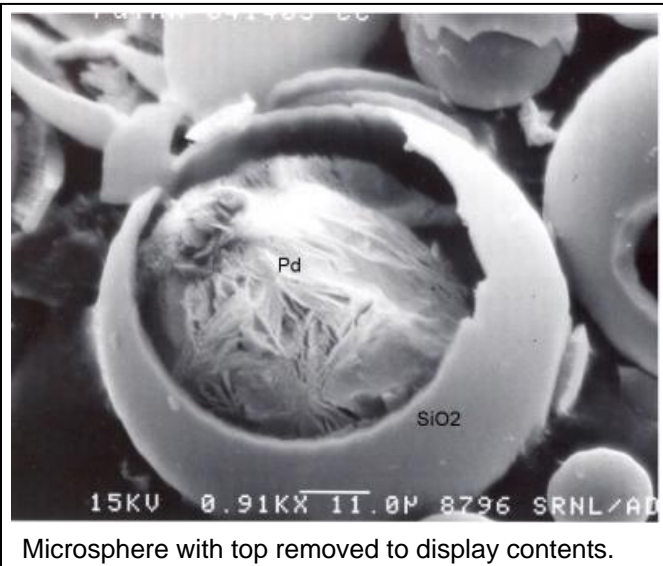


## MO-SCI CORPORATION TO MANUFACTURE, MARKET SRNL'S UNIQUE GLASS MICROSPHERES

### FOR IMMEDIATE RELEASE



AIKEN, S.C. (December 17, 2009) – A licensing agreement between the U.S. Department of Energy's Savannah River National Laboratory (SRNL) and specialty glass provider Mo-Sci Corporation will make SRNL's unique Porous Walled Hollow Glass Microspheres available for use in targeted drug delivery, hydrogen storage and other uses, including applications still being developed.

Hollow glass microspheres have been used for years in light-weight filler material, insulation, abrasives and other uses. What makes SRNL's patent-pending microspheres unique is the network of interconnected pores in the microsphere walls, which allow the tiny "microballoons" to be filled with, hold, and release gases and other materials.

Each porous walled hollow glass microsphere is about 50 microns in diameter, about half the width of a human hair. Its walls, which are about 10,000 angstroms thick (an angstrom is one-tenth of one-billionth of a meter) feature pores that range from 100 to 300 angstroms, which allow gases to enter the tiny spheres and be stored or cycled on absorbents inside.

SRNL originally developed the unique microspheres as a solid-state storage method for hydrogen; they have been successfully demonstrated to store and release the gas.

Work since then has shown potential in other uses, including battery applications and medicine. An article by authors from the Medical College of Georgia and SRNL, which has been accepted for publication in the peer-reviewed journal *Nanomedicine: Nanotechnology, Biology and Medicine*, discusses a possible application for the delivery of anti-cancer drugs. (Porous-wall hollow glass microspheres as novel potential nanocarriers for biomedical applications; Shuyi Li, Lynsa Nguyen, Hairong Xiong, Meiyao Wang, Tom C.-C. Hu, Jin-Xiong She, Steven M. Serkiz, George G. Wicks, William S. Dynan; article in press)

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## Mo-Sci to Manufacture SRNL Microspheres

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Under the license agreement, Mo-Sci will provide SRNL with a cost-effective supply of the microspheres to continue research and development of additional applications. It also provides for aggressive marketing by Mo-Sci to be the premier supplier for medical R&D applications.

Mo-Sci Corporation, a small business entity located in Rolla, Missouri, has been producing specialty glass materials since 1985. They currently produce glass materials to serve a variety of markets ranging from pharmaceutical to health care to space travel and automotive components.

SRNL has long been recognized for its expertise in the science and engineering of glass. The laboratory developed the flowsheets and methods used in the Savannah River Site's facility for converting high-level radioactive waste into a stable glass form.

SRNL is DOE's applied research and development national laboratory at the Savannah River Site (SRS). SRNL puts science to work to support DOE and the nation in the areas of environmental management, national and homeland security, and energy security. The management and operating contractor for SRS and SRNL is Savannah River Nuclear Solutions, LLC.

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