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## WHAT'S NEXT - GREEN BIZ

### MATERIALS

#### Of New Plastics and a Steel Sandwich

**Better materials are the key** to lighter vehicles that burn less fuel. Scientists at the University of Michigan have borrowed a trick from oysters, which fabricate mother-of-pearl one layer at a time, and have used it to make a tough, superlight composite plastic. The researchers started with a layer of clay only nanometers thick, then added a sticky liquid, then another layer of clay--repeating this process 300 times. The result is a light, transparent substance as strong as steel but no thicker than plastic wrap.

**Taking a different tack**, San Diego's CellTech Metals is making more durable sheet metal that resembles corrugated cardboard. On the outside are thin steel layers. Sandwiched in between is a rippled layer created by crinkling steel into waves. The resulting product is the same thickness as sheet metal, but half the weight and more than three times as strong. It could be cheaper and better than aluminum in automobile hoods, fenders, and other parts, says CellTech CEO Doug Cox.



*By John Carey*

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