeth protected with commercial protective coatings (standard PMMA-based solutions).