

Europe launches \$8.8B nanoelectronics R&D program



CATRENE (Cluster for Application and Technology Research in Europe on NanoElectronics) hopes to take electronics into the nanoscale era.

November 13, 2007 -- [MEDEA+](#), a Europeanwide collaborative research program centred on microelectronics, and part of the [EUREKA](#) project, has announced that [CATRENE](#) (Cluster for Application and Technology Research in Europe) is to be the follow-on program designed to take electronics into the nanoscale era.

The new program has two important novel features: the Lighthouse Project -- which will address major socioeconomic needs such as transportation, health care, security, energy and entertainment -- and a new structure that will focus on large application markets, identified in a roadmap of required technologies.

The MEDEA+ program supported 77 projects and the work resulted in important innovations within a number of areas, including automotive and traffic control, broadband communications, secure society, energy saving and health care. The new CATRENE public-private partnership aims to ensure the continued development of European expertise in semiconductor technology and applications.

Like MEDEA+ and its predecessors MEDEA and JESSI, the new program involves all the key actors in the value chain including those working with applications, technology and materials, as well as equipment suppliers. Industrial companies, both large and small, universities, and

research institutes will take part with the support of public authorities.

"For more than a decade the EUREKA JESSI, MEDEA and MEDEA+ programs have made it possible for Europe's industry to reinforce its position in semiconductor process technology, manufacturing and applications to become a key supplier to markets such as telecommunications, consumer electronics and automotive electronics," said Jozef Cornu, MEDEA+ chairman and CATRENE chairman-elect.

The start date for CATRENE is scheduled for Jan. 1, 2008; it will last four years, extendable by another four years, and will operate under the auspices of the EUREKA program. Commercial participants in EUREKA projects can get half their costs paid by their national governments, while academic institutions can get up to 75 percent of their costs paid. The program has been earmarked to make use of 4000 person-years of effort each year, equivalent to EUR 6 billion (about \$8.8 billion) for the extended program.

Key technology goals contained within the program include maintaining and increasing Europe's strength in intellectual property across the entire electronics supply chain, as well as

sustaining and strengthening leadership in lithography and silicon-on-insulator materials and component packaging, and reinforcing European expertise in applying semiconductor process technology to efficient design for new electronics applications.

"Nanoelectronics will offer enormous opportunities to those who are the first to master and bring to market new technologies and applications and we believe that CATRENE will play a vital role in helping Europe's microelectronics industry to go from strength to strength," Cornu said.