The Strange Matter exhibition has reached a major milestone by passing the 5 million visitor mark in 2015. The exhibition, which began touring in 2003, was projected to tour for only three years. It has surpassed all expectations as it begins its 13th year of touring.

The Materials Research Society (MRS), along with the National Science Foundation (NSF) and the Ontario Science Centre, following an extensive period of research and development, unveiled Strange Matter as an interactive traveling exhibit with over a dozen hands-on experiences and an interactive website with supplemental materials.

In the beginning, it traveled throughout North America, including Mexico and Canada. Then in the fall of 2013, the exhibition leaped over the Atlantic Ocean to Abu Dhabi, United Arab Emirates, for the first location outside of North America. Since the middle of 2014, the Strange Matter exhibition has been touring in China and has visited Shanghai, Hong Kong, Guangdong, and Chongqing. Over 279,603 visitors interacted with the exhibition while recently at the Guangdong Science Center in Guangdong, China.

In addition to the Strange Matter exhibit, the Strange Matter team has developed a teacher curriculum/activity guide designed to assist teachers with integrating materials science into their 5th–8th grade science curricula. The hands-on activities, based on US National Science Education Standards, are designed to encourage exploration and inquiry.

The site (www.strangematterexhibit.com) also offers a guide for family activities and fun things to do at home. It explains the four principles materials scientists study (structure, properties, processing, and performance) by providing videos, experiments, and learning links.

“This exhibition really stands out in that it is a great balance of hands-on experiences, but also has really strong and great science that goes along with it,” said Heather Farnworth, Ontario Science Centre. “It is one of those exhibitions that can straddle both of most science center’s key audiences: the education audience and the general public. It has a very strong relevance and interactivity for both groups.”

The exhibit features 13 groups of more than 40 interactive exhibits that introduce the science principles behind some interesting and useful materials. It also explains how they are used to develop new products such as eyeglass frames, computer chips, and golf clubs.

The touring model is such that the exhibition is maintained by teams of crafts people (metalworkers, carpenters, and electronics technicians) who work full time in the fabrication facility. Some of the team going out to set up and take down the exhibition may have worked on the original fabrication of the exhibits, so they have intimate knowledge of and are quite familiar with the exhibition. They are led by a project manager/supervisor from the Ontario Science Centre, who is a constant in all of the procedures. The rest of the team varies from venue to venue but all have had experience with the exhibition.

“New experiences are the beauty of the materials scientists in the area where it goes. We would contact all of the MRS societies and folks we knew, and every site had additional on-site and off-site experiences associated with Strange Matter,” said Shenda Baker, former chair of the Strange Matter Subcommittee.

NSF has stated that Strange Matter is a new paradigm in the collaborative development of a traveling science exhibition, whereby science researchers were brought on not as just science advisors but as equal partners with science museum professionals and educators in the concept, content, and design efforts.

Learn more about the Strange Matter exhibition and its travels, along with fun stuff about materials science at www.strangematterexhibit.com.