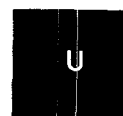


# **Session U**

## **Solid-State Devices and Circuits: Non-FET I**

**Chairman:**

**B. Bayraktaruglu**  
North Carolina State University  
NC



This session includes papers describing progress in the analysis of heterojunction bipolar transistor (HBT) properties and on-wafer millimeter wave measurement techniques for GaAs Schottky diodes. Specifically, papers address HBT oscillator noise characterization through  $1/f$  noise and noise upconversion studies, temperature dependence of HBT DC currents, and direct calculation of HBT equivalent circuits. Also included is reliability comparison of HBTs using beryllium and carbon doped base layers. Finally, an on-wafer measurement and modeling technique is described for millimeter wave GaAs Schottky diodes.

**1:00 p.m.-2:20 p.m., Wednesday, June 3, 1992**  
**Kiva Auditorium**