STORRS — A soldier sprinkles fairy dust behind him. The pieces of dust form themselves into a tiny computer, which tells him whether someone's sneaking up on him.

It sounds like a scene from the next Matrix movie, but this technology, in which a computer actually builds itself and runs, is being developed.

This and other cutting-edge technologies — and the problems associated with implementing them — were among the issues discussed Thursday at the start of a two-day international conference on homeland security technology at the University of Connecticut.

More than 450 engineers, academics and scientists came to the conference to hear speakers talk about everything from protecting bridges and power networks to detecting biological threats.

Some scientists talked about emerging technology, such as wall-climbing surveillance robots or an artificial nose that can detect chemicals by smell.

One of the themes that emerged was the need for better information sharing. John G. Voeller, chief security officer for BV Solutions Group Inc., touched on this theme, pointing out that his company only happened to discover one such innovation when officials visited a submarine base.

During the visit, they heard about a high-tech buoy the base was using that could be used to help detect contaminants in water.

Another session focused on barriers to technological advancement. A panel of scientists, municipal and technology leaders said part of the problem is that policy moves much slower than technology.

"The policy in place today reflects the 1970s era. But technology is very different than it is today," said Robert L. Popp, acting director of the Defense Advanced Research Projects Agency's Information Awareness Office, part of the Department of Defense.

Policymakers often don't have a deep enough understanding of technology to make informed decisions and many of the new technologies raise thorny privacy issues, they said.

The conference was organized and run by UConn's school of engineering. After 9/11, the department realized that many of its faculty members were working with federal agencies to improve security. The conference, which continues today, is designed to provide a forum for debate and networking among experts and leaders in technology and public policy.