

“Our aim is to accelerate the integration of freeform optics technologies in collaboration with industries, ushering innovative products into the market. Our emphasis lies in achieving swifter timelines, reduced costs, elevated performance, and pioneering capabilities.”

Jannick P. Rolland, PhD  
Director of CeFO

## Join CeFO Today

Be at the forefront of the freeform revolution



**Engage** in shaping the development of roadmaps for freeform technology



**Accelerate time to market** of new technologies



**Leverage** research funds



**Demonstrate** new capabilities



**Access the center's** intellectual property

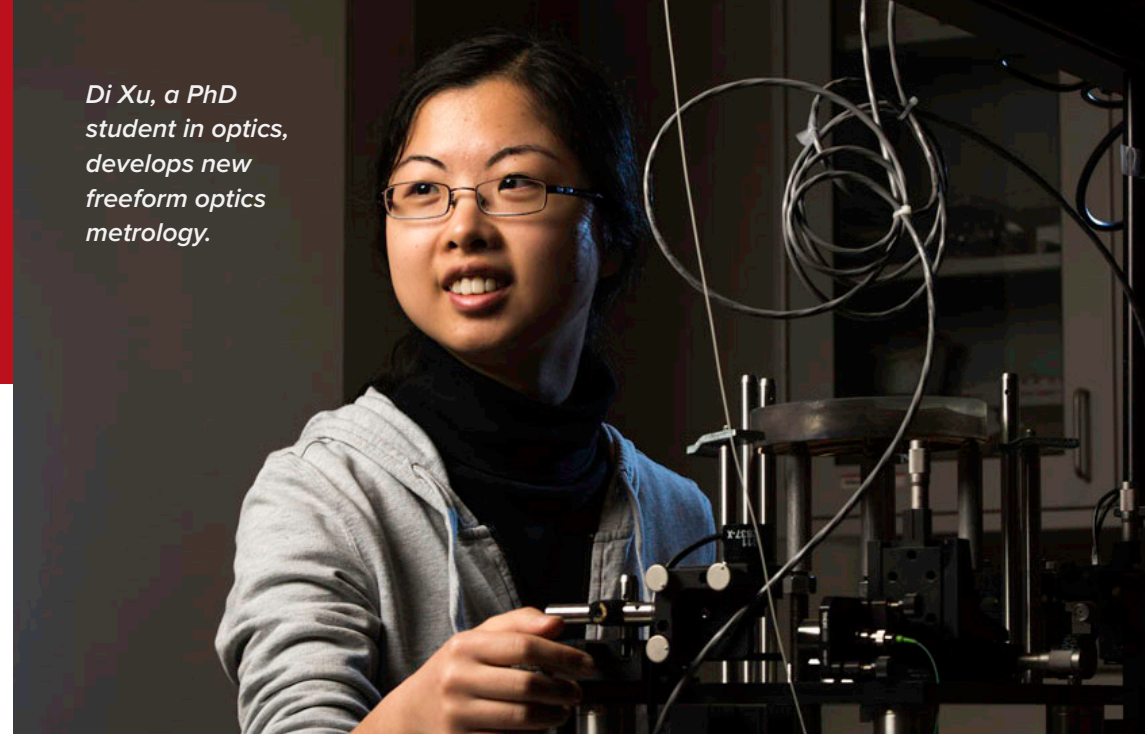


**Mentor** graduate students



**Access students** trained in freeform optics

*Di Xu, a PhD student in optics, develops new freeform optics metrology.*



# CeFO

## Join the Freeform Revolution

**THE CENTER FOR FREEFORM OPTICS**  
An Industry/University Cooperative Research Center



The Center for Freeform Optics  
An Industry/University Cooperative Research Center

[centerfreeformoptics.org/](http://centerfreeformoptics.org/)

or contact Jannick P. Rolland at [rolland@optics.rochester.edu](mailto:rolland@optics.rochester.edu)  
and Thomas Suleski at [tsuleski@charlotte.edu](mailto:tsuleski@charlotte.edu)

Photos courtesy of J. Neil Sjoblom & J. Adam Fenster

### Center for Freeform Optics (CeFO)

- Foster cross-disciplinary research and education for optical precision and engineering
- Preserve a legacy of centers in optics, imaging science, physics, and mechanics
- Committed to innovation



**Freeform optics unconstrain optical design, improve performance, and reduce part count and package size.**



JANNICK ROLLAND



THOMAS SULESKI

## Accelerate the Impact of Freeform Optics on Our Collective Future

The Center for Freeform Optics (CeFO) was established in 2013 as a collaboration between industry and university, supported by the National Science Foundation.

