Contribution ID: **137** Type: **Invited Paper**

(Invited) Position Sensitive Detectors in Security Imaging

Thursday 11 September 2014 11:00 (40 minutes)

Both one-dimensional and two-dimensional position sensitive detectors are deployed widely for creating X-ray images in the security inspection industry. The majority of these sensors are based on scintillation detectors with photodiode readout. However, the constraints in image quality, allowable dose to the object, the need for quantitative inspection and control over manufactured cost lead to a careful optimization of detector design for every application. The design of position sensitive detectors for low energy X-ray (< 300 keV), high energy X-ray (> 1 MeV) and Compton scatter based X-ray imaging systems are reviewed and example detector configuration and associated images are presented.

Primary author: Dr MORTON, Edward (Chief Technical Officer, Rapiscan Systems, USA)

Presenter: Dr MORTON, Edward (Chief Technical Officer, Rapiscan Systems, USA)

Session Classification: Session 12: Applied Radiation Imaging

Track Classification: Applications in Security and Environmental Imaging