



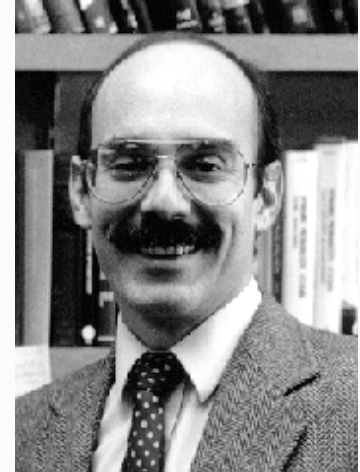
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BS MIT 1972
MS MIT 1974
Sc.D MIT Sc.D



Rafael L. Bras

Description of Research

Dr. Bras' main interests are fluvial geomorphology, hydroclimatology and use of digitized topographic and precipitation data in distributed rainfall-runoff modeling. Why do river basins develop in regular tree patterns and what is the relation between form and function? Morphology and hydrology are intertwined. We try to discover regularities in river and landscape forms and to elucidate principles and processes that lead to described patterns and to build models that mimic nature. The promise of this work lies on the understanding of landscape changes, evolution, and associated uses of remote sensing, digital elevation maps, and inference of river basin response.

Recent Papers or Publications

Bras, Rafael L. and Ignavio Rodriguez-Iturbe, Random Functions and Hydrology,
Dover Publications, 1994.

Bras, Rafael L., Hydrology: An Introduction to Hydrologic Science, Addison
Wesley, 1990.

Special Honors or Awards

MIT Reverend Dr. Martin Luther King Jr. Leadership Award, February 2000

William Mong Distinguished Lecture, 1999-2000, The University of Hong Kong

Albert Baez Jr. Award and the Outstanding Educator Award of the

Hispanic Engineer National Achievement Awards Conference, 1999

1999 Horton Lecturer, American Meteorological Society

1998 Clarke Prize Laureate for Outstanding Achievement in Water Science and Technology

Named Top 100 Most Influential Hispanics, Hispanic Business, 1997

Bacardi and Stockholm Water Foundations Professor, MIT, 1995-present

Fellow, American Society of Civil Engineers, 1994

1993 Walter L. Huber Civil Engineering Research Prize, ASCE

Fellow, American Meteorological Society, 1992

Honoris Causa Laurea, Instituto di Idraulica Agraria, Universita Degli Studi di Perugia,
Italy, 1992

William E. Leonhard Professorship, MIT, 1989-1995

American Geophysical Union, James B. Macelwane Award, 1982

Fellow, American Geophysical Union, 1982

John Simon Guggenheim Memorial Foundation Fellowship, 1982

American Geophysical Union, Horton Award, 1981

Gilbert Winslow Career Development Chair, MIT, 1979-1982

Tau Beta Pi, Chi Epsilon, Sigma Xi

Graduate Fellowship from Puerto Rico's Economic Development Administration

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