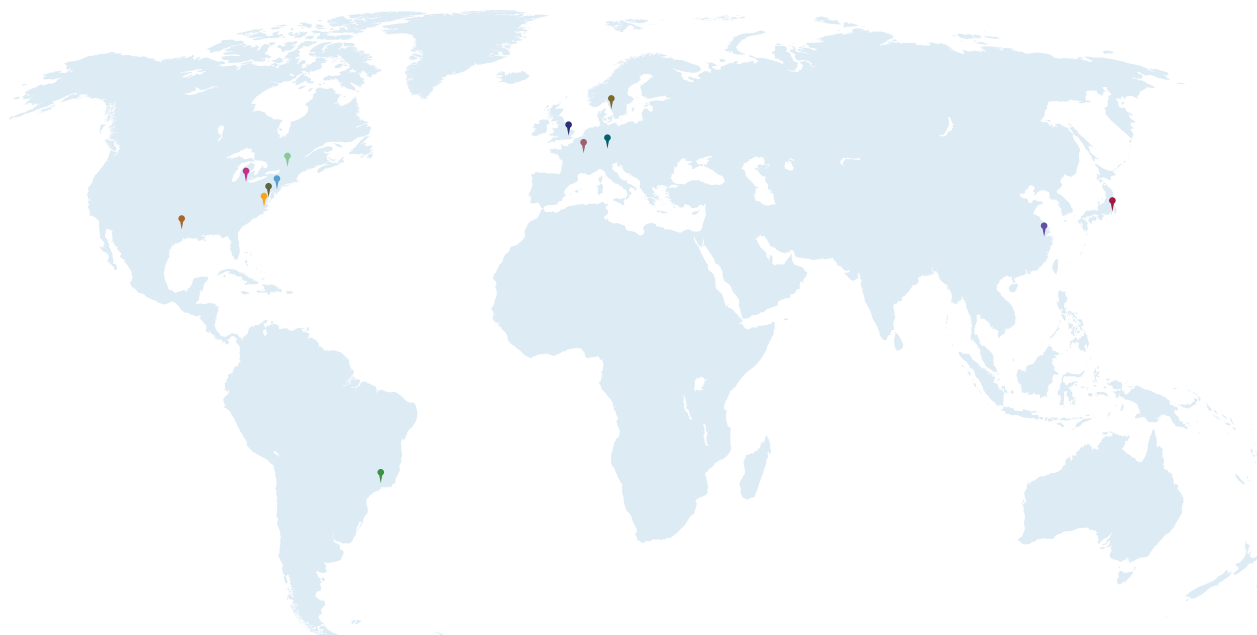


# Thorlabs Operations and Facilities

Founded in 1989 as a manufacturer of optical and optomechanical systems, Thorlabs has experienced extensive growth in the past 25 years. This growth has enabled us to design, develop, and manufacture many of the building blocks needed by photonics and life science researchers. By combining our extensive knowledge of components with vertically integrated manufacturing facilities, we have ventured into designing and producing more complex systems. Our first, a Swept-Source Optical Coherence Tomography system, was released in 2007.

In years since, we have embraced opportunities to add extensively to both our photonics and life science offerings. Today, our portfolio encompasses more than 15,000 products, over one third of which are customer inspired. We hope this second volume of our Life Science catalog will allow you to conveniently locate the systems and components that will best suit your needs.



## ● Thorlabs, Inc.

56 Sparta Avenue  
Newton, NJ 07860

**Phone:** 1-973-300-3000

**Fax:** 1-973-300-3600

**Email:** sales@thorlabs.com

**Web:** www.thorlabs.com

## ● Thorlabs Quantum Electronics (TQE)

10335 Guilford Road  
Jessup, MD 20794

**Phone:** 240-456-7100

**Email:** sales-TQE@thorlabs.com

## ● Thorlabs Imaging Systems

108 Powers Court, Suite 150  
Sterling, VA 20166

**Phone:** 1-973-300-3000

**Email:** imagingsales@thorlabs.com

## ● Thorlabs Scientific Imaging (TSI)

4120 Freidrich Lane, Suite M-500  
Austin, TX 78744

**Phone:** 1-973-300-3000

**Email:** sales.tsi@thorlabs.com

## ● Thorlabs Ultrafast Optoelectronics

NW Suite 110 Parkland Plaza  
Ann Arbor, MI 48103

**Phone:** 1-973-300-3000

**Fax:** 1-973-300-3600

**Email:** sales@thorlabs.com

## ● Thorlabs Canada ULC

5155 Avenue Decelles 1251  
Pavillion J-Armand  
Bombardier H3T 2B2

**Phone:** 1-973-300-3000

**Fax:** 1-973-300-3600

**Email:** sales@thorlabs.com

**Web:** www.thorlabs.com

## ● Thorlabs Ltda, Brazil

Rua Rischuelo, 171  
Centro, São Carlos, SP  
13560-110 Brazil

**Phone:** +55-16-3413 7062

**Fax:** +55-16-3413 7064

**Email:** brasil@thorlabs.com

## ● Thorlabs Ltd.

1 Saint Thomas Place, Ely  
Cambridgeshire, CB7 4EX  
United Kingdom

**Phone:** +44 (0)1353 654440

**Fax:** +44 (0)1353 654444

**Email:** sales.uk@thorlabs.com

## ● Thorlabs SAS France

109, rue des Côtes  
78600 Maisons-Laffitte France

**Phone:** +33 (0) 970 444 844

**Fax:** +33 (0) 825 744 800

**Email:** sales.fr@thorlabs.com

## ● Thorlabs Sweden AB

Bergfotsgatan 7  
431 35 Mölndal Sweden

**Phone:** +46 (0)31 733 3000

**Fax:** +46 (0)31 703 4045

**Email:** scandinavia@thorlabs.com

## ● Thorlabs GmbH

Hans-Böckler-Str.6  
85221 Dachau/Munich

**Phone:** +49 (0) 8131 5956-0

**Fax:** +49(0) 8131 5956-99

**Email:** europe@thorlabs.com

**Web:** www.thorlabs.de

## ● Thorlabs China Ltd.

Room A101, No. 100,  
Lane 2891, South Qilianshan Rd  
Putuo District, Shanghai, China

**Phone:** +86 (0)21-60561122

**Fax:** +86 (0)21-32513480

**Email:** chinasales@thorlabs.com

## ● Thorlabs Japan Inc.

Higashi-Ikebukuro  
Q Building 1F 2-23-2  
Higashi-Ikebukuro, Tokyo,  
Japan 170-0013

**Phone:** 81-3-5979-8889

**Fax:** 81-3-5979-7285

**Email:** sales@thorlabs.jp

**Web:** www.thorlabs.jp

# Celebrating Milestones

## Thorlabs' Silver Anniversary

Over the past year, Thorlabs has celebrated several notable milestones. 2014 marks Thorlabs' 25th year of being in business. On this anniversary, we'd like to thank those who have partnered with us as a photonics tools company, sought us out as a supplier of life science equipment, and provided us with valuable feedback which has helped us to learn and grow over the years. Given that over one third of our new products are customer inspired, it is evident that your thoughts, needs, and ideas have inspired our engineering teams. As we continue to grow, we remain "Hungry for Your Thoughts" and eager to serve and support the growing photonics and life science communities.



