

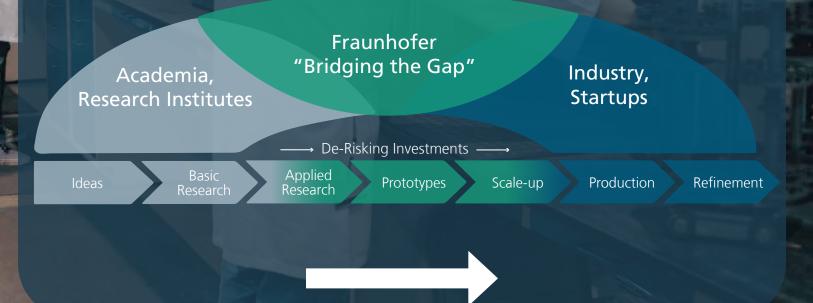
Celebrating 30 Years of Innovation and Technology Transfer at Fraunhofer USA



The Mission

Since our inception in 1994, the heart of Fraunhofer USA's mission is the drive to foster innovation across various industries. We are dedicated to pushing the boundaries of what's possible in manufacturing, energy, healthcare, information technology, and beyond.

Crucially, we are committed to making innovation accessible to businesses of all sizes, from industry giants to small and medium sized enterprises.



The Impact

Applied research and technology transfer play a pivotal role in driving economic growth, enhancing industrial competitiveness, and addressing societal challenges.

At Fraunhofer USA, we're dedicated to bridging the gap between fundamental research and practical applications, ensuring that groundbreaking discoveries translate into tangible benefits for businesses and communities alike. Our collaborations, involving thousands of industry partnerships and strong ties with leading universities, have created synergies that propel technologies from our labs to markets, thus making innovation happen.

The breadth of our impact is reflected in our intellectual property portfolio, with numerous patents and publications contributing to the global knowledge base and benefiting businesses of all sizes. By making innovation accessible and applicable, we've empowered companies to leverage cutting-edge technologies, enhancing their competitiveness in an increasingly technology-driven marketplace.

The Technologies

Our work spans a wide range of sectors and business sizes, showcasing our commitment to fostering innovation at all levels. While our list of accomplishments is extensive, here are just a few highlights that demonstrate the breadth and depth of our work:

- Advancing Artificial Intelligence: We've developed innovative tools and methodologies to enhance the robustness and reliability of AI systems, particularly in image recognition. Our work has focused on optimizing testing processes for AI applications, identifying factors that lead to classification errors, and providing recommendations to improve system performance. This research is crucial for ensuring the safety and reliability of AI in critical, real-world applications, especially in autonomous and decision-making systems.
- Pioneering Laser Technologies: We've developed state-of-the-art laser processes and applications for various industries, including additive manufacturing, automotive, medical, energy, and defense sectors. Our innovations in laser technology have enabled advancements in manufacturing processes, material processing, and product development across these diverse fields.
- Biotechnology Breakthroughs: Our work in biotechnology has led to significant advancements across multiple areas. In biomedical device manufacturing, we've developed innovative processes and materials that enhance the functionality and reliability of medical implants and diagnostic tool all while making these technologies work at scale.
- Custom Manufacturing Solutions: We've developed and deployed a wide range of innovative manufacturing solutions, from novel surface coatings for consumer goods and advanced forming tools to world-class fiber winders for fiber optic gyroscope production. These diverse applications showcase our ability to adapt cutting-edge technologies to meet specific industry needs.
- Advanced Materials: We've pioneered the development of world-leading materials with far-reaching applications across multiple industries. Diamond materials for example are set to revolutionize the semiconductor industry, enhance the performance of electric vehicles, and enable new possibilities in medical treatments and devices. Our work in this field demonstrates our commitment to pushing the boundaries of material science and creating technologies with broad, transformative potential.

The Future

As we step into our fourth decade, Fraunhofer USA remains committed to driving technological progress and societal impact. Our focus areas for the future include:





Digital Transformation



Healthcare Innovation



Interdisciplinary Collaboration



Empowering SMEs



A Heartfelt Thank You

Our journey of innovation would not have been possible without the dedication of our talented team members, the trust of our partners and clients - from multinational corporations to local small businesses - and the invaluable collaboration with our university partners. The partnership between industry, academia, and our organization has been a cornerstone of our success.

We extend our deepest gratitude to Fraunhofer-Gesellschaft, our founding organization and funding partner, whose unwavering support and shared vision have been instrumental in our growth and success over these three decades. Our thanks also go to our industry partners, both large and small, who have trusted us with their challenges and collaborated with us to find innovative solutions. We are grateful to the academic institutions and researchers who have worked alongside us, pushing the boundaries of scientific knowledge and helping to translate cutting-edge research into practical applications. We are particularly grateful for our longstanding partnerships with Michigan State University, Boston University, and the University of Maryland, whose collaboration has been instrumental in driving forward-thinking research and innovation. Lastly, and most importantly, we are immensely grateful to our dedicated team members, whose expertise, creativity, and hard work have been the driving force behind our achievements. Our strength is our people, and we want to thank everyone who has been on our side along the way.

As we celebrate this milestone, we recognize that our success is a testament to the power of collaboration and the shared commitment to innovation that unites us all.

Here's to 30 years of turning ideas into innovations, and to many more years of groundbreaking research and impactful solutions. Together, we'll continue to shape the future of applied research and technology and to our partners, ensuring that businesses of all sizes can thrive in our proven innovation ecosystem.

Join us in celebrating three decades of Fraunhofer USA. Follow us on our social media channels and website for updates on projects, events and initiatives. Here's to the next chapter of innovation at Fraunhofer USA!