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## FOR IMMEDIATE RELEASE

## Metals with Memory? Frozen "Smoke"? It's Strange and It's Science!

Don't miss the debut of Connecticut Science Center's new traveling exhibition: **Strange Matter, presented locally by United Technologies Corporation** 

**Hartford, CT**- September 28, 2012- Enter the fascinating world of materials and discover the surprising science behind the stuff we use every day, as well as some really weird materials we're just learning about. Space exploration and cardiac surgery are known for their use of advanced materials, but materials with amazing qualities are also part of our everyday lives, from basketball backboards and cell phone antennas, to DVD players and golf clubs.

On view at the Connecticut Science Center September 29- January 1, *Strange Matter* helps guests examine the always amazing and sometimes bizarre world of modern materials, providing a glimpse of where the future of materials research might take us. *Strange Matter* is presented locally by **United Technologies Corporation**.

"United Technologies has continually advanced the Connecticut Science Center's education programs. The latest example of their support is *Strange Matter*, which features direct and practical ties to curriculum," said Hank Gruner, Connecticut Science Center's Vice President of Exhibits & Programs. "*Strange Matter* has received very positive responses from educators who plan to use it to meet their classroom objectives. We will make the exhibit accessible to more schools with a \$5 field trip promotion this fall."

The 6,000 square foot exhibition offers scores of interactive experiences, allowing people of all ages to investigate the structure of exotic, as well as of ordinary, materials and discover what gives them their remarkable properties. Ten different exhibition areas and a live demonstration theater are included in the exhibition.

**Zoom!** takes participants from the larger, macro scale of the world we see around us to the incredibly tiny nanoscale where scientists investigate and manipulate individual atoms using atomic force microscopes.

Crank up a bowling ball and let it fly! In **Smash the Glass**, guests discover whether a large pane of heat-tempered glass has the strength to withstand a direct strike from a bowling ball. The glass will shatter at some point -- who'll break it? Find out how many whacks the pane withstood and why it finally shattered, then learn where this special glass is used, from professional basketball arenas to our own kitchens.

Investigate how **ferrofluids** (fluids in which minute iron particles are suspended) are used, such as in your family room audio system.

Bend and twist nitinol (nickle-titanium) metal and see what happens when it's heated. Unlike other metals, nitinol, an astonishing example of a *Memory Metal*, returns to its original shape with a blast of hot air. Learn what gives nitinol its properties and how it is being used in eyeglass and brassiere frames, during cardiac surgery and for orthodontic braces.

**Foam** is found in cushions, inside bones, atop glasses of beer and is even used by NASA in space. Watch a dramatic column of foam grow towards the ceiling and learn about its surprising composition. Discover why foams are so useful. Is it primarily their insulating properties? Their lightweight strength? Other attributes? Then check out the lightest solid in the world – aerogel -- also known as "frozen smoke." It weighs almost nothing but behaves like glass in many ways.

Younger children can discover materials through hands-on experimentation at the **Touch Table**. Put different materials under the lens of a microscope camera to see how they look when magnified. Play tunes on a wooden xylophone and a xylophone of mixed materials – do similar materials sound the same? Tumble tubes to see how a solid material can flow like a liquid.

Other exhibit experiences include: checking out the one of the world's hardest materials in *Amorphous Metal*; discovering how scientists control *Structure and Defects* to create certain properties in materials; and finding out about silicon, the material that led to the computer revolution in *Sand to Supercomputers*.

This exhibit opening comes on the heels of a major milestone for the Science Center. Last month, the three-year-old destination celebrated its one-millionth person served –underscoring the significant potential of interactive experiences like this one to engage young people in science. *Strange Matter* is located on the 4<sup>th</sup> Floor of the Connecticut Science Center in the Saint Francis Hospital & Medical Center Traveling Exhibit Gallery and is included free with General Admission or Membership. The Connecticut Science Center is open Tuesday – Sunday 10AM to 5 PM and also open for Columbus Day, October 8.

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About Strange Matter The exhibition features 6,000 square feet of interactive experiences developed, designed and fabricated by the Ontario Science Centre and is presented by the Materials Research Society, a not-for-profit scientific association founded in 1973 to promote interdisciplinary, goal-oriented research on materials of technological importance. The Society includes more than 12,500 scientists from industry, government, academia and research laboratories in the United States and nearly 50 other countries. Funding for Strange Matter is provided by the National Science Foundation, Alcan, Dow, Intel, the Ford Motor Company Fund and the 3M Foundation. Strange Matter is presented locally by United Technologies Corporation and Media Sponsor CPTV.

About the Connecticut Science Center The LEED-Gold certified Connecticut Science Center, located in downtown Hartford, sparks creative imagination and an appreciation for science by immersing visitors in fun and educational hands-on, minds-on interactive experiences while maintaining an environmentally conscious presence. Serving more than 1,000,000 people since opening in 2009, the Science Center features more than 150 exhibits in ten galleries and a range of topics, including space and earth sciences, physical sciences, biology, the Connecticut River watershed, alternative energy sources, Connecticut inventors and innovations, a children's gallery, and much more. Other features include four educational labs, a 200-seat 3D digital theater, function room, gift store and café, and ongoing events for all ages. The Science Center is a non-profit organization dedicated to enhancing science education throughout the state of Connecticut and New England, providing learning opportunities for students and

adults of all ages, and engaging the community in scientific exploration. More information:  $\textbf{www.CTScienceCenter.org} \ \text{or} \ 860. \\ \textbf{SCIENCE}.$