

# Enamel on ceramics

Vitreous ceramics are of great interest for various applications as they do not suffer from temperature changes. For domestic purposes, they are a well known materials for cooking plates. On these plates an enamel able to handle high temperatures is coated on the ceramic.

The coating process however is rather complex and possible problems may happen at the interface enamel/ceramic and then turn into poor adherence and cracking of the enamel.

GD has been successfully applied to the study of these materials and was able to provide a quick determination of good products from bad products (showing a Pb peak at the interface).

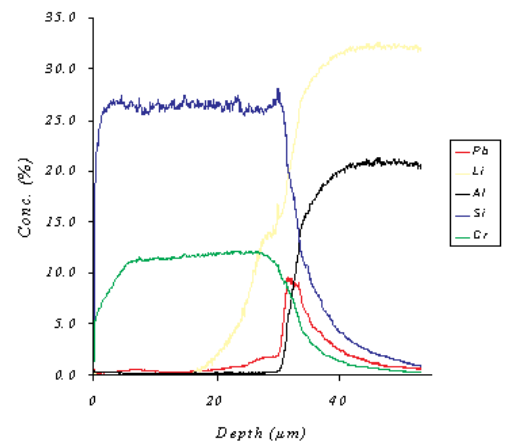
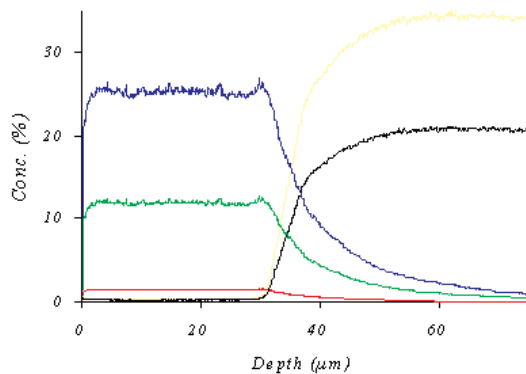


figure 1 and 2 : good and bad product. Note the thickness of the non conductive layers.

Key point : GD has been applied to the study of enamels on vitreous ceramics. This application was developed by Mr Beugnies at INISMA