

# SESSION VII

Processing III

*Chair: Greg Fung, Watkins-Johnson*

As we seek to emulate the manufacturing success of the silicon world, anneal and activation stand out as unique challenges to the GaAs process engineers. Instability of GaAs at high temperatures and infrared transparency lead to inherent annealing difficulties, while its amphoteric nature complicates activation. The GaAs industry has not fully accepted a standard anneal technique, as both RTP and furnace are still employed. Three papers will be presented in this session. The first will describe uniformity improvements with proper susceptor selection in the RTP. The second discusses factors influencing Silicon Nitride fracturing and delamination in GaAs devices. Finally, we will conclude with a paper from Sumitomo Electric describing the reduction in wafer sliplines to ensure the quality of subsequent lithography registration.