# Way to Glow


## Summary

"Way to Glow" is an interactive exhibit that shows how some high-tech nanomaterials mimic natural phenomena. Super-small, light-reflecting structures—instead of pigments—on the wings of some butterflies create intense, iridescent colors. Nanoscientists have replicated this effect with layered, super-thin films. Watch the colors change on butterfly wings and thin-film slides as you move them beneath a light source, and discover how nanoscale structures can manipulate light and create color.

Butterfly specimens deteriorate with heavy use, and may need to be replaced periodically.

## Big Idea

- Nanoscience is harnessing nanoscale phenomena seen in nature to create new techniques, materials, and products.

## Learning Goals

- The butterfly scales and thin films contain no pigment.
- The butterfly scales and thin films are made up of layers of super thin, transparent materials. The spacing between the layers causes only certain light waves to bounce back to our eyes as colors.
- When you change the angle of the light, you change the color.

## Exhibit Details

Audience: All ages

Exhibit Format: Stand-Alone Exhibit Component

Exhibit Dimensions: 65 ½"w x 32 ½"d x 78"h