Progression of Thorlabs Catalogs Over the Years

## 10 Years in the UK

Our office in Ely, United Kingdom also celebrated a "birthday" in 2014. To celebrate 10 years as a manufacturing, sales, and support location, the team enjoyed a cake made to resemble a Nexus™ breadboard, one of the products designed and manufactured on-site. The Nexus family of optical tables and breadboards, designed for high stability and performance, were released in 2013, adding to the sentiment of the cake. The cake also incorporated a detectable flexure stage, another one of the products developed by our UK group, as well as an edible version of the Lab Snack boxes we ship with all our orders.



The 10 Year Anniversary Cake at the Ely Celebration

## First Product Release for Thorlabs Scientific Imaging

Another important addition to our product line came from our Scientific Imaging group in Austin, TX, with the release of their 1.4 Megapixel CCD Camera, based on high quantum efficiency and low-noise imaging, making them ideal for a variety of imaging techniques.

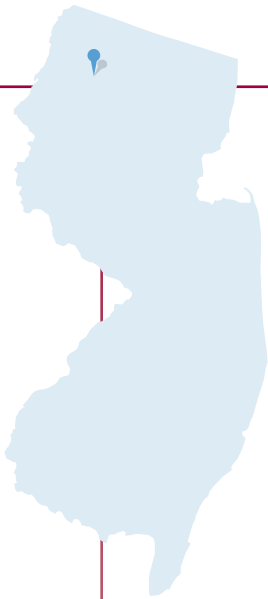


**FACE  
VALUE**

We have used the feedback we have received over the years to shape our business, constantly looking for new ways to maximize your productivity. We invite you to contact us with new product ideas or feedback on how we can improve our existing products and services.



One of the Scientific Cameras Released by the Scientific Imaging Group (Left) and a Merged Triple Emission Fluorescence Microscopy Image Taken with a Scientific Camera (Above).



# Newton, New Jersey

## Design, Manufacturing, & Distribution Facility

### **Thorlabs, Inc.**

56 Sparta Avenue  
Newton, NJ 07860

**Phone:** +1-973-300-3000

**Fax:** 1-973-300-3600

**Email:** [sales@thorlabs.com](mailto:sales@thorlabs.com)

**Web:** [www.thorlabs.com](http://www.thorlabs.com)

Thorlabs was established in Newton, NJ 25 years ago as a customer-centric organization aimed at fulfilling a need for same-day shipping on standard optomechanical components to those in the photonics community. From these roots, this location has grown to encompass groups that specialize in mechanics, electronics, fiber, optics, lasers, and imaging, all of which strive to serve the life science community and our long-standing photonics customers. With an aim to provide same-day shipping, Thorlabs' warehouse

is stocked with 99% of all catalog items for distribution.

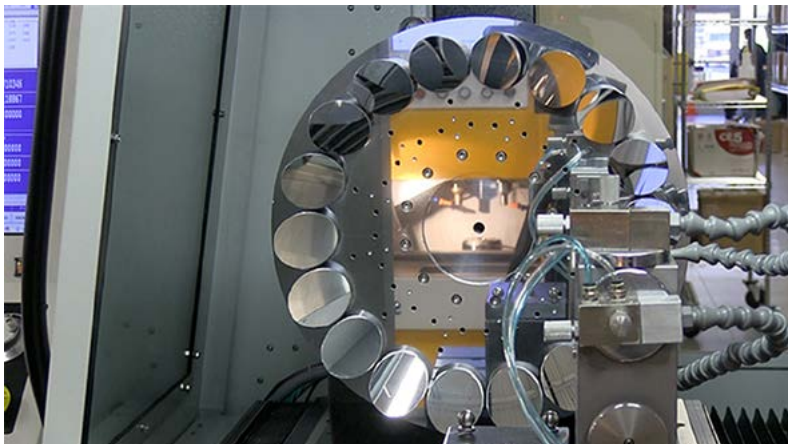
Today, Thorlabs' Newton, NJ location consists of a campus of five facilities employing over 560 individuals. Located at 56 Sparta Avenue, our headquarters building opened in February 2013. This 125,000 square foot facility is home to our fiber, optics, mechanics, and advanced system technologies (AST) groups.

In addition to these competencies and manufacturing capabilities, the 56 Sparta Ave facility also contains the North American warehouse. This warehouse is supplemented by our facility nearby on 69 Stickles Pond Road, which houses our optical tables and breadboards.

Adjacent to our main facility, Thorlabs has two other buildings where our laser systems division and our AST lab reside. Our laser group is dedicated to creating laser systems and subsystems for use in linear and nonlinear biological probing and imaging applications.



Thorlabs' Headquarters in Newton, NJ



Our Off-Axis Parabolic Mirrors, Produced on Our Own Diamond-Point Turning Machine





Fiber Draw Tower

#### COMPETENCIES

- Mechanics, Optics, Electronics, Imaging, and Software Development
- Machine Shop and Coating Chambers
- In-House Fiber Drawing
- American Distribution Hub
- Sales & Technical Support
- Marketing & Web Development
- Lean Manufacturing Capabilities and Synchronized Supply Chain

All of our Newton-based business units are committed to serving the industrial optics and research communities. To this end, we provide custom coatings, volume and prototype optics, and draw our own fiber, including silica, indium fluoride, and zirconium fluoride fibers. Our efforts to supply these and other items for same-day shipment, combined with comprehensive customer support and services, are the pillars of our ability to meet our customers' needs.

Additionally, we continue to improve and expand our 36,000 square foot manufacturing space at our former headquarters facility located at 435 Route 206. This space, currently shared between our machine shop and mechanical engineers, provides on-site design and manufacturing. Here, collaboration between the two groups allows us to quickly and efficiently customize projects to meet specialized customer requests.

Our Technical Support and Sales teams are on-call Monday through Saturday. They are available from 8 AM to 8 PM EST Monday through Thursday, 8 AM to 7 PM EST Friday, and 9 AM to 1 PM EST Saturday.



