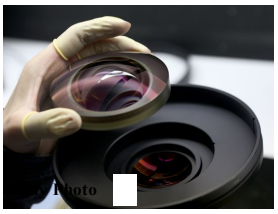
Rochester wins federal photonics center


Brian Tumulty, USA Today *10:13 p.m. EDT July 28, 2015*



(Photo: MAX SCHULTE/@maxrocphoto/, STAFF PHOTOGRAPHER)

The Rochester region has won a nationwide competition as the site for an Institute for Manufacturing Innovation (http://manufacturing.gov/ip-imi.html) focusing on the increasingly important field of integrated photonics, used in telecommunications and lasers.

New York Sen. Chuck Schumer said Wednesday he learned of the decision from high-level Obama administration officials and sources in Rochester. Gov. Andrew Cuomo plans to join Vice President Joe Biden at a formal announcement Monday morning in Rochester.

ROCHESTER DEMOCRAT AND CHRONICLE

Rochester's future looks brighter with photonics

(http://www.democratandchronicle.com/story/money/business/2015/07/22/photonics-institute-rochester-ny/30534511/)

“This is amazingly good news for Rochester,” Schumer said in an interview. “For Rochester to become the center of excellence in one of the most, if not the most, promising areas of job creation in the country could well be a game-changer. Not only are the jobs that are created by the center important, but it could bring many, many companies creating hundreds, if not thousands, of jobs to the area.”

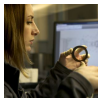
Rochester’s selection means it will receive $110 million in grant money from the Defense Department. That will be complemented by a $250 million commitment in state funding and another $250 million from private-sector partners, giving the photonics hub a $610 million kickoff.

The hub could produce jobs for the region on the same scale as the Route 128 corridor in Massachusetts and Silicon Valley in California, (http://www.netvalley.com/silicon_valley/Silicon_Valley_and_Route_128.html) Schumer said.

The Research Foundation for the State University of New York served as the lead agency in the consortium that applied for a multi-state Integrated Photonics Institute for Manufacturing Innovation to be headquartered in New York.

The consortium came together after Cuomo convened a meeting in November to ensure a unified approach led by the state.

The headquarters will be at a yet-to-be-named site in the greater Rochester area.



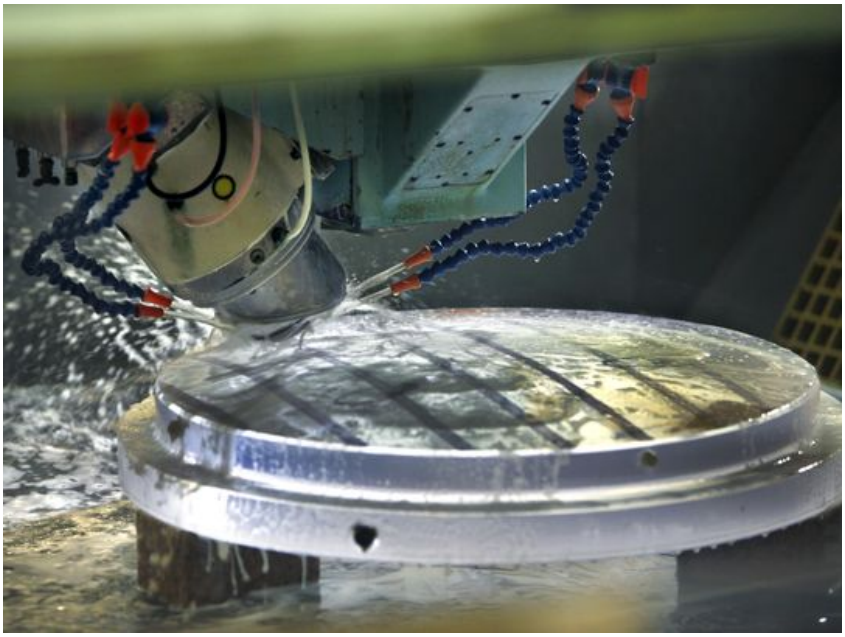
ROCHESTER DEMOCRAT AND CHRONICLE

Jubilant reaction in Rochester to photonics news

(http://www.democratandchronicle.com/story/money/2015/07/22/photonics-rochester-reaction-schumer/30526593/)

Rep. Louise Slaughter, D-Fairport; Democratic Sen. Kirsten Gillibrand; Rep. Tom Reed, R-Corning; and Schumer were among the lawmakers who lobbied for approval of the application.

