

# CHALLENGES AND INNOVATION IN CIVIL AND ENVIRONMENTAL ENGINEERING

## Innovations in Infrastructure for Disaster Mitigation

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**Wednesday, April 15, 2009  
129 DeBartolo Hall  
4:30pm**



America has long been recognized as a world leader in innovative solutions to a wide range of problems, with leading-edge science and technology playing a large role in the foundation of our country's economic growth. In spite of this, the emphasis in many areas of science and engineering has shifted from nurturing innovation to one in which only areas with demonstrated short-term "pay-offs" remain well-funded; and people are now asking "how can we change directions for the future?" Within the realm of infrastructure in the US, large amounts of funding are presently being distributed specifically for "shovel ready" projects." Although such grants should serve to help much of our aging infrastructure, it does not truly lead us to a sustainable future for infrastructure development and maintenance.



Given the many problems facing this country's infrastructure, it is likely that innovation will be necessary to achieve effective solutions to a number of these problems. This seminar deals some of the basic fundamentals of the innovation process and uses two projects to illustrate some recent innovations in infrastructure that have been directed by Dr. Resio. The first of these projects focuses on a new expedient bridging system for use by military forces or for emergency evacuation/relief missions. The second of these projects focuses on a new technology for stopping flow through a breached levee – while the water is still flowing through the breach.

The first of these projects earned the project team an award for the best "Technology Implementation of the Year" (for all Military Services) from the Defense Logistics Agency. The second project earned Dr. Resio the honor of being named one of the top 25 newsmakers in the country by Engineering News Record (ENR) this year.

**A reception and an opportunity to meet the speaker will take place at 4:00pm in the CE/GEOS office conference room, Fitzpatrick 156, before the seminar**