Veeco Spector Coating Chamber Capable of Ion Beam Sputtering



# Sterling, Virginia

## R&D and Production Facility

### Thorlabs Imaging Systems

108 Powers Court  
Sterling, VA 20166

**Phone:** 1-973-300-3000

**Email:** [imagingales@thorlabs.com](mailto:imagingales@thorlabs.com)

**THORLABS**  
Imaging Systems

Located in Sterling, Virginia, our Imaging Systems group is housed in a 25,000 square foot R&D and production facility. Specializing in systems-level design and integration of imaging equipment tailored to the life sciences and biomedical communities, this multidisciplinary team is currently comprised of 40 individuals, including engineers specializing in mechanics, optics, electronics, and software. This diversity allows us to be fully self-sufficient with respect to product design and development.

The Sterling-based group derives the full benefits of a vertically integrated organization with decades of market expertise. Our extensive in-house design and fabrication capabilities allow us to function at the capacity necessary to meet the specific needs of our customers quickly and efficiently. This structure, combined with our depth of knowledge, allows us to provide a market-driven product portfolio that pushes the boundaries of cutting edge technologies.



Thorlabs Imaging Systems' Manufacturing Facility in Sterling, VA

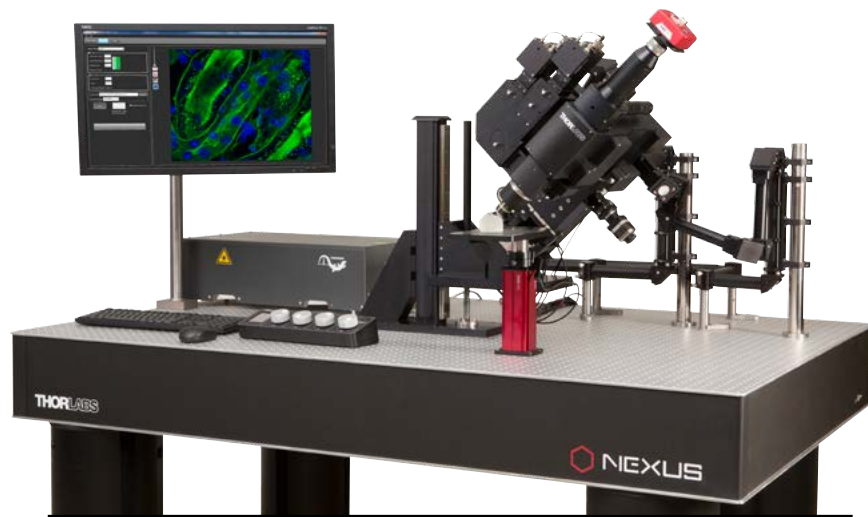
Within our product portfolio we provide a variety of dedicated imaging platforms, including stationary and articulated multiphoton microscopes, which provide the highest level of experimental flexibility in demanding imaging environments. These systems offer exceptional speed, sensitivity, and high resolution, providing powerful aid to a broad range of researchers and life scientists. We also offer a confocal microscope, developed in a

compact, modular design, with turnkey integration for commercial upright and inverted microscopes. Additionally, the Virginia team is responsible for producing a variety of focus blocks, objectives, adapters, and other accessories designed to support the needs of a diverse life science market.

#### COMPETENCIES

- Configurable Imaging Solutions
- On-Site Design and Manufacturing
- Dedicated Life Science Sales Personnel
- Micromanipulators & Electrophysiology Platforms
- Complete Turn-Key Confocal, 2-Photon, and Cytometry Imaging Systems

In recent years, Thorlabs Imaging Systems has added significantly to its capabilities by strategically leveraging acquisitions. The addition of the Burleigh® product line from Lumen Dynamics in 2011 added a wide range of manipulation and precision motion control equipment to our competencies. This equipment, including patch-clamp systems, piezoelectric micromanipulators, and high-stability microscope mounting solutions, allows us to further support the scientific community by enabling ground-breaking biological and electrophysiology research as well as manipulation on the cellular level and *in vitro* fertilization. Additionally, in October 2013, Thorlabs acquired CompuCyte Corporation and added laser scanning cytometry (LSC) to its product portfolio. These products, used for cellular and tissue-based analysis, combine the advantages of digital microscopy, image processing, and cytometry to deliver high-content analysis of adherent cell and tissues specimens. Our life science team is excited to integrate this technology into our product line to further develop their presence in the biomedical community.



Thorlabs' Bergamo Multiphoton Microscope

Thorlabs' imaging team provides worldwide coverage through a supportive field service staff of sales engineers, all who endeavor to provide exceptional service through extensive knowledge and personal interaction with our life science and biotechnology customers. This dedicated team is familiar not only with our life science equipment but also with Thorlabs' entire portfolio, enabling them to provide assistance and solutions in many areas.



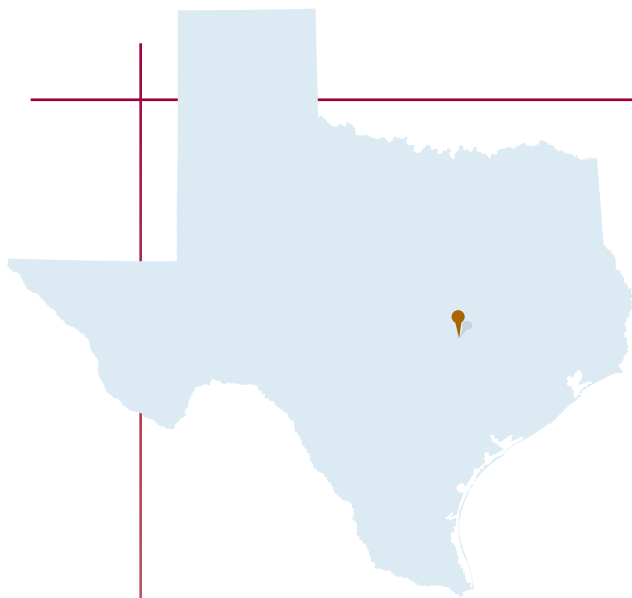
Deep tissue image of a primary somatosensory cortex in an 8-week-old mouse. This image, taken with our Bergamo Series microscope (see page 2), is courtesy of Dr. Hajime Hirase and Katsuya Ozawa, RIKEN Brain Science Institute, Wako, Japan.

Members of the Thorlabs Imaging Systems office also frequently visit customers, providing on-site demonstrations of our various imaging systems. In addition, we maintain a series of demo rooms around the world, including in Sterling, VA, all of which are equipped with stationary and rotating multiphoton microscopes as well as confocal microscopes in a variety of configurations.



