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## Rafael Bras to receive AGU's Horton Medal

Denise Brehm, Civil and Environmental Engineering

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Edward A. Abdun-Nur Professor Rafael Bras has been named this year's winner of the Robert E. Horton Medal, the highest award given to hydrologists by the American Geophysical Union. An internationally recognized researcher in hydrology and hydroclimatology whose work encompasses many aspects of the Earth's water cycle, Bras is being recognized for his contributions to the geophysical aspects of hydrology.

Bras, who holds appointments in the Department of Civil and Environmental Engineering and in the Department of Earth, Atmospheric and Planetary Sciences, is known for his work in flood forecasting and distributed hydrologic modeling, remote sensing and modeling of precipitation and soil moisture.

"It means a lot to follow so many giants," Bras said upon learning he would receive the Horton medal. "And it means a lot to be recognized by an organization I hold dear to my heart, since it has played such an important role in my life. After 30-plus years, I can honestly say that I never get tired of working in this field, largely because of the people and, in particular, the students."

In addition to being a noted flood forecaster, Bras is also known for his research the fractal organization and geometry of river basins, for his models of the evolution of river basins, for studies of the impact of deforestation in the Amazon River basin and most recently for his work on how vegetation, hydrology, climate and landscapes evolve together.

Since 1995 he has chaired a panel of international experts overseeing the development of a system of barriers being built to protect Venice, Italy, against flooding during unusually high tides. The 4.5 billion euro project is scheduled for completion in 2012.

Bras will formally receive the Horton award in December. Next May, during the Environmental and Water Resources Institute meeting in Hawaii, Bras also will receive the Simon W. Freese Award from the American Society of Civil Engineers (ASCE) "for advancing the theory and practice of hydrologic sciences, including hydrometeorology and hydroclimatology." This is the highest environmental recognition for environmental work by ASCE. At the same he will be presented with an honorary diplomate award from the American Academy of Water Resources Engineers, an honor held by only 14

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other individuals, for his "demonstrated advanced expertise in water resources engineering, extensive experience, strong ethics, and commitment to lifelong professional development."

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