

Message from the MMWMC Chairman



Welcome to the 1993 IEEE Microwave and Millimeter Wave Monolithic Circuits Symposium. Together with the MTT-S International Microwave Symposium, we have put together a strong technical program with excellent papers, as well as many social activities in the wonderful city of Atlanta, Georgia.

The monolithic microwave circuits industry is experiencing a major transition from a traditional defense oriented business to a mixed defense/commercial business. There are several challenges that have arisen in the transition period. First, global defense spending is dropping sharply before many of the expected commercial applications have yet reached the marketplace. Second, it is difficult and time-consuming to change mindsets and administrative systems from defense to commercial business. For example, while defense-related products can easily take 5 to 10 years to reach full production, commercial products may pass through several complete life cycles in that time. These challenges are compounded by the fact that many major corporations are reducing R&D spending because of the worldwide economic recession.

Despite these challenges, it is clear that in the 1990's and beyond, monolithic microwave integrated circuits will be an integral part of our daily lives. Potential applications abound in areas including communications (such as personal communication and computer network), transportation (such as collision avoidance and intelligent highways), and entertainment (such as direct broadcast TV). It will be important to continue improving the affordability and availability of monolithic circuits, and continued technical innovations and breakthroughs will be essential to the industry's long-term success.

Government, industry, and academia all have a role to play in realizing the promise of MMIC technology, and the contributions of each sector are reflected in this year's technical program. Government initiatives are increasing the investment in innovative R&D and low-cost manufacturing techniques for both defense and commercial use. Industry efforts include both evolutionary, product-related developments and more revolutionary technical break-throughs. Academic work is focused on new concepts and phenomena. Through the continued cooperation of government, industry, and academia, our challenges can be met successfully and monolithic microwave integrated circuits will make a major contribution to the quality of life in the years to come.

Ho Huang
1993 IEEE MMWMC Symposium
General Chairman