

# **Auger & X-Ray Photo- Electron Spectroscopy**

Peer Zalm  
Materials Analysis Dept.  
Philips Nat. Lab.

In this presentation I will first summarise the most important characteristics of Auger Electron Spectroscopy (AES) and X-Ray Photoelectron Spectroscopy (XPS). Both are extremely surface sensitive (probe depth < 10nm) analytical techniques with modest detection limits (> 0.1 at%). It will be made clear what the main similarities, differences and (dis-)advantages of both techniques are. Emphasis will be placed on quantification.

In the second part, a number of applications (on EUV mirrors, poly-LED, automotive lamps, fluorescent lamps and car bumpers) will be presented. These more or less convincingly demonstrate the peculiarities of each technique and their level of exchangeability.