

SPOTLIGHT

Faculty Research in the News

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



ABOVE: College of Computing researcher Shwetak Patel tests a device intended to prevent video piracy and unwanted photography.

Scientific American, *Technology Review*, *Science News*, BBC.com and *Information Week* were among the news outlets reporting on a system that could halt the taking of unwanted still pictures and videos. The technology, developed by a team of researchers led by Associate Professor **Gregory Abowd** in the College of Computing, could be useful for preventing video piracy and protecting sensitive areas from being photographed. Other media reporting on the work include: *Electronic Design*, *Network World*, *Photonics.com*, *Atlanta Magazine* and *Security Products*. (See the Research News article at:

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



The Wall Street Journal, *New York Times* and the *Washington Post* were among more than 300 media outlets to report on a new speed record set by silicon-germanium transistors developed by a research team from IBM and Georgia Tech.

The work, by Professor **John Cressler** and others in the School of Electrical and Computer Engineering, demonstrates the potential for further performance improvements in silicon devices. Other key media outlets reporting the research included: ABC News.com, *Atlanta Journal-Constitution*, *Industry Week*, *Research & Development*, *EE Times*, *The Financial Times* and the *New Scientist*. (See the article on **page 22** in this issue of *Research Horizons*.)



The *Los Angeles Times*, *Boston Globe* and *Technology Review* reported on Georgia Tech research that conclusively demonstrated the mechanism by which ultrasound energy increases the permeability of cell membranes for the passage of drugs. **Mark Prausnitz** in the School of Chemical and Biomolecular Engineering led the research. The Reuters and United Press International news services also reported on the work, and those stories appeared on numerous Web sites. *R & D Magazine*, *Medical Imaging*, *Small Times*, *Pharmaceutical Manufacturing* and *Medical Device & Diagnostic Industry* also covered the story. (See the article on **page 13** in this issue of *Research Horizons*.)

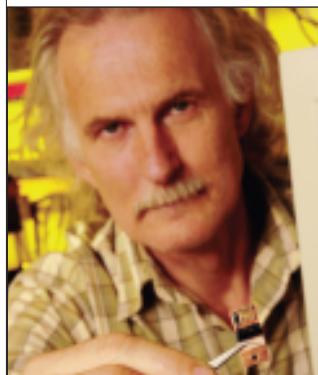


ABCNews.com reported on a study showing that the Earth's protective ozone layer appears to be on the road to recovery at the mid-latitudes in both the Northern and Southern hemispheres. The research was done by a large team headed by **Eun-Su Yang** and **Derek Cunnold** from the School of

Earth and Atmospheric Sciences. Other Web sites covering the work included MSNBC.com, CNET.com and ScientificAmerican.com. (See the article on **page 14** in this issue of *Research Horizons*.)



Machine Design and MSNBC.com were among dozens of news outlets reporting on the fuel-cell-powered UAV flown by a research team from GTRI and the School of Aerospace Engineering. The team, which included **David Parekh**, **Dimitri Mavris** and a number of graduate and undergraduate students, developed an aircraft with a 22-foot wingspan that flew for up to a minute during test flights. Other news outlets covering the story included ScientificAmerican.com, LiveScience.com, *Discovery Reports Canada*, *Electronics Weekly*, *TechJournal South* and the *Atlanta Journal-Constitution*. (See the article on **page 4** in this issue of *Research Horizons*.)



Professor Walt de Heer

Nature quoted Professor **Walt de Heer** of the School of Physics in an article about the potential for graphite as the basis for future electronic devices. De Heer helped popularize carbon nanotubes, but now believes thin sheets of graphite known as graphene have much more potential in electronic applications. (Read the Research News article at

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



Machine Design, *Network World*, *Scientific Computing* and *Dark Reading* reported on GTRI prototype devices for the fail-safe and rapid erasure of data from magnetic storage media of varying types. The work, by **Michael Knotts** and others in GTRI, uses powerful magnets to delete data from VHS tapes, floppy disks and small hard drives. (See the *Research Horizons* article at: gtresearchnews.gatech.edu/reshor/rh-ss06/guard-dog.html)



CIO Today and *Dark Reading* covered Georgia Tech research on a new cure for spam — a proposal to attack the problem of unwanted e-mail by using network cues rather than content filtering. Assistant Professor **Nick Feamster** from the College of Computing presented the research at a SIGCOMM meeting. (Read the article on **page 32** in this issue of *Research Horizons*.)



Environmental Protection was among more than two dozen news outlets that covered research on green chemistry solvents and processes that could be used to generate high-value products from the same feedstock used to produce ethanol. Professor of Chemical and Biomolecular Engineering **Charles Eckert** made a presentation on the research at the recent American Chemical Society meeting. Other outlets covering the work included Azom.com, *Biofuel Review*, *Green Car Congress*, *Power Online* and *Scientific Front Line*. (Read the article on **page 39** in this issue of *Research Horizons*.)