

SPOTLIGHT

Faculty Research in the News

Georgia Tech researchers' work is covered in the news media.

BusinessWeek, *Chemical & Engineering News*, *Earthtimes*, *Electronics Weekly*, *New Scientist* and *TechJournal South* were among the media outlets reporting that the three-dimensional shells of tiny ocean creatures could provide the foundation for novel electronic devices, including gas sensors able to detect pollution faster and more efficiently than conventional devices. Published in the journal *Nature*, the research is led by **Kenneth H. Sandhage**, a professor in the School of Materials Science and Engineering. (Read the article on page 30 in this issue of *Research Horizons*.)



R&D Magazine, *Occupational Hazards*, *Scientific American* online, *Earth and Sky Radio*, and *Green Business News* were among the news media outlets that published news accounts of research by Assistant Professor of Civil and Environmental Engineering **Jaehong Kim** and colleagues on the environmental fate of multi-walled carbon nanotubes. The study showed significant potential for dispersal in aquatic environments — especially when natural organic materials are present. Among the many news Web sites carrying the story were *Nanotechweb*, *Nanowerk*, *Earthtimes*, *Chemlin*, and *Photonics.com*. (Read the article on page 16 in this issue of *Research Horizons*.)

IndustryWeek reported on a collaborative project involving researchers from the Georgia Tech Research Institute (GTRI) and the Manufacturing Research Center (MARC). Working with a national standards organization, **Andrew Dugenske** of MARC and **Jeffrey Gerth** of GTRI developed a system of interoperability standards governing how machinery and software should communicate on the factory floor. The article was part of a larger package of articles about manufacturing standards. (See the Research News article at:

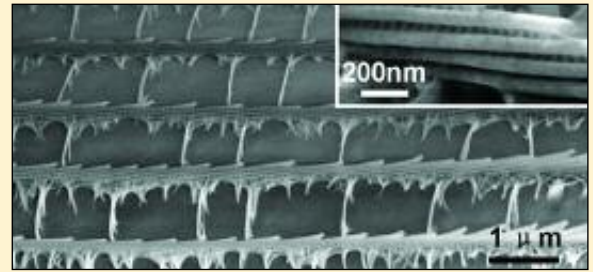
gtresearchnews.gatech.edu/newsrelease/camx.htm)



EDN, *Designfax.com* and *Machine Design* published articles on a new sensor that measures the motion created by sound waves under water. It could allow the U.S. Navy to develop compact arrays to detect the presence of enemy submarines. The research is a collaboration among **Francois Guillot**, **Peter Rogers** and **David Trivett**, all of the School of Mechanical Engineering. (Read the article on page 41 in this issue of *Research Horizons*.)



Photonics Spectra, *Materials World* and the *Journal of Materials* published articles on a new technique that uses biotemplates for fabricating nanoscale structures that could serve as optical waveguides, optical splitters and other



This scanning electron microscope image shows the structures on the surface of a butterfly wing scale.

building blocks of photonic integrated circuits. **Zhong Lin Wang**, a Regents Professor in the Georgia Tech School of Materials Science and Engineering, led the research. (See the Research News article at: gtresearchnews.gatech.edu/newsrelease/butterfly-wing.htm)



American City & County, *Technology Horizons*, *Materials Performance*, *the Engineer Online* and *Urban Transportation Monitor* reported on a first-of-its-kind system capable of automatically placing raised pavement markers along the lane stripes while in motion. The system, developed by Georgia Tech Research Institute senior research engineer **Wiley Holcombe** and his colleagues, is expected to save lives and money. A prototype system was produced for the Georgia Department of Transportation. (Read the Research News article at: gtresearchnews.gatech.edu/newsrelease/rpm.htm)



Building Design & Construction, *SmallTimes*, *Materials World*, *Medical Design Online* and *Plant Engineering* pub-

lished articles on research that is mimicking one of Nature's best non-stick surfaces to help create more reliable electric transmission systems, photovoltaic arrays that retain their efficiency, MEMS structures unaffected by water and improved biocompatible surfaces able to prevent cells from adhering to implanted medical devices. **C.P. Wong**, a Regents Professor in the School of Materials Science and Engineering, is leading the research. (See the Research News article at: gtresearchnews.gatech.edu/newsrelease/lotus.htm)



C.P. Wong