Our On-Site Machine Shop in Sterling, VA





# Austin, Texas

## Design & Manufacturing Facility

### Thorlabs Scientific Imaging (TSI)

4120 Freidrich Lane

Suite M-500

Austin, TX 78744

**Phone:** 1-973-300-3000

**Fax:** 1-512-288-2961

**Email:** sales.tsi@thorlabs.com



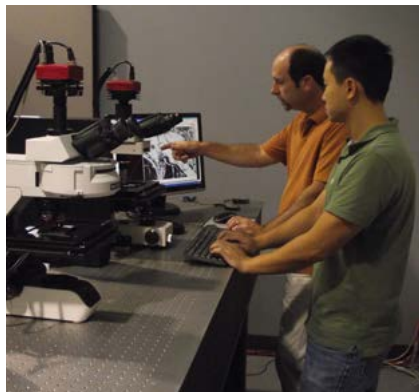
Thorlabs Scientific Imaging Facility

## THORLABS

Scientific Imaging



TDI Microscope System



Come See a Demo in Our Office

In 2011, Thorlabs added to its growing portfolio through the acquisition of Austin-based DVC Company. With this, we added low-noise, high-sensitivity CCD cameras to our imaging capabilities. Driven to create a modular platform, the engineers at Thorlabs Scientific Imaging (TSI) work in a multidisciplinary environment that brings together challenging circuit design, optical and mechanical innovation, firmware, and software to develop a camera platform that can be used with a variety of imaging systems.

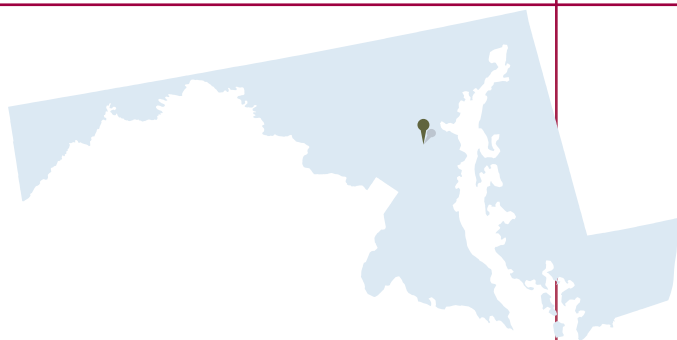
TSI couples years of experience and engineering capabilities to bring to market imaging solutions for all applications in the life sciences. One of their most recent products is a microscope system utilizing time delay integration (TDI). Designed to eliminate the relative motion between a slide and the charge pattern on an image sensor, the TDI technique allows fluorescence and brightfield slides to be scanned without stopping the motion of the slide. In order to suit a broader market, this product is offered with a commercial microscope but is also sold as a cost-effective kit, which may be added to an existing microscope.

### COMPETENCIES

- Custom Design and Manufacturing for OEMS
- High-Sensitivity, Low-Noise Scientific Cameras
- Electronics Design, Including Board-Level Hardware and Firmware
- Development of API/SDK and Application Software
- Design of Hermetically Sealed TE-Cooling and Optomechanical Packaging

# Jessup, Maryland

## Design & Manufacturing Facility



Thorlabs Quantum Electronics Manufacturing Facility

Thorlabs manufactures a broad variety of active optoelectronic components at our Jessup, Maryland location. Housed in

a 60,000 square foot state-of-the-art manufacturing facility, our Thorlabs Quantum Electronics (TQE) team is comprised of a diverse group of individuals. With vast knowledge in material science, device design, electro-optic device packaging, and wafer growth and fabrication, our TQE group collaborates to develop high-performance optoelectronic devices and modules.

In 2012, we grew our existing team through an acquisition of Maxon Technologies, who brought with them the capability to develop mid IR turn-key semiconductor lasers. Their interband cascade and quantum cascade lasers, which provide output in the 3-12 micron range, are now an integral part of our product line, driving our commitment to the chemical sensing, countermeasures, and free-space optical communications markets.

Supported by our vertically integrated manufacturing infrastructure, our team's expansive knowledge and attention to customer satisfaction allows us to pioneer and manufacture market-leading products such as semiconductor laser diodes, semiconductor optical amplifiers, optical modulators, and tunable MEMS-VCSEL lasers suited for the life science, telecommunications, medical, industrial, and defense markets.

Here at TQE, we also directly

manufacturer many of the key optical components that are at the heart of complex life science and bio-science instruments, such as semiconductor laser light sources and precision metrology targets. This facility also has epitaxial wafer growth, wafer fabrication, and packaging capabilities for group III-V (InP, GaAs, GaSb) semiconductor laser devices, and Lithium Niobate ( $\text{LiNbO}_3$ ) electro-optic modulators.

Our on-site sales team, available from 8 AM to 6 PM EST, is eager to assist in custom projects and special contracts.

### Thorlabs Quantum Electronics (TQE)

10335 Guilford Road  
Jessup, MD 20794

**Phone:** 240-456-7100

**Email:** sales-TQE@thorlabs.com

# THORLABS

Quantum Electronics

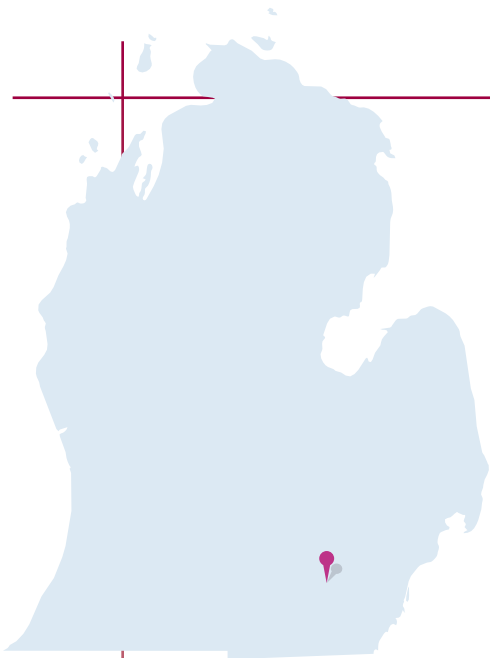
### COMPETENCIES

- In-House Epitaxial Wafer Growth
- III-V Semiconductor, Lithium Niobate, Quantum Cascade, and Interband Cascade Wafer Fabrication
- Sub-Micron Photolithography
- Precision Antireflection (AR) Optical Coatings
- In-House Reliability Testing
- Hermetic, Flux-Free Optoelectronic Packaging in Class 100 and 1000 Cleanrooms
- On-Site Sales Team



Cleanroom Inspection Area





# Ann Arbor, Michigan

## Design & Manufacturing Facility

In early 2014, Thorlabs began a greenfield initiative to start an ultrafast optoelectronics group. Based in Ann Arbor, Michigan, this group will design, develop, and manufacture leading-edge photonics and optoelectronics products and systems, guided by key insights from customers in the expanding marketplace.

