

# NEWS from The Savannah River Site

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## SRTC WINS R&D 100 AWARD

AIKEN, S.C., July 15 – Researchers at the Savannah River Technology Center have won a coveted R&D 100 Award, considered the Academy Awards of applied research and development. (SRTC is the Savannah River Site’s applied research and development laboratory.) The R&D 100 Awards are presented each year by R&D Magazine to recognize the 100 most technologically significant developments of the year. ALPES is SRTC’s fourth innovation to receive the prestigious R&D 100 Award.

SRTC received its award for Aerosol-to-Liquid Particle Extraction System (ALPES), a highly efficient, portable device that collects airborne particles, including chemical agents and microorganisms, and concentrates them into a liquid for scientific analysis. ALPES is able to collect any aerosol, including chemical agents; radioactive particles; microorganisms (such as spores, bacteria, and fungi); residual substances from explosives; and byproducts of manufacturing processes (such as lead in a battery factory). An array of units, deployed throughout a public or private facility, could be a vital part of an anti-terrorism alert system. This system could quickly notify authorities of the existence of harmful biological, chemical, or explosive materials in the area.

(more)

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SRTC's Dr. Cliff Carlson along with Dr. Justin Halverson and Jeff DeGange designed ALPES specifically to collect particles in the range of 0.3 to 2 microns, which is the size range of most concern for chemical, biological, and radiological hazards presented by terrorist weapons.

"We are honored to receive the highly prized R&D 100 award and the recognition from R&D Magazine editors," said SRTC Director Dr. Todd Wright.

"Technologies that have won in the past have dramatically impacted the way we live our lives each day. Likewise, we believe ALPES will make a significant contribution to homeland security and dealing with issues involving the use of biological, chemical, or radiological weapons."

ALPES also could be effectively deployed to monitor for any number of harmful airborne particles in locales such as manufacturing facilities, clean rooms, cruise ships, sea borne containers, food production facilities, and grain elevators. Also, ALPES could collect airborne constituents derived from illicit drug manufacturing.

For 39 years, the R&D 100 Awards program has recognized the developers of the top 100 technologically significant products introduced into the marketplace over the past year. This year's selection finds industrial, academic, and government researchers from around the world who have moved the bar another notch higher in their continuing efforts to develop technology-based products that work to improve the human experience. Many of the winning products accomplish tasks for which no previous product was able to satisfy.

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In years past, the R&D 100 Awards have recognized many winning products that later became household names, including Polacolor film (1963), the flashcube (1965), the automated teller machine (1973), the halogen lamp (1974), the fax machine (1975), the liquid crystal display (1980), the laser printer (1986), the Kodak Photo CD (1991), the Nicoderm antismoking patch (1992), and High Definition TV (1998).

**Note to Editors: A photograph of the inventors and ALPES is available upon request.**

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