

## Recent Case Studies

Secrets of the sandcastle worm could yield a powerful medical adhesive

17-August-2009 - The sandcastle worm makes a protective home out of beads of zirconium oxide in a lab. At the University of Utah, scientists have created a synthetic version of this glue for possible use in repairing fractured bones. > [Read the full American Chemical Society press release](#)

Evolution meets creation

27-July-2009 - At first glance, a humpback whale and a wind turbine don't have a lot in common. For that matter, neither do a shellfish and a sheet of plywood. But both sea creatures are the inspiration behind products designed using biomimicry, or looking to nature's designs and processes to solve human problems.

For those who know where to look, biomimetically inspired products can be found in almost every corner of the marketplace, from medicine to transportation. But where the emerging field has the potential for the greatest impacts, according to advocates and practitioners, is in changing the way we think about our built environment—not only in designing individual building products, but in conceiving of entire communities as biomimetic systems, not to mention businesses, government bodies and other "systems." >[Read the full "Evolution meets creation" article in Sustainable Industries](#)

Panelite ClearShade Insulating Glass Unit inspired by honey bees

27-July-2009 - Just as the hub of a bee hive is the honeycomb, the hub of New York-based Panelite's ClearShade insulating glass unit is its "tubular polycarbonate" core. Modeled after the hexagonal structure of a honeycomb, ClearShade's core limits sunlight coming through glass thereby reducing heat gains as well as energy costs. Because light rays can only make it through when they hit the glass perpendicularly, the sun is most obscured when it is highest in the sky. At midday, ClearShade has a low shading coefficient and a low solar heat gain coefficient—which Panelite touts as "four times better than a typical insulating glass unit." >[Read the full article from Sustainable Industries](#)

Dolphins inspire efficient flight

29-June-2009 - The flippers that some marine mammals use to glide underwater have a lot in common with the wings of passenger jets and fighter planes. >[Read the full Scientific American article](#)

Clams inspire new joining system

15-June-2009 -

Queensland inventor Dean Cameron has developed a new joining system that replaces screws, bolts, glue, flanges and nails.

The

Joinlox system is likened to "industrial velcro" and can be used for products ranging from food crates and pipes to cars, planes and bridges.

Cameron has been announced as a finalist in Innovic's International Next Big Thing Award 2009. >Read the full article in [Manufacturers' Monthly](#)