

# INSTITUTE FOR MATERIALS DISCOVERY AND DESIGN

**WE DISCOVER  
DESIGN AND  
CHARACTERIZE  
ADVANCED  
MATERIALS  
HUMANITY  
NEEDS**

## **ENERGY MATERIALS**

High-endurance solar cell, fuel cell and battery materials and devices.

Biofuels, solar fuels, and sustainable energy conversion materials.

Membranes, electrocatalysts and photocatalysts.

## **ELECTRONIC MATERIALS**

Quantum materials for quantum sensing, communication and computation.

Materials for 5G/6G communications and 3D integration.

Lasers and next-generation optical and display materials.

## **BIO-INSPIRED MATERIALS**

Therapeutic nanoparticles, small molecules, and proteins.

Bio-inspired and bio-based materials.

3D-printed medical implants; and biomedical devices.

“The first big win for the Institute is the \$18 million NSF grant funding a Materials Research Science and Engineering Center (MRSEC) at UC San Diego. This MRSEC capitalizes on three specific strengths at UC San Diego—our leadership in materials science, our leadership in the life sciences and our position as a national resource in high performance computing.”

— Michael Sailor, Ph.D,  
 Director, Institute for Materials Discovery and Design  
 Director, Materials Research Science and Engineering Center



**Chemistry and Biochemistry**

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**Electrical and Computer Engineering**

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**Mechanical and Aerospace Engineering**

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 Olivia Graeve  
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**Molecular Biology**

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**NanoEngineering**

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**Structural Engineering**

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**BENEFITS OF PARTNERSHIP**

- Industry-faculty-student research teams
- Recruit our top students
- Collaborate one-on-one with faculty
- Embed a visiting Industry Fellow in our labs
- Research Reviews
- Fast-track research agreements
- Access to commercialization engine with lab-to-market focus

**JOIN US.**

**LEADERSHIP**

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