



Challenges in Enabling Multiple Feedback & Feedforward Loops for Advanced Patterning Control

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The talk covers Industry 4.0 aspects of metrology challenges in advanced patterning. The talk will address why challenges in control of coming technology nodes are not just tighter but more intertwined. Hence, a new demand for deconvolving intertwined tight control loops will be presented. The speaker proposes the driving force behind this new trend is EPE (Edge Placement Error) budgets expanding from Photolithography field level overlay issues to wafer level signatures induced by process tools. The talk provides a data driven overview on how well current feedback metrology work-horses: Overlay, CDU tools, and OCD, address these challenges. And as a closing statement derives an industry need for a technology that can measure fast overlay and CDU – to enable multiple patterning control feedback and feedforward loops.