LIGHT IN THE DARK: FILIPINO USES FIBERGLASS TO ILLUMINATE SUBMERGED SIGHTS

A Filipino man hopes his innovative glass-bottom boat will shed light on his country’s marine treasures and educate his fellow citizens. Environmental lawyer Tony Oposa has introduced a modified version of a glass-bottom boat in Bantayan Island, Cebu. Instead of marine plywood, Oposa used sawali mats and fiberglass to make a glass-bottom boat so passengers can see and appreciate corals and fish while island hopping. Oposa said the Philippines is the richest nation in the world in terms of marine resources. However, according to Oposa, only a few Filipinos do their part to preserve the environment.

Oposa's modified version of the glass-bottom boat is less expensive than one made of marine plywood because sawali mats cost one-fifth the price of plywood. “We want to use it as a teaching tool and as an example where people will be able to see underwater without getting wet,” Oposa explained. The 3 x 5-meter glass-bottom dinghy is sandwiched by two big bancas, each of which can accommodate six passengers. Oposa hopes people will copy his invention, as it is not patented, to enable more Filipinos to help increase the public’s awareness of the beauty and preservation of marine life. Source: www.abs-cbnnews.com

In the Know: Teaming Up to Promote Composite Education

Wichita State University’s College of Engineering and National Institute for Aviation Research partnered to offer a five-week course on composite materials for local aviation industry professionals. Attendees spent 40 hours during five Mondays learning from NIAR researchers and WSU professors through a combination of lectures and hands-on laboratory sessions. The topics were wide-ranging, including conventional fiber/polymeric materials, process modeling, mechanics of laminates and ultrasonic NDI.

Wichita State engineering professors Suresh K. Raju, Charles Yang and Bob Mitinae, along with NIAR researchers Allison Crockett and Lamia Salah, taught sessions. The College of Engineering and NIAR have extensive composites experience, primarily in industry and the federal government. “It is imperative that we offer composite education to the local industry as it will not only add to the pool of engineers and technicians with composites background, but also provide a platform for us to demonstrate and share our expertise and experiences,” says Raju, assistant professor of aerospace engineering.

The workshop was underwritten by the Kansas Department of Commerce in partnership with the Workforce Innovation in Regional Economic Development (WIRED), the Workforce Alliance of South Central Kansas and the Area 1 Workforce Investment Board. This was the third composites introduction course provided to industry professionals by WSU’s College of Engineering and NIAR. Source: www.niar.wichita.edu/composites

Let’s Get Together: Carbon Fiber Companies Join Forces

Toray Industries Inc., Teijin Ltd. and Mitsubishi Rayon Co. plan to jointly mass produce recycled carbon fiber to promote the use of the strong yet lightweight material. The three companies, which collectively hold a 70 percent share of the global market for carbon fiber, plan to establish a joint venture in 2009 to collect and recycle used carbon fiber recovered from aircraft and other equipment. The capitalization and ownership ratios in the new firm have not yet been determined, and there are plans to invite other manufacturers of carbon fiber, such as Mitsubishi Plastics Inc. and Kureha Corp., to join the partnership.

The venture will outsource the recycling work to a plant in Japan’s Fukuoka Prefecture owned by Mitsui Mining Co. Test operations started in April, and samples will likely be shipped to the three firms this autumn. Annual output of the recycled carbon fiber will start at several hundred tons and eventually be raised to a world-best 1,000 tons. Toray and the other firms will each purchase the carbon fiber from the joint venture and then mix it with plastics to manufacture materials that will be priced at about 2,000 yen per kilogram, more than 30 percent less than non-recycled materials of the same strength. The companies will initially seek to sell them to computer makers for use in laptops.

Carmakers view carbon fiber as something that will help them manufacture lighter vehicles, so the move to offer recycled fiber may further encourage its adoption by auto companies, which are under pressure to raise the recycled content in the parts and materials they use. Source: www.tradingmarkets.com