

Imaging Process of ESCA

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The technique of ESCA (Electron Spectroscopy for Chemical Analysis), also known as XPS(X-ray Photoelectron Spectroscopy), is a well acceptwd techniqe which gives quantifiable elemental and chemical information. It can also analyse insulatators which are difficult to analyse with other techniques. The main concern with ESCA has been its lack of spatial resolution compared with other techniques such as AES and SIMS.

In this paper the methods by which various manufactures have addressed this issue will be surveyed. In particular, with better spatial resolution, manufacturers have ventured into ESCA imaging. The methods used for ESCA imaging or mapping, their advantages, limitations and what is in store for the future will be discussed.