Abstract: Aim: It is overwhelming and can be confusing knowing all the different nuances of materials and material processing systems. This article will cover what types of ceramics are available based on a classification of micro-structural components of the ceramic. A second, simpler classification system based on how the ceramics are processed will give the main guidelines for their use.

Abstract: At a micro structural level, we can define ceramics by the nature of their composition of glass-to-crystalline ratio: (1) Glass-Based Systems,( 2) Glass-Based Systems with Fillers(subdivided to 3 groups),( 3) Crystalline-Based Systems with Glass Fillers, and (4) Polycrystalline Solids. A more user friendly and simplistic ways to classify the ceramics used in dentistry is by how they are processed. In general, for dentistry they can be classified as: (1) powder/ liquid, glass-based systems; (2) machinable or pressable blocks of glass-based systems; and (3) CAD/CAM or slurry, die-processed mostly crystalline (alumina or zirconia) systems.

Conclusion: Ceramics can be classified in many ways. Two classification systems were given here to aid the reader in understanding types of ceramics available in dental use. Processing technique has a very large impact on strength and, thus, clinical performance and should be one of the primary considerations in choosing a material.