Focused on addressing the need for high-speed optoelectronic products with bandwidths as high as 100 GHz, this team will be able to leverage the technical expertise that already exists within the organization's optomechanical, semiconductor, ultrafast laser, and imaging system product development areas.

Although the initial efforts of this team will be in the area of ultrafast optoelectronic components such as lasers, modulators, and subsystems, the team seeks to complement and advance Thorlabs' other product development initiatives in ultrafast and high-power lasers, optical & fiber optic instrumentation, and the life sciences.

Thorlabs is dedicated to establishing R&D facilities geographically. Hence, we made the decision to locate the new venture in the heart of Michigan's vibrant scientific community in Ann Arbor, where we hope to promote interaction within the research community and attract valuable feedback from both the photonics and life science communities.

The Ann Arbor office will be served primarily through our Technical Support and Sales Call Center teams located in Newton, NJ. They are on-call Monday through Saturday, with Technical Support available from 8 AM to 8 PM EST, Monday through Friday and sales available from 8 AM to 8 PM EST Monday through Thursday, 8 AM to 7 PM EST on Friday, and 9 AM to 1 PM EST on Saturday.

### Thorlabs Ultrafast Optoelectronics (UFO)

NW Suite  
110 Parkland Plaza  
Ann Arbor, Michigan 48103

**Phone:** 1-973-300-3000

**Fax:** 1-973-30-3600

**Email:** [sales@thorlabs.com](mailto:sales@thorlabs.com)

**Web:** [www.thorlabs.com](http://www.thorlabs.com)

## THORLABS

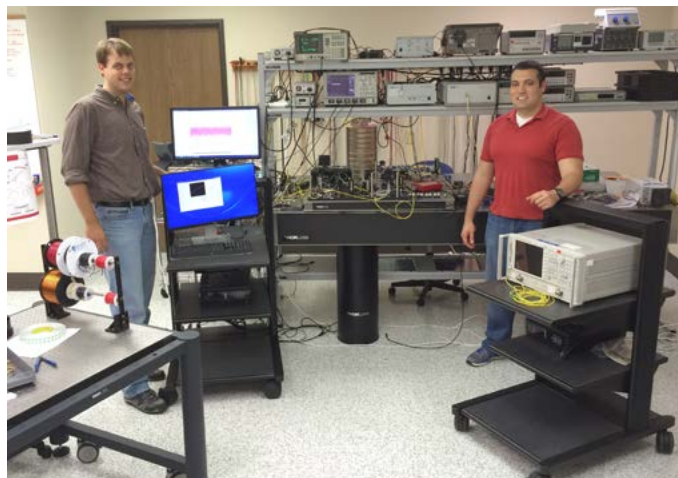
Ultrafast Optoelectronics



Thorlabs Ultrafast Optoelectronics' Manufacturing Site in Ann Arbor, MI

### COMPETENCIES

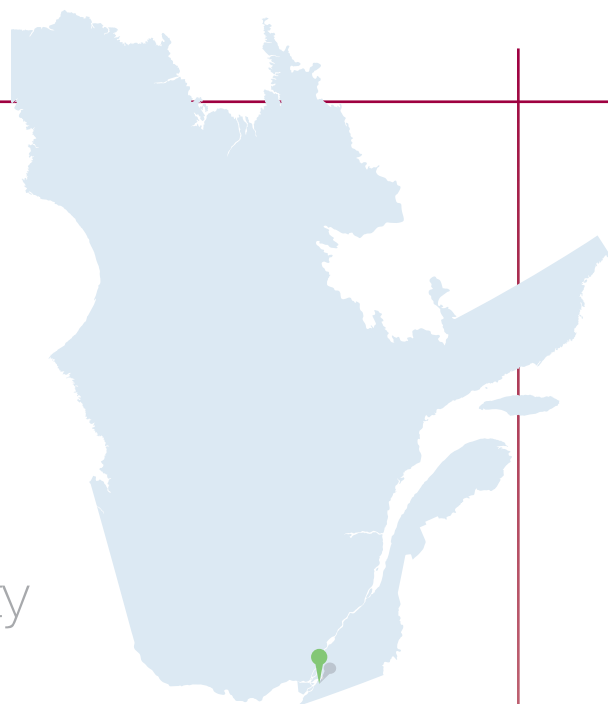
- Design, Develop, and Manufacture Devices, Components, & Systems
- Optoelectronics from 1GHz to 100 GHz
- Semiconductor Devices
- Transmit, Control, & Receive Photonics
- Integrated Test Systems
- Custom & OEM Services



Engineers in Their New Lab Space in Ann Arbor, Michigan

# Montreal, Canada

## Design & Manufacturing Facility



In April of 2014, Thorlabs expanded its global presence with a new R&D and manufacturing facility located in Montreal, Canada. Thorlabs Canada ULC will focus its efforts on developing the broad range of fiber-based optical components necessary for next-generation medical imaging devices and advanced instrumentation for use in the physical sciences.

### Thorlabs Canada ULC

5155 Avenue Decelles 1251  
Pavillon J-Armand Bombardier  
H3T 2B2  
Montreal, QC Canada

**Phone:** 1-973-300-3000

**Fax:** 1-973-30-3600

**Email:** [sales@thorlabs.com](mailto:sales@thorlabs.com)

**Web:** [www.thorlabs.com](http://www.thorlabs.com)



Thorlabs' Montreal Facility

Here in Montreal, our team will look to combine their experience with that of local academic partners, such as the École Polytechnique and Université de Montreal. In addition, they will also leverage Thorlabs' vertically integrated manufacturing model to allow them to quickly and effectively bring innovative optical components to the marketplace to benefit the photonics and life science communities.

Sales and support for the office in Montreal will be served primarily through our Technical Support and Call Center teams in Newton, NJ. They are on-call Monday through Saturday, with Technical Support available from 8 AM to 8 PM EST, Monday through Friday and Sales available from 8 AM to 8 PM EST Monday through Thursday, 8 AM to 7 PM EST on Friday, and 9 AM to 1 PM EST on Saturday.



One of Our Design and Manufacturing Areas

### COMPETENCIES

- Development and Production of Passive Fiber-Based Optical Components
- Components Designed for use in Next Generation Imaging Systems and Advanced Instrumentation
- R&D and Manufacturing Groups



# São Carlos, Brazil

## Design, Manufacturing, & Sales Facility

### Thorlabs Ltda, Brazil

Rua Riachuelo, 171  
Centro, São Carlos, SP  
13560-110 Brazil

**Phone:** +55-16-3413 7062

**Fax:** +55-16-3413 7064

**Email:** [brasil@thorlabs.com](mailto:brasil@thorlabs.com)

### COMPETENCIES

- Technical Sales and Support
- Order Processing
- On-Site Demo Room

In April 2012, Thorlabs extended its presence to South America with the addition of an office in São Carlos, Brazil. This office, centrally located in the state of São Paulo, is dedicated to supporting the photonics and life science communities in the region.

