

Project Name: Rochester Regional Optics, Photonics, and Imaging Accelerator (RRPA)

Lead Applicant: University of Rochester (UR)

Requested Funds: The three year project totals \$2,648,423 with a federal request of \$1,889,937 and cost share of \$758,486 from non federal sources to include UR, Rochester Regional Photonics cluster, NYS and B&L.

Applicant Team: University of Rochester (EDA, DOE, ETA lead); NYS Empire State Development, Division of Science, Technology & Innovation (NYSTAR) (NIST lead); High Tech of Rochester Inc. (SBA lead) with leveraged alliances with Rochester Regional Photonics Cluster, Rochester Institute of Technology (RIT), and Monroe Community College (MCC). Identified Region and Cluster: Targeted 9-county Finger Lakes Region in NYS plus Corning Inc. in Steuben County.

Cluster: Optics, Photonics, and Imaging Companies in the region.

Summary of the Integrated Project and Objectives: The RRPA will combine the efforts of the three co-applicants and five partner organizations to accelerate the growth of the SME Optics, Photonics and Imaging (OPI) cluster companies and stop the net loss of jobs stemming from downsizing of some of the larger companies. The RRPA will assist companies in developing new and innovative products, develop and implement advanced manufacturing equipment and processes, increase revenues, particularly export revenues, train qualified workers, and attract both foreign and domestic investment. **A Brief Description of the Scopes of Work and Associated Funding by**

Source follows:

-EDA (\$500,000 with \$645,486 non-federal match): Activities tied to the OPI will include enhanced networking and outreach specific to key trade shows and targeted international customer matchmaking, market research tied to key regional assets; direct assistance to companies in the region through technology demonstration, collaborative research projects and student (UR & RIT engineering and business school students) team projects. The UR led effort will also include the Rochester Regional Photonics Cluster, RIT and Bausch & Lomb.

-NIST (\$375,000): Through HTR, the regional MEP Center, activities will focus on OPI companies to further the NIST Next Generation Strategy. Efforts will include: Innovation Engineering, Continuous Improvement, and Technology Acceleration. Leveraged MEP tools include the web-based National Innovation Marketplace and Supply Chain-Working with sustainability improvements to reduce waste and energy usage in client companies.

-DOE (\$447,936 with \$113,000 non-federal match): Activities to support two research efforts at UR, freeform optics and polishing slurry recycling, which are based on developing and implementing advanced manufacturing and innovation with companies. New technologies will be developed and tested at regional companies & leverage world-class resources at UR's Institute of Optics and Laboratory for Laser Energetics.

-ETA (\$400,000): UR, RIT, and MCC are collaboratively working to prepare current and future employees with a career pathway training offerings key to the growth of OPI companies in the region. The local WIB, RochesterWorks! will refer and assist with placing qualified individuals tied to targeted occupations and assist with collecting, tracking and reporting participant data. Training offerings include 1-, 2- and 4- week short courses at UR's Institute of Optics, RIT's Center for Imaging Science, Microelectronics, Photonics/ Optoelectronics Systems Packaging, along with MCC's Optical Systems Technology certificate program.

-SBA (\$167,000): Led by HTR, activities include targeted 7(j) eligible small and disadvantaged business assistance, SBIR/STTR outreach and proposal assistance and entrepreneurial training/matchmaking events in coordination with local Procurement Technical Assistance Center, SBDC, Urban League of Rochester. **Associated Performance Measures & Deliverables:** increased membership, networking events, tradeshow, market research reports, technical research reports, number of design projects, students trained, SMEs receiving MEP training, number of small businesses trained. **Impacts: 150 new jobs** created by 2015, **1500 new jobs by 2020 with 20 new OPI companies; over 130 underserved individual trained, added investment, displaced or**

disadvantaged workers hired, 2 new product innovations, plus amount of advanced manufacturing transferred to production.

Summary: The decline of Kodak further increases the focus on economic development and entrepreneurship to support the formation of new companies, to accelerate job creation & drive innovation in the largest cluster in the region. This proposal takes a vital step to build on the region's strong capacity for innovation and entrepreneurship, developing an expanded OPI cluster.