

“Sintering behaviours and microstructural developments in oxide and non-oxide ceramics”

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In this presentations, first basic understanding of sintering mechanisms in ceramic materials will be discussed and sintering behaviours of ceramics will be presented by choosing some examples such as Al_2O_3 , ZrO_2 , PSZ, AlN, Si_3N_4 and SiC- Si_3N_4 systems. Microstructural development will be given by considering the sintering temperatures, powder characteristics (powder size, composition, amount of additives).

Special attention will be given to Al_2O_3 -based and B₄C armour ceramics and their fracture behaviours in real testing conditions.