Our team, comprised of 5 individuals, combines their familiarity of the industry with technical knowledge to provide technical and sales support to our customers throughout the continent.

This team is dedicated to developing a strong local presence in and around Brazil. Through university visits, local tradeshow, personal interaction, and an on-site demo room for hands-on opportunities, we strive to provide a convenient and familiar link between our South American customers and our global life science teams.

Our Brazilian team is committed to growing our presence in the life science and photonics communities within the region. To this end, we provide administrative, export, and compliance guidance to our life science teams, which allows the organization to easily liaise between North and South America.



Thorlabs Brazil Office

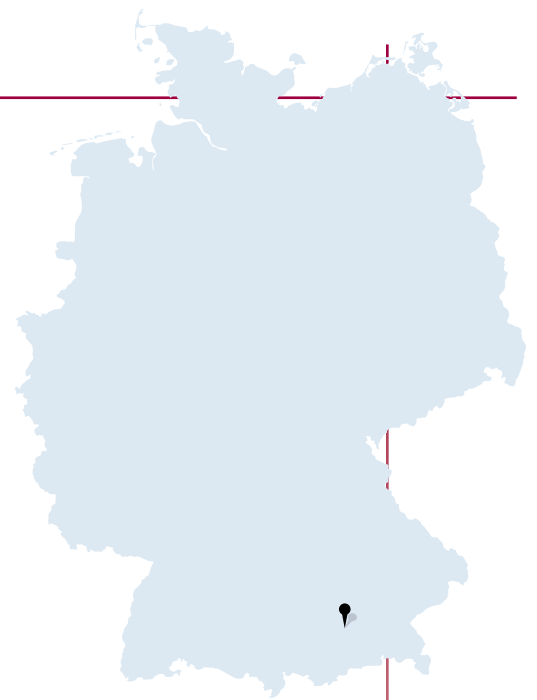


The Brazil Demo Room Includes an Opportunity to See Our LEDs, Light Sources, and Detectors



# Dachau/Munich, Germany

Design, Manufacturing,  
Technical Support, Sales,  
& Distribution Facility



Our team in Germany specializes in the development and manufacturing of optoelectronic devices such as photodiodes, detectors, LEDs, and controllers. The engineering and manufacturing teams are equipped to design and customize a variety of



Our Manufacturing Site in Munich

products, including our SD-OCT systems, to meet specific customer needs. Additionally, this group has developed an array of easy-to-use kits targeted at educating and demonstrating basic principles in a classroom setting.

Our German office employs over 150 people, all dedicated to serving the life science and photonics industries. Encompassing over 26,000 square feet of office, laboratory, and warehouse space, our Munich office serves as our European distribution hub and is also home to a demonstration center where customers can meet with specialists and test products, such as our LEDs and scanning beam profiler.

The technical sales and support team is dedicated to providing exceptional service and solutions for our European Customers. To this end, we offer on-site Sales and Technical Support between the hours of 8 AM and 6 PM CET, providing our photonics and life science communities with comprehensive and expert support.

## Thorlabs GmbH

Hans-Boeckler-Str. 6  
85221 Dachau/Munich  
Germany

**Phone:** +49 (0) 8131 5956-0

**Fax:** + 49 (0) 8131 5956-99

**Email:** [europa@thorlabs.com](mailto:europa@thorlabs.com)

## COMPETENCIES

- Engineering, Manufacturing, and Logistics
- SD-OCT Design and Customization
- Multi-Cultural and Multi-Lingual Customer Support Team
- Lean Manufacturing Capabilities and Synchronized Supply Chain
- European Distribution Hub
- Demonstration Room



Our Demo Room in Germany

# Ely, United Kingdom

## Design, Manufacturing, & Technical Support Facility

Our Thorlabs team in Ely is dedicated to manufacturing vibration-isolation and motion control offerings, such as our microscopy stages, ScienceDesk™ workstations, and our Nexus™ support platforms. The Nexus™ line, designed to provide the best performance and stability in the industry, includes table frames, as well as imperial- and metric-tapped tabletops.

Located in close proximity to leading research campuses, this group benefits from collaborations and ongoing discussions with nearby scientists, which provide valuable insight into the needs of the photonics and life science communities. From this feedback, we have expanded our manufacturing competencies over the past decade to address the needs of those working in microscopy to include precision closed-loop XY stages, piezo-driven Z stages, and piezo objective mounts.



Thorlabs Ltd. Manufacturing Site in Ely

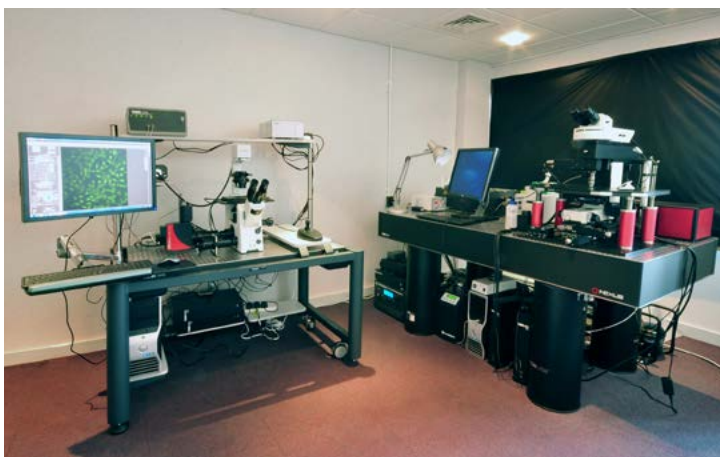
### Thorlabs Ltd.

