

# Recent Honors

**James Clarke** appointed to the Executive Board of the Environmental Sciences Division of the American Nuclear Society and the U.S. Nuclear Regulatory Commission Advisory Committee on Nuclear Waste.

**David Kosson**, 2007 Medal of Excellence for Alumni Achievement in Academia from Rutgers, the State University of New Jersey

**Molly F. Miller**, Association for Women Geoscientists 2005 Outstanding Educator Award

**Calvin F. Miller**, American Geophysical Union 2005 Daly Lecturer

**Frank Parker**, Award of Excellence from the Department of Energy

**Florence Sanchez** wins a 2006 NSF Career Award

**Vanderbilt** is home to the first National Science Foundation program on interdisciplinary graduate study of reliability and risk.

### For more information contact:

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<http://sitemason.vanderbilt.edu/site/ldTsE8/home>

For more information about  
Vanderbilt University:

<http://www.vanderbilt.edu/facts>

For more information about  
the city of Nashville, TN:

<http://www.vanderbilt.edu/nashville/>



### Earth and Environmental Sciences

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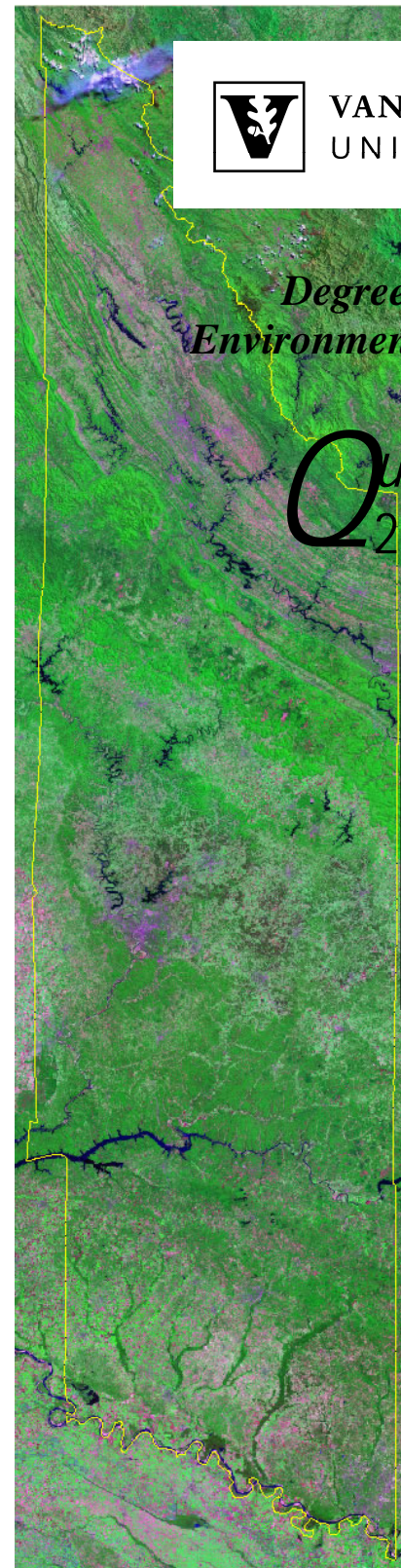
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VANDERBILT  
UNIVERSITY

## *Degree Options in Environmental Science*

## *Quick Facts 2007-2008*



# Faculty and Specialties

**John Ayers** (Ph.D. Rensselaer, 1991)  
*Geochemistry*

**Mark Abkowitz** (Ph.D. MIT, 1980)  
*Environmental Risk Management and Risk Assessment*

**Alan Bowers** (Ph.D. 1982, Univ. Delaware)  
*Environmental Chemistry, Adsorption Processes, Heavy Metals*

**James Clarke** (Ph.D. 1973, Johns Hopkins)  
*Site Restoration, Environmental Policy, Environmental Forensics*

**David Furbish** (Ph.D. Colorado, 1985)  
*Geomorphology, Hydrology, Fluid Mechanics*

**Steven Goodbred** (Ph.D. William & Mary, 1999)  
*Sedimentology and Climate Change*

**Guil Gualda** (Ph.D. 2007, Univ. of Chicago)  
*Igneous Petrology and Volcanism*

**David Kosson** (Ph.D. 1986, Rutgers)  
*Chemical and Environmental Engineering*

**Eugene LeBoeuf** (Ph.D. 1998, Univ. Michigan)  
*Physicochemical Processes of Environmental Systems*

**Calvin Miller** (Ph.D. UCLA, 1977)  
*Igneous Petrology, Continental Tectonics*

**Molly Miller** (Ph.D. UCLA, 1977)  
*Paleoecology, Sedimentology*

**Harold Park** (Ph.D. 2004, Northwestern)  
*Modeling of nanostructured materials*

**Frank Parker** (Ph.D. 1955, Harvard)  
*Hazardous and radioactive waste management*

**Florence Sanchez** (Ph.D. 1996, Univ. Lyon, France)  
*Environmental Systems and Weathering of Nano-Structured Materials*

**Kaye Savage** (Ph.D. Stanford, 2001)  
*Environmental Geochemistry*

Vanderbilt University's Environmental Science option is administered jointly by the Departments of Civil and Environmental Engineering (School of Engineering) and Earth and Environmental Sciences (College of Arts and Science). Students may pursue work leading to the M.S. and Ph.D. degrees. To acquire a solid foundation for pursuing work in the areas of excellence above, students choose courses from four knowledge and skill areas that serve as the foundation for study:

**materials** — the physicochemical nature of solid and fluid earth materials;

**processes** — physical, chemical and biological processes affecting the transport and fate of materials in environmental systems;

**systems** — the dynamics of environmental systems wherein processes are coupled over a wide range of spatial and temporal scales; and

**quantitative foundations** — understanding and modeling uncertainty in environmental systems, notably as this pertains to science and engineering applications.

Focus on these key areas will allow students to be competitive in the academic and professional marketplace on completion of their studies, and provide them with flexibility to respond to current and future high-priority environmental research needs.



## Research Areas

- Earth surface and subsurface system dynamics involving the intersection of engineering and geological timescales;
- Natural and human-induced environmental hazards and risk assessment; and
- Management and restoration of environmental systems involving coupled physical, chemical and biological elements.

## Application and Financial Aid

Apply *free online* by January 15 by visiting the website <http://sitemason.vanderbilt.edu/site/ldTsE8/home>. Assistantships (TA, RA) provide nine-month stipends of \$16,000 to \$21,000 plus health insurance and graduate tuition waivers. Summer support is available.