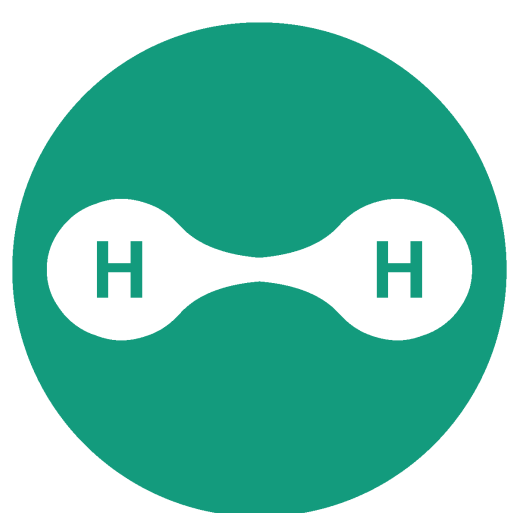


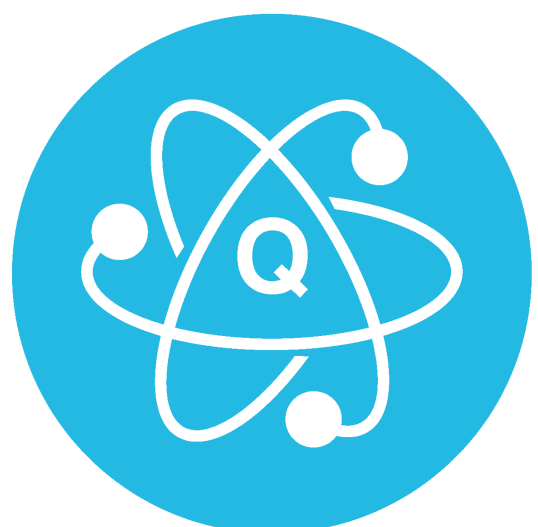
# Fraunhofer-Gesellschaft

The Fraunhofer-Gesellschaft, based in Germany and founded in 1949, is the world's leading applied research organization. By prioritizing key technologies for the future and commercializing its findings in business and industry, it plays a major role in the innovation process. A trailblazer and trendsetter in innovative developments and research excellence, it is helping shape our society and our future.

## Strategic Research Areas



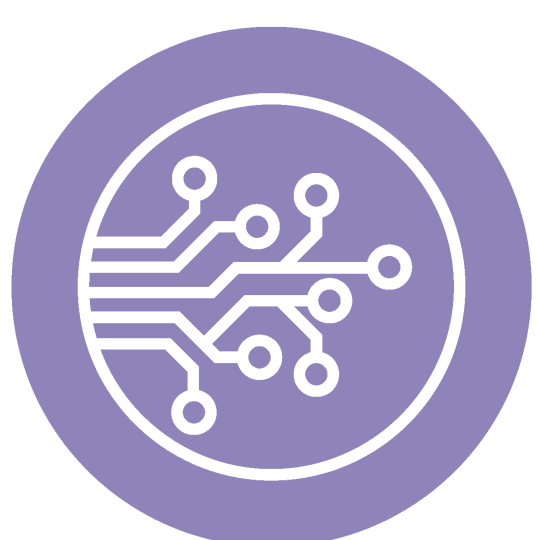
Hydrogen Technologies



Quantum Technologies



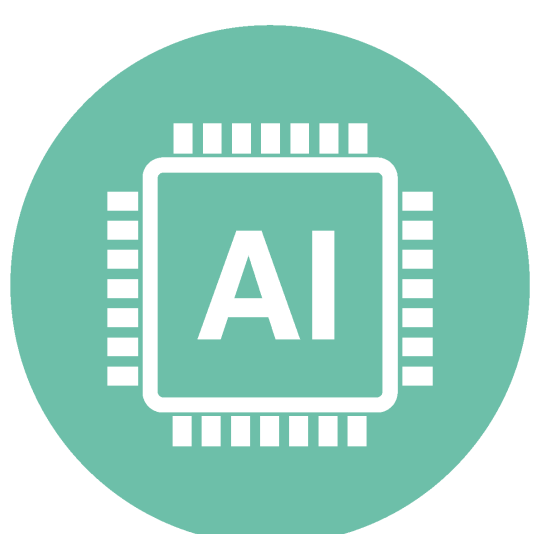
Resource Efficiency and  
Climate Technologies