1 Saint Thomas Place, Ely  
Cambridgeshire, CB7 4EX  
United Kingdom

**Phone:** +44 (0)1353 654440

**Fax:** +44 (0)1353 654444

**Email:** sales.uk@thorlabs.com



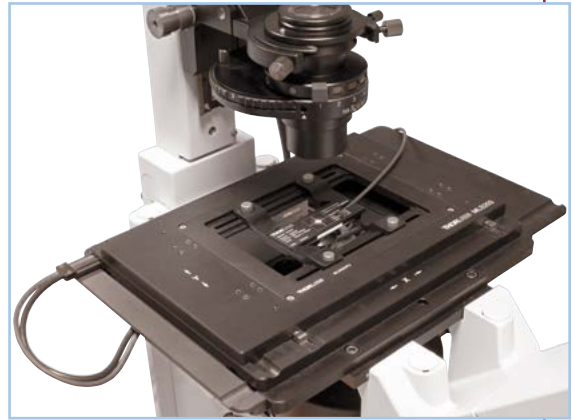
Our Ely Demo Room

### COMPETENCIES

- Vibration Isolation Systems
- Motion Control Equipment
- Precision Nanopositioning
- Closed-Loop Feedback and Auto Alignment Nanopositioning
- Technical Support and Sales
- Demonstration Room



Optical Tables Manufacturing



Our MLS203 Fast Scanning XY Stage on a Microscope

The 27,000 square foot Ely manufacturing site is also home to a demonstration facility where customers can see and use our laser scanning microscopes and related life science products such as our multiphoton microscope.

Our expert design and manufacturing engineers leverage their knowledge and customer feedback to serve the life science and photonics communities with cutting-edge, high-precision motion control systems and vibration isolation solutions. Research and development, as well as manufacturing are all done on site, allowing us to efficiently and effectively meet customer needs. The vibration isolation design and manufacturing facilities in Ely utilize high tolerance CNC bridge mills to achieve the tight tolerances we offer on our optical table designs. These manufacturing processes, combined with a homogenous selection of metals, ensure an athermal design, reliability, and stability.

With over 130 employees, the UK office provides on-site Sales and Technical Support to our customers between the hours of 8 AM and 5:30 PM GMT.



ScienceDesk™ Anti-Vibration Work Station



Nexus Line of Tables



# Göteborg, Sweden

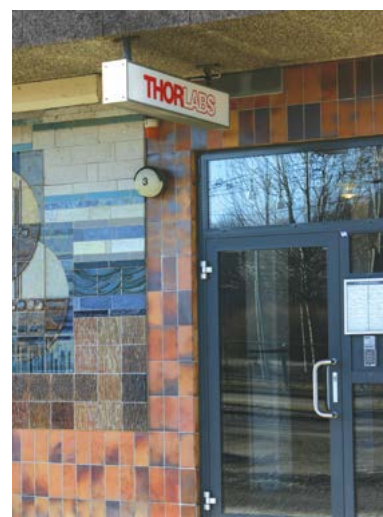
## Design, Manufacturing, and Sales Facility

Located in Göteborg, Thorlabs Sweden AB employs 27 individuals who specialize in the design, testing, and manufacturing of optical systems and beam diagnostic instrumentation. This team has extensive experience with optical and mechanical design, software development, electronics, and systems development, allowing them to quickly and efficiently bring to market a variety of objectives, scan lenses, collimation packages, and optical spectrum analyzers.

Our 10,700 square foot Swedish office space includes a production area, cleanroom, and development laboratories. The cleanroom, coupled with our specialized testing capabilities, is well-suited for manufacturing and testing of high-end optical systems.

Our optical systems engineers frequently receive requests to manufacture specialized OEM equipment and high-quality custom products tailored to the evolving needs of those working in the life sciences. Their expertise in optical system design was instrumental in developing the scan lens utilized in the scan head of our OCT imaging systems.

The devoted Sales and Technical Support teams are available from 8 AM to 5 PM CET to support customers in the Nordic countries, Baltic countries, and Poland.



Thorlabs Manufacturing Facility in Sweden

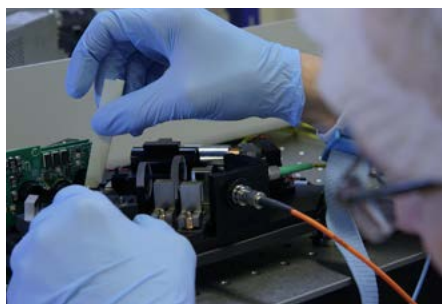
### Thorlabs Sweden AB

Bergfotsgatan 7  
431 35 Mölndal Sweden

**Phone:** +46 31 733 30 00

**Fax:** +46 31 703 40 45

**Email:** [scandinavia@thorlabs.com](mailto:scandinavia@thorlabs.com)



Production of Thorlabs' Optical Spectrum Analyzers



Thorlabs' Reflective Microscope Objectives are Designed, Manufactured, and Tested in Our Sweden Facility



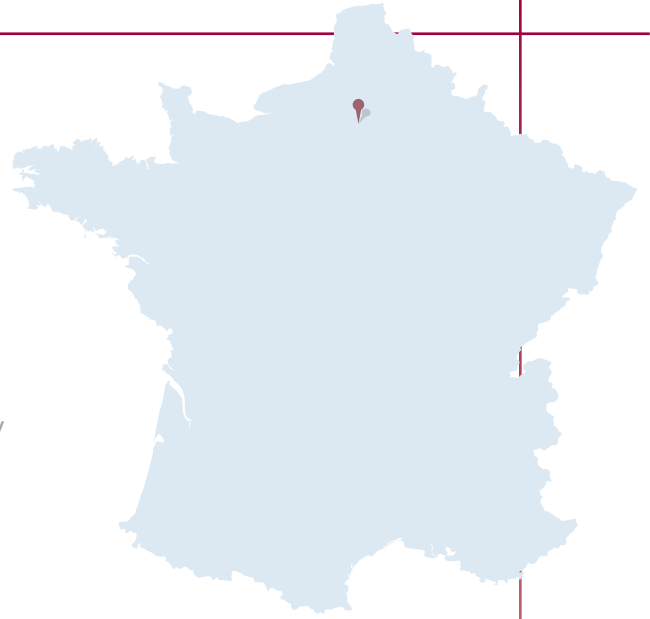
LSM03 OCT Scan Lens

### COMPETENCIES

- R&D for Optical Spectrum Analyzers, Fabry-Perot Interferometers, Scan Lenses, Focusing Objectives, Collimation Packages, and Beam Expanders
- Instrument Design, Manufacturing, Assembly, and Alignment
- Sales and Support for the Nordic Countries, Baltic Countries, and Poland

# Maisons-Laffitte, France

Technical Support, Sales,  
and Order Processing Facility



Thorlabs France Office

## Thorlabs SAS

109, rue des Côtes  
78600 Maisons-Laffitte  
France

**Phone:** +33 (0) 970 444 844

**Fax:** +33 (0) 825 744 800

**Email:** [sales.fr@thorlabs.com](mailto:sales.fr@thorlabs.com)

Located 20 kilometers from Paris, Thorlabs' facility in Maisons-Laffitte, France was opened in response to our growing European customer base and the desire to serve them more efficiently. This small team of dedicated individuals is supported by our worldwide engineering group to ensure immediate technical assistance, and by our European distribution hub, enabling same-day shipment for over 95% of Thorlabs' product portfolio.

