

UCSB

# The Innovation Engine for New Materials



Widely recognized as one of the top materials research facilities in the world, the MRL serves as the innovation engine for discoveries in new materials.

The facility is home to a scientific and engineering community that creates new collective knowledge and the next generation of scientific leaders. By enabling modern technological advances, the high-impact research

being conducted at the MRL, and its affiliated centers has enormous societal impact, and is shaping the future of technology, the environment, and medicine.

## HIGHLIGHTS . . .



The UCSB MRL is a founding member of the Materials Research Facilities Network (MRFN), a nationwide partnership of NSF supported materials centers.

The UCSB MRL has been helping to understand the creation and formation of novel materials functionality at the interfaces between distinct forms of matter.



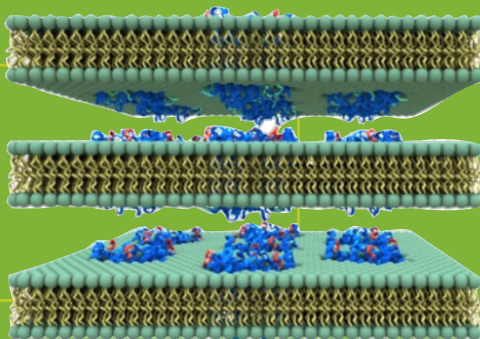
University of California, Santa Barbara

DIRECTOR: Craig Hawker  
[www.mrl.ucsb.edu](http://www.mrl.ucsb.edu)

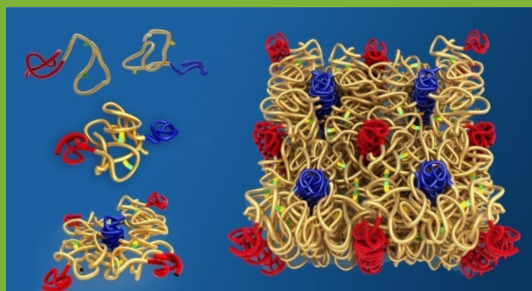


## RESEARCH FUNDAMENTALS . . .

Understanding structure - property relations between synthetic, biomimetic building blocks, and complex functional materials.

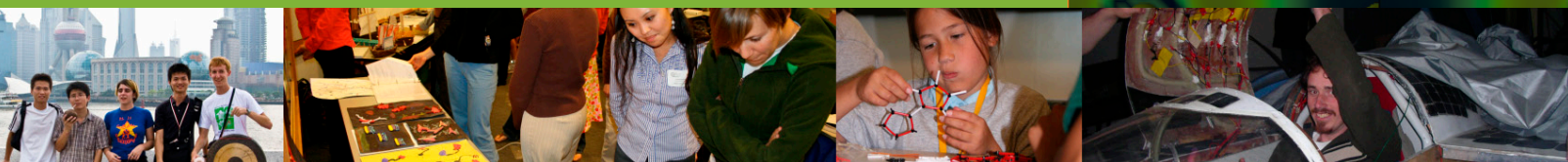


Developing the fundamental knowledge that enables the creation of polymeric high internal phase emulsions and related novel soft material structures using conventional polymer processing.



The MRL research efforts are built on a set of core philosophies — all MRL programs are synergistic, continually evolving and focus on problems and opportunities of a scope and complexity that requires the advantages of scale and interdisciplinarity. These programs are backed by a strong focus on facilities support and the development of a vibrant research community. //

Craig Hawker, Director  
MRL



## MRL OFFERS DIVERSE EDUCATION AND PARTNERSHIPS...

- **Research Interns in Science and Engineering (RISE):** Students from UCSB and other colleges and universities around the country pursue research projects under the supervision of MRL faculty.
- **Cooperative International Science and Engineering Internships:** US undergraduate science and engineering majors participate in 10-week summer internships at our international partner institutions.
- **UCSB ScienceLine: "Ask-a-Scientist"** Internet project links UCSB researchers with K-12 schools.
- **RET - Research Experience for Teachers:** Secondary school teachers participate in laboratory research, under the mentorship of researchers.

# OUTREACH

More information about the workshops, internships, partnerships, and educational opportunities are available at:  
[www.mrl.ucsb.edu/mrl/outreach](http://www.mrl.ucsb.edu/mrl/outreach)

