A Materials Research Science and Engineering Center Program Highlight

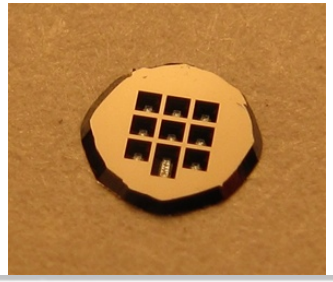
JumpStart Program Aids Small Businesses

University-Industry Partnerships Develop New Products and Solve Technical Challenges

The Cornell Center for Materials Research (CCMR) runs the JumpStart program — an innovative, semester-long partnership that pairs New York State businesses with Cornell faculty to solve technical challenges, develop new products, and access new markets. Since 2005, Cornell researchers have helped 41 companies.

The JumpStart Program has been instrumental in bringing innovative products to market. SiMPore (Rochester, NY) worked with Prof. David Muller to develop a new product for high-resolution electron microscopy: UltraSM® TEMwindows which have half the chromatic blur of the best commercial amorphous carbon TEM grids. First commercialized in January 2009, TEMwindows revenue for 2010 is almost twice that of 2009, and sales of $300,000–$400,000 are projected for 2011.

Harrick Scientific (Pleasantville NY), an established manufacturer of optics and optical products, approached the CCMR with the goal of expanding their product line into the medical area. The JumpStart program partnered Harrick with Prof. Itai Cohen to develop a microscope attachment that enables the direct visualization and measurement of biological tissues under pressure. This instrument can aid the understanding of diseases such as osteoarthritis and the development of diagnostic tools. This instrument was also commercialized, and first sales were in late 2009.



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