

MATERIALS RESEARCH LABORATORY

The Materials Research Laboratory (MRL) (<https://mrl.mit.edu>) provides a unified nexus for interactions among materials researchers within MIT, and a portal for external interactions of the community with industry, government, and other academic institutions.

The MRL enables the broad materials science and engineering community at MIT to conduct research that benefits society, helps companies and federal agencies address fundamental challenges, creates opportunities for technology transfer and practical engineering applications, and encourages collaboration through interdisciplinary research groups, shared experimental facilities, and educational outreach programs.

The MRL encompasses research on energy conversion and storage, quantum materials, spintronics, photonics, metals, integrated microsystems, materials sustainability, solid-state ionics, complex oxide electronic properties, biogels, and functional fibers. These are all interdisciplinary topics in materials. Each plays a critical role with the focus on scientific discovery, and how to design and make materials that lead to systems that have improved performance or that enable new approaches to existing problems.

The MRL also encourages exchanges between academia and industry with visiting scientists and adjunct faculty appointments, industrial internships, and educational opportunities. The MRL sponsors a yearly workshop each fall, involving both students and faculty during its Materials Day symposium and poster session.

Each year for nine weeks during the summer, the MRL sponsors a research internship program, inviting outstanding undergraduate students nationwide to participate in ongoing MIT materials research. The program has brought hundreds of the best science and engineering undergraduates from across the country to conduct graduate-level materials research. Students can select from a wide array of projects available.

For more information about the Materials Research Laboratory, contact Mark Beals (mbeals@mit.edu), associate director, 617-253-2129. For more information about the summer scholars program (<https://mrl.mit.edu>), (<https://mrl.mit.edu>) please visit our website.