

# **Session FF:**

## **FET Devices and Circuits**

**Chairman: Edward C. Niehenke**

Westinghouse ESG  
Baltimore, MD

**FF**

Major advances have been made in FET devices and circuits. P wells have been introduced in FETs which have resulted in improved back-gating, reduced short channel effects, and smaller variations in pinch off voltage spread. A novel pulse-doped MESFET has been developed for MMIC applications with excellent RF performance and quite uniform and reproducible device characteristics. InP HEMT amplifier in MMIC form has been developed which exhibits 10 dBm gain from 2 to 30 GHz. A 2-way power splitter has been realized using bridged-T low pass filter active networks operational from 0.5 to 26.5 GHz. Finally a 2-18 GHz wide detector logarithmic video amplifier has been developed with 65 dB dynamic range.

**10:00 a.m.-11:30 a.m., Thursday, May 10, 1990**  
**West Ballroom A, B**