

SESSION 5a: OPERATIONS

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So, you found a novel way to utilize compound semiconductors to create that killer new product. You have manufacturing plans underway and have customers knocking on your doors. It would seem everything is falling into place. However, your challenges are just beginning. This section titled Operations explores a few of the many challenges facing the typical manufacturing sites. How do we stay the leader, reduce costs, meet environmental regulations and continuously improve?

In the first presentation, representatives from MAX International Engineering Group outline the benchmarking process used to evaluate and select a Manufacturing Execution System (MES) for a semiconductor Fab. How do you begin to replace a legacy MES system? What are your options, needs and potential benefits? Navigating a change of this magnitude and impact can be daunting. The authors of this paper review the techniques used while assisting a client in this arduous endeavor.

Our second paper in the session is presented by members of the Gallium Arsenide Industry Team (GAIT). Anyone with a significant stake in the future of gallium arsenide will want to be present for this discussion. Their presentation expands upon potential regulatory classifications for gallium arsenide, their efforts to shape these key judgments and how each of us may be affected by the potential outcomes.

Next, our session moves to conservation, raw materials efficiency and reclaim activities at Freiburger Compound Materials. They discuss efforts to reduce waste and to reduce the environmental impacts of their substrate manufacturing process. The methods used and lessons learned can help us all be better environmental stewards while improving our cost competitive position.

Our last presentation addresses the benefits for employee involvement from the important perspective of the operator. Although the most technical education is concentrated within the engineering and management groups, the most practical experience processing wafers, running equipment, and observing nuanced quality interactions often exists in the production workforce. But why is it their input is sometimes overlooked or disregarded when they have so much to offer? Representatives from the production operations and engineering groups team up from TriQuint Semiconductor to call attention to the challenges and opportunities available from total employee involvement.