

THE EFFECT OF ADDITIVES ON THE MICROSTRUCTURE AND TRANSLUCENCY OF ALUMINA, J.C. Bressiani\*, L.A. Genova A.H.A. Bressiani, Energy and Nuclear Research Institute, CNEN, São Paulo, Brazil.

The effect of  $MgO$ ,  $La_2O_3$  and  $Y_2O_3$  additives on the microstructural and optical characteristics of alumina was studied. Samples were sintered in air at  $1650^{\circ}C$  for 30-240 minutes and the densification and grain growth, determined. The results were correlated with theoretical models proposed in the literature. The effect of sintering at  $1815^{\circ}C$ , under high vacuum, on in-line transmittance was also measured.