

MASM Keynote

Chair: Jesus A. Jimenez (Texas State University-San Marcos)

Impacts of Imminent Changes in the Semiconductor Industry / Julian Richards (SEMATECH)



One of the most critical issues facing the semiconductor industry today is the fact that the cost per transistor is increasing for the first time in decades. The semiconductor industry has several current or near-term transitions, which can be characterized as industry inflection points. Those inflection points are being driven by both technology transition issues (e.g. 450nm, EUV, 3D transistors) and industry consolidation. We will review some of the key aspects and concerns of these industry inflections. There is a continued drive for fabs to become more efficient, faster and more agile and we will highlight some of the areas where modeling will be utilized to implement smarter decision-making software tools for manufacturing.

Presenter Biography:

Julian Richards is a Project Manager at Sematech in Albany NY, in the Manufacturing Program. He has responsibility for chairing the Manufacturing Methods Council (MMC) for the Sematech member companies, which brings together the fab managers and IE's to exchange ideas to improve cycle-time, output and costs. Julian also leads various semiconductor equipment productivity forums and related improvement projects.

Julian joined Sematech three years ago after 5 years with Bridge Semiconductor Corporation, where he held the role of VP of Engineering and Manufacturing, leading the development of a low-cost infrared sensor and camera system for volume applications. Prior to joining Bridge, Julian was at Princeton Lightwave Inc. in New Jersey as Manufacturing Director and before that, was Director of Operations at Nortel Networks in Ottawa. Julian began his career as a fab process engineer and spent over 15 years in various fab engineering roles at Nortel and Plessey Semiconductors before moving into leadership roles.

Julian received a bachelor's degree with honors in Materials Science from Brunel University of West London. He is also a certified six sigma black belt