Schumer said he lobbied Defense Secretary Ashton Carter during a Feb. 5 meeting a week prior to Carter’s Senate confirmation to succeed Chuck Hagel.



The former Exelis Geospatial Systems in Rochester, now part of Harris Corp.'s Communications Systems segment, makes optics that are used in drones, satellites and GPS systems. *(Photo: CARLOS ORTIZ/@cfortiz_dandc/2014 file photo)*

Robert Duffy
@BobDuffyRBA

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Our Photonics team is an outstanding one. Kudos to Governor Cuomo for convening the team/pledging $250 million if we won. Huge investment.

3:52 PM - 22 Jul 2015

8 6

Photonics involves the emission, transmission, amplification and modulation of light in applications such as telecommunications and lasers.

It's increasingly important in fields such as manufacturing, where laser-guided robots make precision parts, and in computer processing, where semiconductor technology is close to reaching its maximum potential. Americans accustomed to watching movies on Netflix or videos on YouTube are testing the limits of Internet providers' bandwidth.

Justin Murphy
@CitizenMurphy

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Tom Battley, exec director of NY Photonics: "This is as important to Rochester as when George Eastman donated $30 million to the UR." #ROC

2:27 PM - 22 Jul 2015

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ROCHESTER DEMOCRAT AND CHRONICLE

Politicos make photonics push again

(http://www.democratandchronicle.com/story/money/2015/04/02/politicos-make-photonics-push/70849898/)

When the White House announced the competition in October, it said the proposed new Institute for Manufacturing Innovation “will focus on developing an end-to-end photonics ‘ecosystem’ in the U.S., including domestic foundry access, integrated design tools, automated packaging, assembly and test, and workforce development.”

“Each manufacturing innovation institute serves as a regional hub, bridging the gap between applied research and product development by bringing together companies, universities and other academic and training institutions, and federal agencies to co-invest in key technology areas that encourage investment and production in the U.S.,” a White House statement said.

President Barack Obama has set a goal of establishing a network of 45 Institutes for Manufacturing Innovation around the nation to develop commercial applications for the new technology.

The consortium behind Rochester’s application included the SUNY College of Nanoscale Science and Engineering in Albany, the University of Rochester, the Rochester Institute of Technology, and a regional cluster of 116 businesses that employ 24,000 workers.

Other partners from around the state included the computer chip commercialization center in Utica and the high-tech MEMS foundry in Canandaigua. Reed proposed Southern Tier partners include Alfred University, Corning and Cornell University.

Reed predicted the Canandaigua foundry “will become the prototype lab for photonics-based advanced manufacturing development.’’

Out-of-state higher-education partners included the Massachusetts Institute of Technology, the California Institute of Technology, Stanford University, UC-Berkeley and the University of Arizona. National business partners include General Electric, Harris, Rockwell Collins, Northrup Grumman, Raytheon and Boeing.

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Where do we use photonics?

There are already everyday applications of photoncis, and many more in development. Here are ways you might use photonics on a day-to-day basis.

Your car: Sensors in a variety of uses, such as self-parking cars.

Your phone: Computer chips that will be faster and use less energy.

At work: Laser cutting tools for medical and industrial applications.

At home: Televisions with light-emitting diode (LED) screens. Heat-sensing devices in a home alarm.

What is photonics?

Photonics, a cousin of optics, involves generating and controlling light waves and photons, the particles that make up light. And the optics and photonics industry has pointed to numerous applications with big potential economic impact, such as using light as a medical diagnostic and even treatment tool to better computer vision for more process automation in manufacturing to nano-photonic materials replacing the liquid crystal display and light emitting diode displays that are ubiquitous on phones, tablets, televisions and desktops.

ROCHESTER DEMOCRAT AND CHRONICLE

Lahman: Photonics can fix dismal poverty rates

(http://www.democratandchronicle.com/story/money/columnist/lahman/2014/06/12/lahman-photonics-can-fix-dismal-poverty-rates/10341931/)

ROCHESTER DEMOCRAT AND CHRONICLE

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