

# **Session X:**

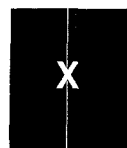
## **Monolithic Integrated Circuits: 2**

**Chairman: Fazal Ali**

Pacific Monolithics  
Sunnyvale, CA

This session consists of six papers on various MMIC functional blocks ranging in frequency from 100 MHz to 100 GHz. These papers demonstrate significant advances in device technology and design techniques for wideband amplifiers, non-linear mixers and control component applications.

The first two papers are on monolithic mixers covering L-Band and Q-Band, respectively. The third paper presents the state-of-the-art results at 90 GHz for an amplifier with 7 dB gain. The fourth paper in the session discusses the design and application of bi-directional MMIC amplifiers. The fifth paper reports a unique feedforward technique with significant intercept point improvement for a 6–18 GHz MMIC amplifier. The last paper in the session presents a low loss monolithic PIN diode 5-bit phase shifter.



**3:30 p.m.–5:00 p.m., Wednesday, May 9, 1990**  
**West Ballroom A, B**