Our office in Maisons-Laffitte provides comprehensive Technical Support, Technical Sales, and Order Processing services in the French language from 8 AM to 6 PM CET.

## COMPETENCIES

- Technical Support & Sales
- Order Processing in French
- European Distribution and Same-Day Shipment



Stop by Thorlabs' Tradeshow Booth to  
See Our Live OCT Systems

# Tokyo, Japan

## Sales & Technical Support Facility

### Thorlabs Japan Inc.

Higashi Ikebukuro  
Q Building 1F 2-23-2  
Higashi-Ikebukuro, Tokyo  
170-0013

**Phone:** +81-3-5979-8889

**Fax:** +81-3-5979-7285

**Email:** [sales@thorlabs.jp](mailto:sales@thorlabs.jp)

**Web:** [www.thorlabs.jp](http://www.thorlabs.jp)

Thorlabs' Japanese office, opened in 2002, is centrally located in the city of Tokyo. Here we employ 40 individuals, each of which is passionate and dedicated to the Asian photonics and life sciences markets. Our Tokyo team is devoted to helping Thorlabs by providing an Asian sales channel for our life science offering in the United States and Europe.



Thorlabs Japan Office

### COMPETENCIES

- Home to Our Asian Warehouse Since 2012
- Full Translation of Web Site into Japanese
- On-Site Showroom Focused on Optical Coherence Tomography, Confocal Microscopy, Beam Diagnostics, and Optomechanical Hardware Systems

This sales and technical support facility has a demonstration showroom that offers customers an opportunity to view a broad range of Thorlabs' life science products. Here, customers gain hands-on interaction with products such as our multiphoton and confocal microscopes, MLS stages, LEDs and drivers, CCD cameras, optical coherence tomography systems, and an optical trap.

To provide further support to our customers in the region, we have translated the Thorlabs website into Japanese for the convenience of those who prefer to view our product information in the local language. In January 2012, this location opened its very own warehouse, enabling same-day shipping for stocked products to the Japanese market.

We have office hours between 9 AM and 6 PM, JST and a comprehensive Technical Support team devoted to promptly assisting customers with their individual needs.



Our Demo Room in Japan

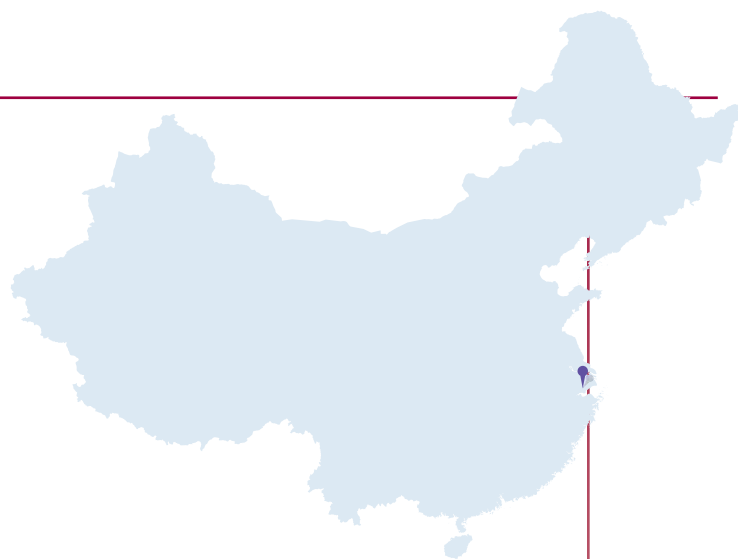


Our Busy Tokyo Sales Office



# Shanghai, China

Design, Manufacturing,  
Technical Support,  
& CR Sales Facility



In 2009, Thorlabs expanded its global footprint to Shanghai, China. Here at our 20,000 square foot facility, our Sales, Technical Support, and Design teams have grown to 90 employees.



Our Manufacturing Facility in China

## Thorlabs China Ltd.

Room A101, No. 100,  
Lane 2891, South Qilianshan Rd  
Putuo District, Shanghai China

**Phone:** +86 (0)21-60561122

**Fax:** +86 (0)21-32513480

**Email:** [chinasales@thorlabs.com](mailto:chinasales@thorlabs.com)

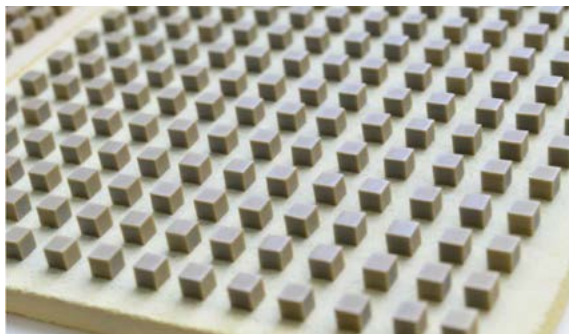
Specializing in advanced liquid crystal technologies, our diverse team of design and manufacturing engineers serve our life science market through the development of tunable filters, light sources, shutters, and high-speed analog circuits. We also specialize in the design and production of piezoelectric elements.

Our Shanghai facility is comprised of a manufacturing center with optical coating chambers, a warehouse, and a demonstration lab. Utilizing the demonstration lab, we provide our Asian customers with an opportunity to discuss our life science and photonics products with knowledgeable staff and to gain hands-on exposure to our products. Here, customers are able to see and interact with fully functioning multiphoton imaging systems, a confocal microscope, our Telesio Spectral-Doman OCT system, as well as other microscope accessories.

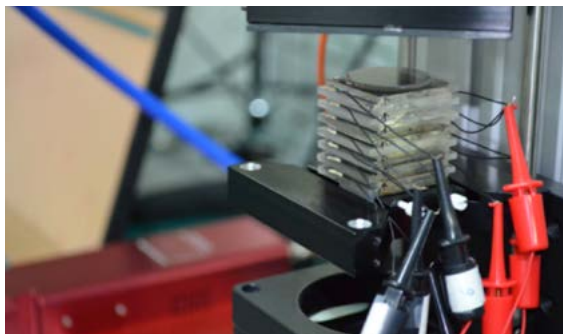
Our dedicated Sales and Technical Support staff are available from 8 AM to 6 PM CST to serve our Pacific-Asian customer base.

## COMPETENCIES

- Piezoelectric Elements In-House Manufacturing
- Training and Testing Platforms for Multidisciplinary Experiments, Such as Optogenetics, Optical Trapping, and Polarization Imaging
- Optical Coatings and Chambers
- Software Development
- Demonstration and Training Lab



Piezo Chip Manufacturing



Assembly of a Liquid Crystal Stack for use in a Tunable Filter