Next Generation  
Computing



Intelligent Medicine



Artificial Intelligence

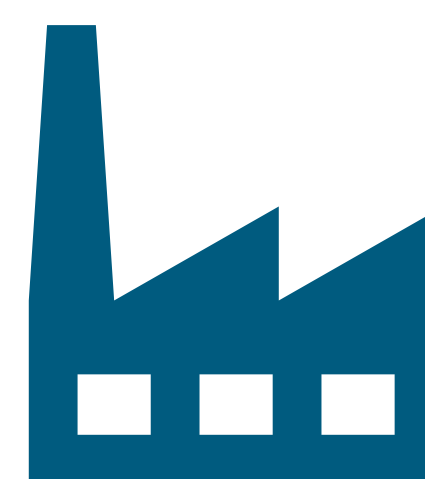


Bioeconomy

Over **7,600**  
active patent families



Over **6,200**  
customers from the private  
sector



Over **75** institutes



Over **30,000**  
employees



**2** patent  
applications every work



**2.5 billion**  
euros (2.7 billion US dollars)  
of revenue from contract  
research each year

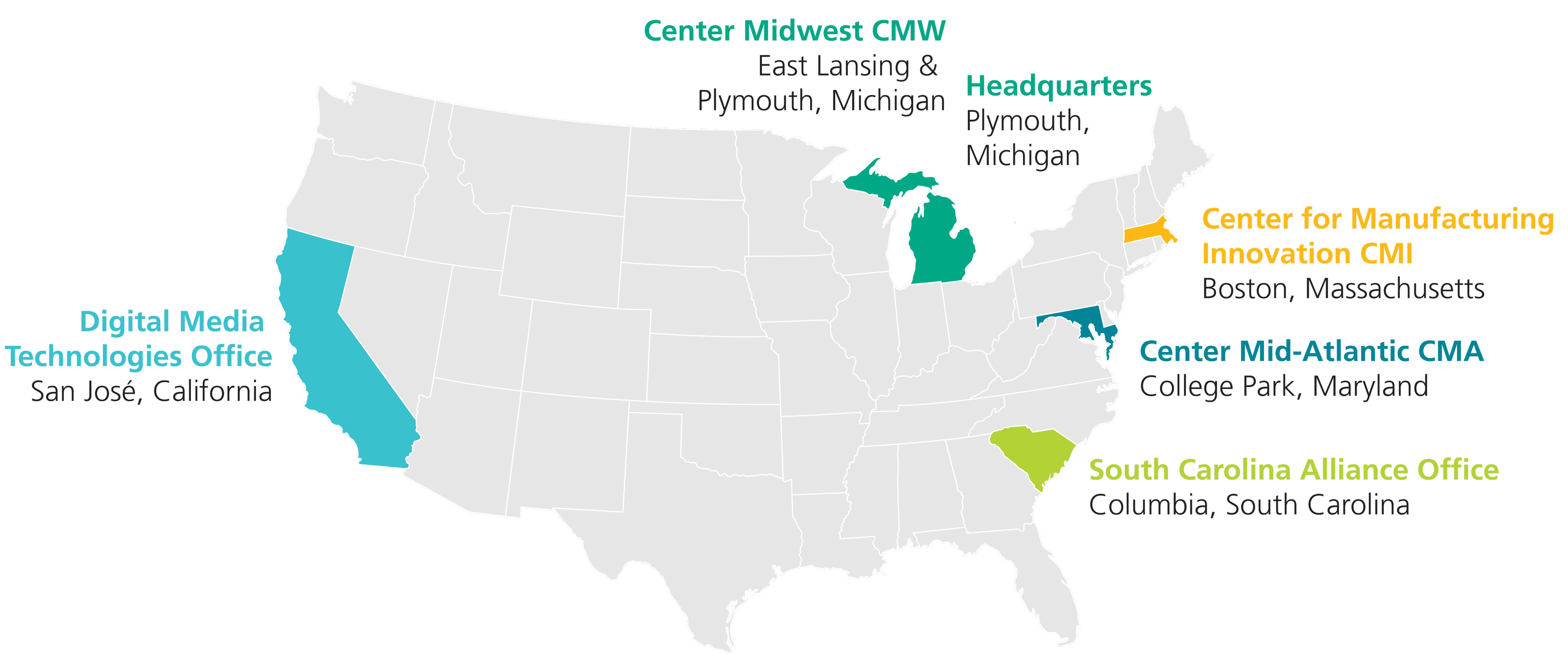


Fraunhofer-Gesellschaft is a recognized non-profit organization named after Joseph von Fraunhofer (1787-1826), a researcher, inventor, and entrepreneur, who continues to be our role model and inspiration.



