

MICROSYSTEMS TECHNOLOGY LABORATORIES

The Microsystems Technology Laboratories (MTL) (<https://www.mtl.mit.edu>) is predicated on the notion that microelectronics, enabled by nanoscale science and technology, can help solve some of the world's greatest problems in areas of energy, communications, water, health, information, and transportation, among others.

In this regard, MTL's mission is to foster world-class research, education, and innovation at the nanoscale. In all these and other important areas of human concern, researchers in MTL are carrying out fundamental research and engineering in materials, structures, devices, circuits, and systems using MIT's nano fabrication facilities and Computer-Aided Design (CAD) services, in search of fresh and effective solutions to persistent problems.

MTL's activities encompass integrated circuits, systems, electronic, and photonic devices, MEMS, bio-MEMS, molecular devices, nanotechnology, sensors, and actuators, to name a few. The range of materials continues to expand well beyond Si and Ge to include III-V compound semiconductors, nitride semiconductors, graphene, and other 2D materials, polymers, glass, organics, and many others.

MTL manages an information technology infrastructure that supports state-of-the-art CAD tools and process design kits for device, circuit, and system design. Together with a set of relationships with major semiconductor manufacturers, MTL makes available to its community some of the most advanced commercial integrated circuit fabrication processes in the world today.

For information regarding MTL programs and other general information, contact Charles Hsu, Consortium Manager, 617-253-0573.