

MEETOPTICS uses AI to make the search for optics and photonics components easy and accessible

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MEETOPTICS is one of 10 startups from around the world working with the Luminate NY accelerator at NextCorps in downtown Rochester. These companies are helping to write the next chapter in Rochester's history as the world's center for optics, photonics, and imaging (OPI).

Each company in Luminate's cohort 5 received an initial investment of \$100,000 and is participating in the six-month program, which helps the selected companies speed the commercialization of their technologies and businesses. On October 19, at Finals 2022 at the Rochester Riverside Convention Center, they will compete for up to \$2 million in follow-on investment. Funding for the \$25 million program is being provided through Empire State Development's Finger Lakes Forward Upstate Revitalization Initiative.

"Optics and photonics are key to bringing many of the latest technologies to market, but these specialized components are often difficult to find within a sea of providers," said Dr. Sujatha Ramanujan, managing director of Luminate. "MEETOPTICS is simplifying the search and evaluation process to help innovators everywhere to bring their ideas to life faster, and to advance the optics and photonics industry as a whole."

We caught up with Dr. Barbara Buades, Founder and CEO of MEETOPTICS, to discuss how the company is helping engineers and researchers with its highly customizable search engine.

Tell us about your company.

MEETOPTICS is an Artificial Intelligence (AI)-driven platform that helps engineers and researchers in the optics and photonics Industry access and compare available products and technologies from trusted manufacturers. The comprehensive, up-to-date database saves them weeks of search time, providing access to valuable contacts when they are needed.

The MEETOPTICS platform includes more than 50,000 products and over 30 suppliers from the USA and Europe. It is growing at a rate of 10% per month, and we now have a user community of more than 55,000 professionals. Our vision is to solve the supply chain crisis by becoming the standard platform for anything related to optics and photonics.

Where is your company headquartered?

MEETOPTICS is located in Barcelona, Spain.



Dr. James Douglas, Co-Founder & Chief Technology Officer and Dr. Barbara Buades, Co-Founder & CEO. (Photo provided)

Who are the company founders?

I founded MEETOPTICS to specifically leverage my background. I have a PhD in Photonics from The Institute of Photonics Sciences, and experience and expertise in AI project management.

Dr. James Douglas, our Chief Technology Officer, holds a PhD in Quantum Optics from the University of Oxford and is an expert in software development architecture.

We've had the honor of attracting international business angels who are serial entrepreneurs, who also have experience in growing rapidly evolving, successful companies. They are helping to supplement our expertise.

How did you and your team develop the concept for your platform?

Four years ago, during my path to PhD, I was working on a million-dollar laboratory project. I had to interrupt my work for eight weeks to find an achromatic lens that was critical to the project. Dr. Douglas and I realized that the optics and photonics industry, in general, faced bottlenecks that prevented engineers and researchers from developing their technologies and conducting research. Manufacturers faced similar hurdles, with not being able to get the most current information on products or suppliers, or direct access to new, growing, fragmented markets.

To solve the problem, we created AI algorithms that can semantically read and understand the technical specifica-

tions of available products in the market and standardize them across manufacturers, creating a unique up-to-date industry database.

Engineers and researchers can search and compare available products from validated and trusted vendors on the MEETOPTICS platform, saving weeks of search time. Manufacturers can use the platform to directly access customers and showcase their products and capabilities to become custom suppliers for Original Equipment Manufacturer (OEM) projects.

Why does the world need this product?

The optics and photonics industry serves an immense, \$2 trillion market and it's rapidly growing year over year. High-tech applications like autonomous driving, laser surgery, medical imaging, and quantum technologies have optical systems that need to be designed and manufactured, yet necessary information is scattered and massive supply chain challenges hinder development.

It can take engineers and researchers months to find specialized, trusted suppliers. They must manually compare, one by one, an exceptionally high volume of products, for instance, 11,000 lenses, with many technical specifications (more than 30 specifications for each optics part), and deal with scarcity in the known supply chain.

The more specialized a product, the more difficult it is to find, leading to time delays and sub-optimal solutions.

The AI-powered MEETOPTICS database is the most comprehensive and up-to-date optics and photonics database, saving time and, in turn, speeding development.

How long have you been working on this technology?

In 2019, we started developing the MEETOPTICS technology and adapting it in response to industry feedback.

Our goal is to expand our Software-as-a-Service (SaaS)-enabled B2B marketplace— which only manufacturers currently pay for—to include a “freemium subscriptions” fee for users. We also want to set barriers on the Asian market and continue adding value to our paying clients.

Who is the target audience for your product?

We target engineers, researchers, and innovators working to develop optics- and photonics-based technologies.

Optics experts, novices, and general engineers leverage MEETOPTICS to discover rare components, alternative technologies, and newly founded manufacturing companies that



Mockup of MEETOPTICS' home search page. (Photo provided)

can be trusted to understand the impact of each technical specification on their setup and compare products from different vendors.

What made you look to Rochester to further your platform?

With more than 100 companies and over 1,000 engineers and scientists using optics and photonics technology in the region, Rochester is the place to be. It offers us an opportunity to learn from the industry in a concentrated way. In

return, we are developing a technology that will serve the entire optics and photonics community and enable it to develop technologies more efficiently with open access.

Tell us about your experience being in Luminate.

Luminate is a unique place comprised of professionals who are both prestigious scientists and successful businesspeople. Their experience with optics and with growing companies is remarkable and well proven.

By growing MEETOPTICS to be the optics reference platform and by creating a Rochester-based team, we aim to give the value we take from the program back to the local region as well as to the entire optics and photonics community.

What are you hoping to achieve during your time in Luminate?

Luminate will help us strengthen our value proposition for the community, validate our proposed solutions, and grow our company to become the most referenced optics and photonics platform in the world. It will also help us build part of our team in the Finger Lakes region, initially led by a business developer, user experience designer and a product manager.

If your company wins, what do you plan to do with the follow-on funding?

The follow-on funding will be used to scale the search database and build a well sorted knowledge hub in the industry, helping hundreds of thousands of engineers and researchers every day. It will also enable us to generate data that can be used to create Market Intelligence to help manufacturers anticipate market trends to avoid the scarcity and overproduction of products.

Our team in Rochester will leverage the additional funding to continue growing the platform's value with experts in the industry, consolidating growth in the US market, and scaling up community-building in the region.