

## ENVIRONMENTAL ENGINEERING FACULTY



**Dr. Rob Griffin, Chairman**  
Atmospheric Chemistry



**Dr. Pedro Alvarez**  
Environmental Biotechnology & Nanotechnology  
Director, NEWT Center



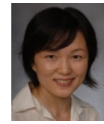
**Dr. Phil Bedient**  
Hydrology & Water Resources  
Director, SSPEED Center



**Jim Blackburn, Professor in the Practice**  
Environmental Law & Sustainability  
Co-Director, SSPEED Center



**Dr. Daniel Cohan**  
Atmospheric Modeling & Policy



**Dr. Qilin Li**  
Advanced Technologies for Water Quality  
Associate Director, NEWT Center



**Dr. Lauren Stadler**  
Micro/Biological Processes for Water Treatment



**Dr. Mason Tomson**  
Fate & Transport of Pollutants in Sediments,  
Brine Chemistry



**Dr. Calvin (Herb) Ward, Professor Emeritus**  
Remediation Technology Development



# CEVE

## CIVIL AND ENVIRONMENTAL ENGINEERING

CEVE is for future leaders of smart & resilient cities. Graduates study global trends of mega-urbanization, population growth, climate change-related disasters, degrading infrastructure, air & water pollution/treatment, energy security, and decreasing natural resources.

Our challenges have never been clearer or more urgent.

## CIVIL ENGINEERING FACULTY



**Reginald DesRoches, Dean of Engineering**  
Resilient Infrastructure Systems



**Dr. Leonardo Dueñas-Osorio**  
Complex Systems Modeling Infrastructure Reliability



**Dr. Satish Nagarajaiah**  
Dynamic Systems & Control, Smart Structures



**Dr. Jamie Padgett**  
Reliability & Risk Assessment, Bridge Engineering



**Ed Segner, Professor in the Practice**  
Project Management & Engineering Economics



**Dr. Rouzbeh Shahsavari**  
Computational Nanoscience for Green Infrastructure



**Dr. Pol Spanos**  
Dynamic & Vibrations of Structural Systems



**Dr. Ilinca Stanculescu**  
Computational Mechanics & Nonlinear Dynamics



**Joseph M. Cibor, Adj. Professor in the Practice**  
Soil Mechanics and Foundation Engineering



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LOCATION | EMAIL | PHONE | WEBSITE

[CEVE.RICE.EDU](http://CEVE.RICE.EDU)

## OVERVIEW

- 13.5 Faculty + 1 Professor in the Practice
- 50 Undergraduate Students
- 62 Graduate Students
- 48 Doctoral Candidates
- 8 Masters Students & 6 Professional Masters
- 10 Postdoctoral Fellows
- 6 Research Scientists
- Graduate Programs ranked 25 (Civ) & 15 (Env)
- ~\$4.6M Annual research expenditure



## WHY CEVE?

**Track Record:** 100% job placement in the CEVE field

**Student Research Opportunities:** Get real life experience within a CEVE Center

**ABET Accredited:** B.S. Degree

**Size:** High faculty to student ratio

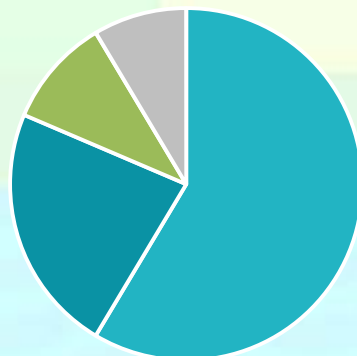
**Flexibility:** Four focus areas to choose from

**Interdisciplinary:** leadership in the integration of expertise & use of advanced models for complex problems



## LIFE AFTER THE PROGRAM

- Stay for a CEVE M.S. or Ph.D.
- Consulting
- Research Lab
- Industry
- Government
- Non-Profit



## DEGREES OFFERED

The department offers two degrees: B.S. Civil Engineering and B.A. Civil and Environmental Engineering. Both tracks offer students a robust curriculum, with small class sizes and hands-on opportunities for research and design.

### B.S. Civil Engineering (ABET Accredited) – 133 hrs.

The B.S. is designed to prepare students for a career in engineering and offers innovative and challenging courses while still providing significant flexibility to the student.

Contact Dr. Bedient: [bedient@rice.edu](mailto:bedient@rice.edu)

### B.A. Civil & Environmental Engineering – 122 hrs.

The B.A. offers a Civil or Environmental Engineering emphasis and allows both tracks to be tailored to the specific needs of each student.

Contact Dr. Tomson: [mtomson@rice.edu](mailto:mtomson@rice.edu)



## RESEARCH AREAS & INTERESTS

CEVE faculty offer an array of research interests in which undergraduate students have opportunities to get involved.

- Environmental Nanotechnology
- Urban Hydrology & Flood Prediction
- Air Quality and Environmental Policy
- Water Quality & Sustainable Water Management
- Hazardous Waste Remediation
- Dynamics of Smart Structures
- Computational & Stochastic Mechanics
- Reliability of Civil Infrastructure & Complex Urban Systems

## BEYOND THE CLASSROOM

- Work for a Research Center
- Research in the Netherlands through NSF-PIRE
- Senior Design
- Internships with Companies & Government Agencies
- Complete Rice Faculty-Led CEVE Courses Abroad (TBA)



## CHOOSE YOUR FOCUS



### Environmental Engineering

Advisor: Dr. Mason Tomson

[mtomson@rice.edu](mailto:mtomson@rice.edu) | 713.348.6048



### Urban Hydrology & Water Resources

Advisor: Dr. Philip Bedient

[bedient@rice.edu](mailto:bedient@rice.edu) | 713.348.4953



### Structural Engineering & Mechanics

Advisor: Dr. Satish Nagarajaiah

[satish.nagarajaiah@rice.edu](mailto:satish.nagarajaiah@rice.edu) | 713.348.6207



### Urban Infrastructure & Management

Advisor: Dr. Leonardo Dueñas-Osorio

[leonardo.duenas-osorio@rice.edu](mailto:leonardo.duenas-osorio@rice.edu) | 713.348.5292

## OPT FOR A MINOR IN SUSTAINABILITY

Students completing this minor in sustainability will be better prepared for global society that is attempting to understand and address the challenge of meeting the basic needs of an expanding population in light of a clearer realization of natural resource limitations.

Advisor: Jim Blackburn | [blackbur@rice.edu](mailto:blackbur@rice.edu) | 713.348.4246

## RESEARCH CENTERS



Nanosystems Engineering Research Center for Nanotechnology-Enabled Water Treatment (NEWT) is applying nanotechnology to develop transformative and off-grid water treatment systems that both protect human lives and support sustainable economic development. For more info: [newtcenter.org](http://newtcenter.org)



The Severe Storm Prediction, Education and Evacuation from Disasters (SSPEED) Center organizes leading universities, researchers, emergency managers, and private and public entities to better address severe storm prediction and its impact on the Gulf Coast area. Check us out: [speed.rice.edu](http://speed.rice.edu)