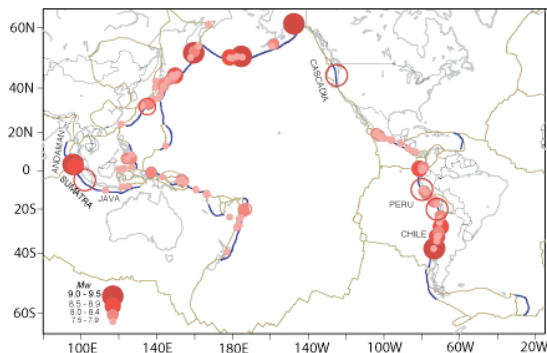


## Volume 1, Number 2

### Featured Story

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#### Protecting the World from the Next Great Earthquake



Credit: Rensselaer Polytechnic Institute/  
Robert McCaffrey

The 2004 Sumatra-Andaman earthquake and resulting tsunami are now infamous for the damage they caused, but at the time many scientists believed this area was unlikely to create a quake of such magnitude. In the March 23 issue of the journal *Science*, geophysicist Robert McCaffrey urges the public and policy makers to consider all subduction-type tectonic boundaries to be “locked, loaded, and dangerous.”

“The great earthquake of 2004 ruptured a segment that was thought to be among the least likely to go,” says McCaffrey, professor of earth and environmental sciences at Rensselaer. On Dec. 26, 2004, the earth beneath the Indian Ocean buckled and ruptured, unleashing one of the largest earthquakes in recorded history. Shockwaves from the magnitude 9.2 (M9) quake created a wall of rushing water that devastated communities up to 1,000 miles away.

M9 earthquakes typically occur at a specific type of tectonic boundary called a subduction zone, where one plate is gently slipping underneath another plate. An M9 earthquake can be created by only 20 meters of slip between two converging plates — less than the length of an 18-wheeler truck — but its effects can be global in their impact. [Read more.](#)

### Honors and Awards

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#### Faculty

- **Blanca Barquera** (Assistant Professor, Biology) won a Career Campaign Award at the RAMP-UP Forum on Advancement in the Academy.
- **Shirley A. Jackson** (President and Professor, Physics) will receive the 2007 Vannevar Bush Award from the National Science Board for a lifetime of achievements in scientific research, education, and contributions to public policy.
- **Michael Shur** (Patricia W. and C. Sheldon Roberts Professor, ECSE and Physics) was promoted to Fellow of the Institution of Engineering and Technology.
- **Ingrid Wilke** (Assistant Professor, Physics) won a Career Campaign Award at the RAMP-UP Forum on Advancement in the Academy.

### Research Accomplishments

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- **Margaret Cheney** (Professor, Mathematical Science), received a National Research Council Senior Research Associateship award to support her work for six months on developing methods for radar imaging of moving objects on the ground at Wright-Patterson Air Force Research Lab in Dayton, Ohio.
- **Jim Hendler** (Tetherless World Constellation Professor, Computer Science) gave a keynote talk at the annual conference of the National Federation of Abstracting and Information Services.

- **Jim Hendler** (Tetherless World Constellation Professor, Computer Science) was featured in an interview in [PC Magazine](#) and quoted in several other magazines and papers about the new "Web 3.0" wave of semantic web research.
- **Robert McCaffrey** (Professor, Earth & Env. Sci.) had his work featured in the March 23 issue of *Science* and on the NPR *Science Friday* [website](#). He urges the public and policy makers to consider all subduction-type tectonic boundaries to be "locked, loaded, and dangerous."
- **Jeff Trinkle** (Professor and Head, Computer Science) was appointed an Associate Editor of *Robotica*, an international journal published by Cambridge University Press.

## Other News

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- The School of Science has created a set of new awards to recognize outstanding accomplishments of its faculty, staff, and students. The awards will be presented for the first time at an awards reception on May 3rd. The six new awards are: Outstanding Service Achievement, Outstanding Graduate Student, Outstanding Undergraduate Student, Outstanding Emerging Researcher, Outstanding Staff Achievement, and Outstanding Teaching Achievement. Each award includes a cash prize and plaque. In addition, the names of award winners will be engraved on a plaque displayed in the Office of the Dean. Nominations for these awards are due April 18th.
- The Computer Science Department and the IT Program co-hosted an IT Distinguished Speaker, Robert C. Seacord '83, of the CERT/CC at the CMU Software Engineering Institute. His specialty is software security and he talked about the CERT Secure Coding Initiative. This event is part of an IT initiative to launch concentrations in information security in the Bachelors and Masters IT degree programs.
- Gamma Nu Eta, the IT Honor Society, held its annual induction ceremony and dinner on March 28, 2007. Nine students were inducted into the honor society, four undergraduate and five graduate students. Greg Hughes, Clinical Professor of IT, was the speaker for the event.
- Rensselaer's graduate program in applied mathematics ranks among the best in the nation, according to the 2008 U.S. News & World Report guide to "America's Best Graduate Schools." The publication hit newsstands on April 3, 2007. The applied mathematics program is ranked number 20.
- Both research awards and research expenditures are up in the School of Science this year over what they were at this time last year. Awards and expenditures are both up about 20%.

## Upcoming Events

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- Undergraduate Accepted Students Day - Saturday, April 14 (all departments participate).
- School of Science Town Hall Meeting on CCNI, Wednesday, April 18, 4:00, CII 4050 (all faculty are encouraged to attend).
- Provost Workshop on Promotion and Tenure, Tuesday, April 24, 10:00, Bio Tech Auditorium. Following the workshop, at noon, the Dean will host a luncheon for School of Science junior faculty in 1C13 Science Center (all assistant professors are encouraged to attend both events).
- School of Science Awards Ceremony and Reception, Thursday, May 3, 3:30, Heffner Alumni House (all faculty, staff, and students encouraged to attend).
- Annual Faculty Recognition Dinner, Friday, May 4, 5:30, Russell Sage Dining Hall (all faculty are encouraged to attend).

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This newsletter is prepared monthly and distributed to faculty, staff and students in the School of Science to keep everyone informed of accomplishments and events within the school. Corrections and items for the next newsletter should be sent to [spoon@rpi.edu](mailto:spoon@rpi.edu).