### Vision

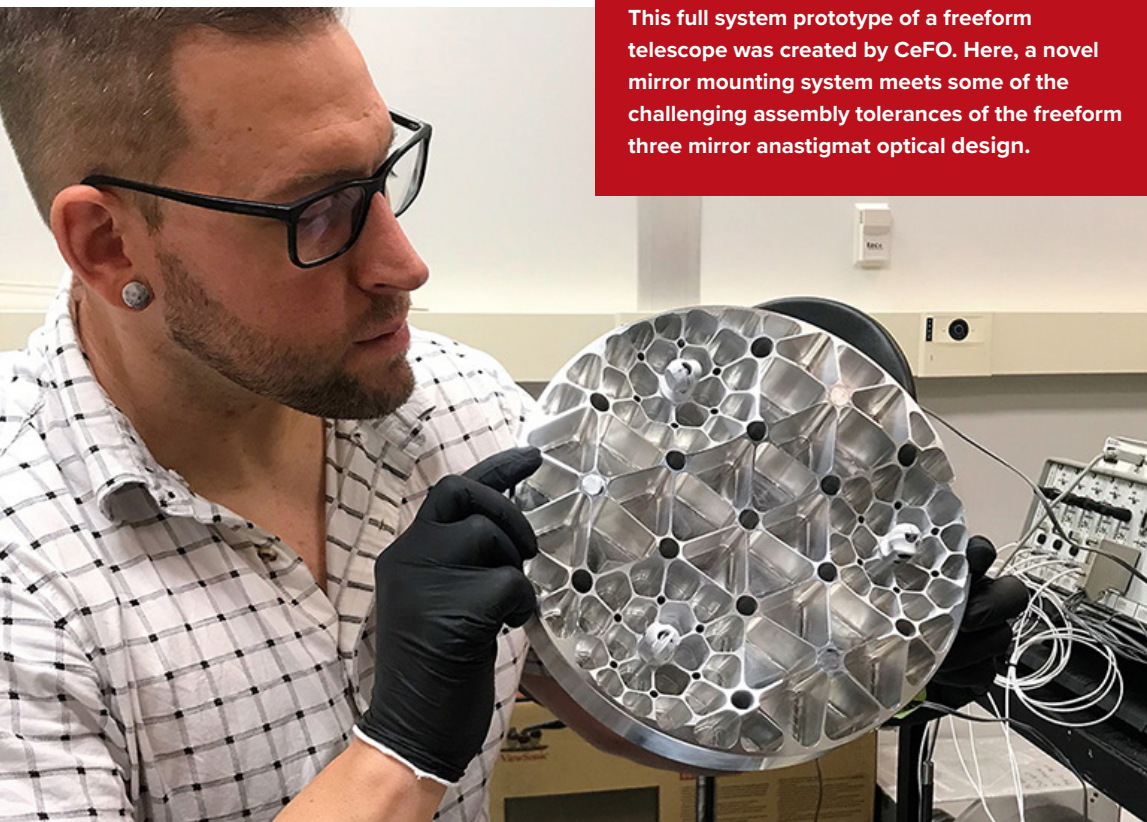
Compact, cost-effective, and high-performing optical systems will permeate and transform precision technologies of the future.

### Mission

The mission of the Center for Freeform Optics (CeFO) is to advance precompetitive research and education in the science, engineering, and applications of systems based on freeform optics through a dedicated, continuing industrial partnership based on shared value.

Join us today!

This full system prototype of a freeform telescope was created by CeFO. Here, a novel mirror mounting system meets some of the challenging assembly tolerances of the freeform three mirror anastigmat optical design.



## Recognize Global Innovation Leaders in Optical Technology

### Participation (2013–23):

2

Sites

3

Universities

123

Students

33

Faculty

36

Members

### University of Rochester

- The Institute of Optics, the nation's first academic institution devoted to training optical scientists and engineers
- The Laboratory for Laser Energetics, home to two of the world's most powerful high-intensity lasers and a world-class coating facility
- Expertise in materials science, precision mechanics, optomechanics, and nanotechnology (URNano)
- Proximity to and collaboration with the University of Rochester Medical Center (URMC) and Department of Mechanical Engineering

### University of North Carolina at Charlotte

- Home to Center for Precision Metrology, a world-leading research facility in dimensional metrology
- Expertise in single-point diamond machining, precision machine design, optical testing, and materials characterization
- Center for Optoelectronics and Optical Communications has full suite of micro-optics and lithography tools to enable fabrication of multiscale optical surfaces
- Center for Metamaterials synergizes with CeFO

## Situate Yourself Within the Spectrum of Freeform Optics

