WASHINGTON, DC — Quilting meets chemistry in a traveling exhibition of 40 contemporary quilts by 40 artists, each inspired by an unlikely source: an element from the periodic table. Organized by the international non-profit Studio Art Quilt Associates (SAQA), Radical Elements is now on view at the National Academy of
Sciences in Washington, DC, coloring a small hallway gallery with an array of works that reimagine and expand the definition of the art of quilting.

"In a relatively short period of time, the field of art quilting has undergone a fundamental change," curator and artist Jill Rumoshosky Werner wrote in the exhibition’s press release. “The primary focus has shifted from decorating the surface of a quilted wall hanging to a much broader acceptance of ideas, styles, and materials.”

Composed of all sorts of materials and objects beyond conventional fabrics, the pieces on view don’t quite resemble quilts at first glance aside from their rectilinear shape or method of display: like tapestries, they hang flat along the walls, which allows for complete examination of their structures (although the show does include two pieces on pedestals that most would categorize as sculptures). It’s especially interesting to note the different techniques artists used to stitch unconventional materials into a cohesive surface: although some are still hand-embroidered or crocheted, others are machine-stitched, tied with wire, fused, or even drilled together.

The results are as varied as the natural elements themselves, drawing inspiration from sources such as their names, unique characteristics, and purposes. “Iridium — My Darkness to Light II” (2013) by Grace Harbin Wever fuses marbleized papers, holographic fabric, foil, wire, and tacks to create an iridescent cloth; at its center is an eye resembling a rose window as Wever, a former cell and molecular biologist, wanted to celebrate the success of the silvery-white metal’s role in improving eyesight when planted in the visual cortex. Representing uranium is one of the show’s most intricately crafted pieces, “Uranium 235” by Daren Pitts Redman, an inkjet-print of an explosion of a US nuclear test near Bikini Atoll Islands that she thread painted with red and black thread.

Daren Pitts Redman, “Uranium 235” (2013)

Other works are more literal representations of elements, like Karen Jurek’s “CU Around” (2013), which integrates copper and copper-colored material, including wires to stitch the objects together into one of the few pieces that adheres to the familiar patchwork format of a quilt. Each patch serves as a mini canvas onto which Jurek has pressed, twisted, and folded objects from keys to pennies to screws to highlight the various textures one element may yield.
Playful quilts are rife, too, such as Brooke A. Atherton’s red and orange, plastic toy-saturated homage to the colorant molybdenum or Kathy York’s electric quilt. The latter, inspired by the medical tracer technetium, lights up LED blubs embedded in specific baby bottle nipples at the flick of a switch to simulate the detection of cancer tumors by isotopes.

These explanations are all recorded on the accompanying detailed wall text, which also notes the materials and techniques used. To some extent, the texts offer mini-lessons in the periodic table for those who want a refresher of high school chemistry, but they also emphasize how building blocks of our natural, everyday world that we may otherwise disregard may be recognized in unexpected ways — that science and art are not so distant in the end.
Brooke A. Athergon, “Orange/Red and Fugitive Blue VI” (2013)
Barbara Schulman, detail of “A Pepto Bismuth Story” (2013)
Karen Jurek, “CU Around” (2013)
Elizabeth A. Baum, “Sine Qua Non” (2013)
Radical Elements continues at the National Academy of Sciences (2101 Constitution Ave., NW, Washington, DC) through October 19. It will travel to the Ruth Funk Center for Textile Arts (150 W University Boulevard, Melbourne, FL), where it will run May 28–August 27, 2016.