# Fraunhofer USA

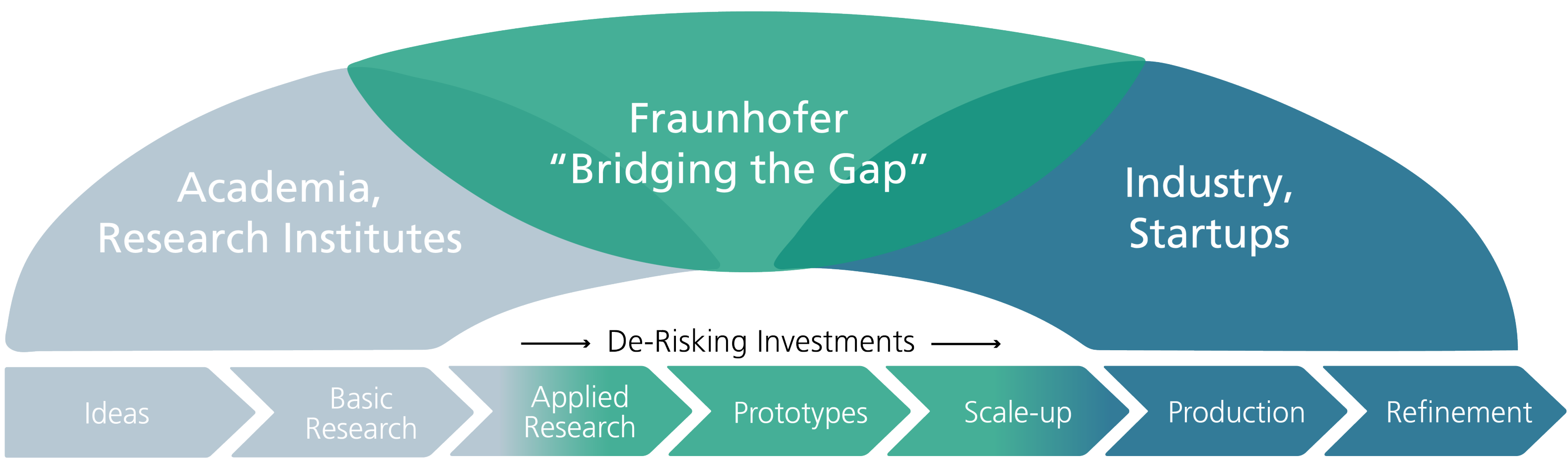
As Fraunhofer USA has been in operation for over a quarter century, it can not only draw on those years of experience here in the US, but also on over 70 Years of expertise from the key cooperation partner, Fraunhofer-Gesellschaft. With this pool of expertise, the name “Fraunhofer” is synonymous with all current topics of applied research, such as Industry 4.0 and Cyber-Physical Systems.



<b>Headquarters</b> Plymouth, MI	<b>Center Midwest CMW</b> East Lansing & Plymouth, Michigan	<b>Center for Manufacturing Innovation CMI</b> Boston, MA	<b>Center Mid-Atlantic CMA</b> College Park, MD	<b>South Carolina Alliance Office</b> Columbia, South Carolina	<b>Digital Media Technologies Office</b> San José, California
	- Surface Engineering - Additive Manufacturing	- Industrial Automation - Energy & Grid Technology - Biomedical Engineering	- Software Systems Engineering - Artificial Intelligence		

Fraunhofer USA, Inc. is an R&D organization working with industry, universities, state, and federal governments on contract research projects.

We are in the high-tech problem-solving business. We utilize our world class scientific and engineering expertise to respond to technical problems, design and develop prototypes, and develop and proof the manufacturing processes. Our work bridges the gap between basic and industrial research.

