I’d like to join the two Johns who are co-chairing this event in welcoming you to Georgia Tech and to our Global Learning and Conference Center. We are honored to be the hosts for the 5th Topical Meeting on Silicon Monolithic Integrated Circuits.

Georgia Tech is one of the nation’s premier research universities with about $425 million in research expenditures last year. We have 1,700 miles of fiberoptic cable on our campus, which puts us pretty high on the list of the nation’s most wired campuses. But we also rank high on the list of the nation’s most wireless campuses. We offer what we call “computing on the LAWN,” in which LAWN stands local area wireless networks. But our students are well aware of the other definition of the word “lawn” and when the weather is nice you will find them outside under a tree surfing the Net.

When Georgia Tech first opened its doors back in the 1880s, the only major we offered was mechanical engineering, but electrical engineering was soon added as the second degree to be offered. Today the School of Electrical and Computer Engineering has 115 faculty and 2,800 students. It is the largest school in our College of Engineering, which in turn is the largest of Georgia Tech’s six colleges.

The School is recognized worldwide for its research and education programs. It conducts more than $37 million in research a year and directs 16 major interdisciplinary research centers. Its research endeavors include work on silicon monolithic integrated circuits, and between the two of them, the co-chairs of this meeting pretty much have that topic covered. They work with faculty groups in microelectronics and microsystems, electromagnetics, and electronic design and applications.

Both of these professors are also involved with major microelectronics and telecommunications research centers housed here on the Georgia Tech campus. John Cressler is affiliated with the Georgia Electronic Design Center, which is broadly focused on research and innovation at the intersection of telecommunications with microelectronics and analog/RF. Its research is conducted by close to 400 faculty and students, primarily from Georgia Tech but also from Georgia State University and Southern Polytechnic State University, and it is supported by three dozen corporate partners as well as state and federal governments.

Georgia Tech is also home to the National Science Foundation Center of Excellence in Microelectronics Packaging, and later this month we will celebrate the 10th anniversary of this national center of excellence. The Microelectronics Packaging Research Center has 50 corporate partners, and many of them have researchers here on our campus. It is the largest university-based center to focus on next-generation system-level packaging of microelectronics, and it pioneered a new paradigm – “system-on-a-package,” as opposed to “system-on-a-chip,” which was where industry was focused at the time the center was created.
If you remember, Gordon Moore, who co-founded Intel, noticed back in 1965 that the number of transistors per square inch on integrated circuits was doubling every year. That observation grew into Moore’s law, and although the time frame was stretched to 18 months, it has held for 40 years. System-on-a-package is an effort to extend Moore’s law to system integration by combining the best of on-chip integration with the best of package integration.

Georgia Tech is also the home of GCATT – the Georgia Center for Advanced Telecommunications Technology – which is a partnership of industry, government, and Georgia’s leading research universities to work on the latest applications for networking, content processing, and system solutions. The director of GCATT, Nikil Jayant, is also a professor in the School of Electrical and Computer Engineering, and many of the faculty from the School are involved in research at GCATT.

The GCATT project that has attracted the most publicity is what we call the Aware Home – a prototype house where Georgia Tech researchers are developing and testing a wide range of communication technology that many of us will incorporate into our own homes in the future.

While you are here hope you will take advantage of the opportunity to visit some of these centers. The Georgia Electronic Design Center is located right across the street from here. The NSF Center of Excellence in Microelectronic Packaging is at the School of Electrical and Computer Engineering in the central part of our campus. And GCATT is a few blocks north of here on 14th Street.

Again, welcome to Georgia Tech. We are proud and honored to be your hosts, and we join you in looking forward to a wonderful program packed with technical sessions and poster paper presentations.