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## Synthesis of miserite or wollastonite glass-ceramics for dental applications

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Glass-ceramics with special properties are suitable for application in dental implants. In this study, we synthesized glass-ceramics based on miserite or wollastonite system. The composition and heat treatment were studied for their effect on the formation of the crystalline phases and on the resulting mechanical properties, such as hardness, fracture toughness, and bending strength. Various colors in Vita shades were achieved by the addition of various metal oxides such as  $\text{Er}_2\text{O}_3$ ,  $\text{Fe}_2\text{O}_3$ , and  $\text{Mn}_2\text{O}_3$ .

### Biography

Jae Chul Bang has completed his PhD from Virginia Tech. He is the Professor of Soonchunhyang University in Korea and has been studying on ceramics for various applications.

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