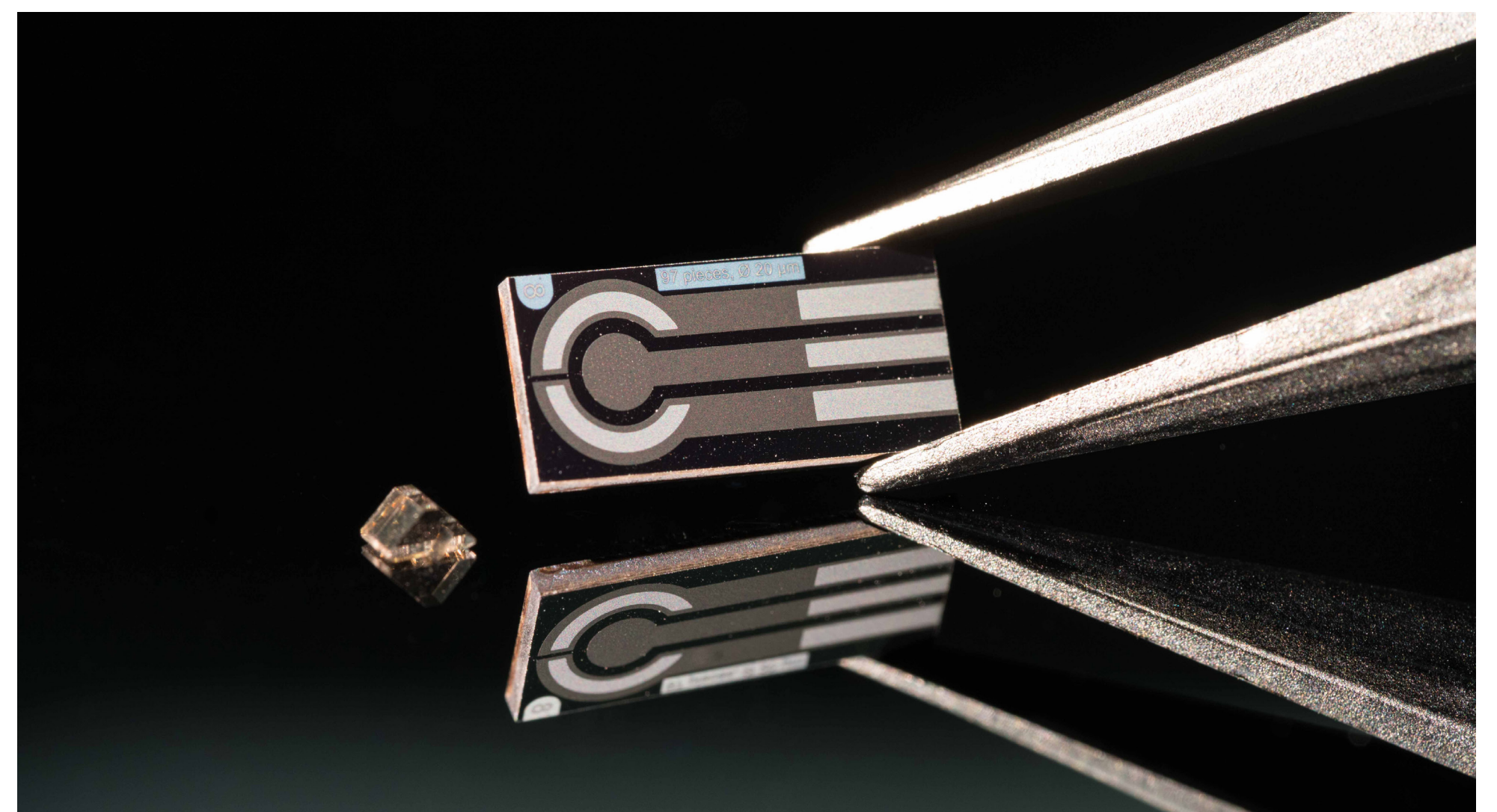


# Center Midwest

Fraunhofer USA's Center Midwest (Fraunhofer USA CMW) combines a broad range of material development and processing capabilities within its two Michigan based locations. The Coatings and Diamond Technologies Division located in East Lansing develops innovative solutions for thin film and diamond applications. The Laser Applications Division, located in Plymouth offers process solutions ranging from micro to macro scale.

## DIAMOND TECHNOLOGIES

- Power Electronic Devices
- R.F. Electronic Devices
- Thermal Management
- Particle Detectors
- Electrochemical Sensors
- Synthesis Systems
- Quantum Systems

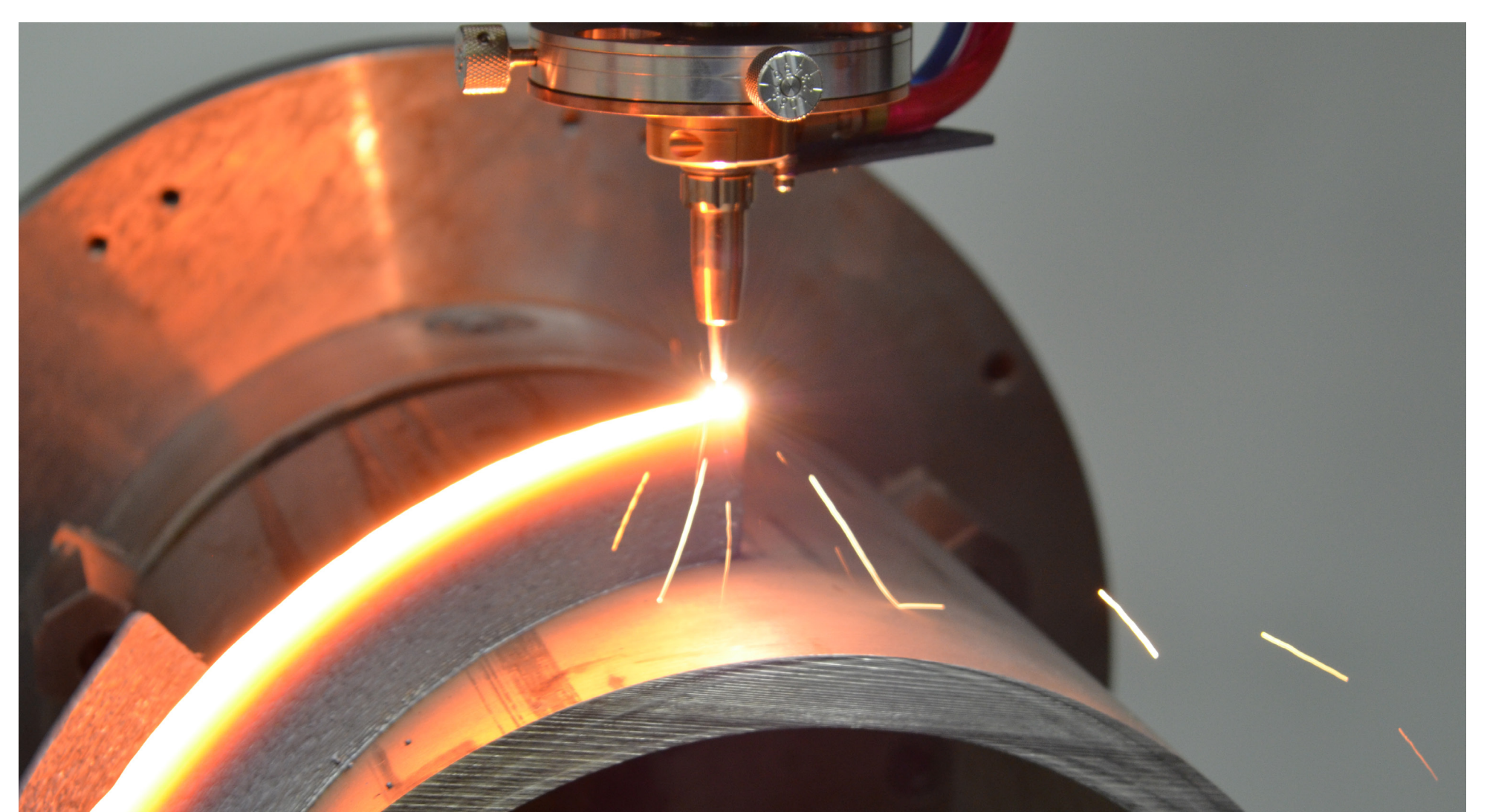


## COATING TECHNOLOGIES

- Wear, Friction, and Corrosion Reduction
- Optical Functionality on Glass and Polymer Substrates
- Energy Storage
- Biomedical Applications

## LASER APPLICATIONS

- Laser Cladding
- Additive Manufacturing
- Nozzle Technology
- Welding & Joining
- Machining & Drilling
- Heat Treatment



### Partnership

Fraunhofer USA Center Midwest CMW closely cooperates with Michigan State University's College of Engineering. Since 2003 Fraunhofer USA and Michigan State University have jointly worked on advancing numerous research and development fields.

