Postdoctoral Position in Life-Cycle Sustainability Analysis of Bridges and Other Infrastructure under Multiple Hazards

A postdoctoral researcher is sought in the area of life-cycle sustainability quantification and multi-hazard risk analysis, working in the Padgett Research Group in the Department of Civil and Environmental Engineering at Rice University. The successful candidate will be involved in NSF and Shell Center for Sustainability funded research projects that focus on reliability, risk assessment, and life-cycle sustainability analysis of infrastructure subjected to earthquakes, hurricanes, aging and deterioration, among other threats. Of particular focus is risk-based quantification of life-cycle metrics of sustainability, (e.g. life-cycle costs, embodied energy, emissions, waste generation) for infrastructure in hazard prone regions. A majority of the appointment will focus on but not be limited to applications to bridge infrastructure. For further details on the research scope and position expectations please contact Prof. Padgett.

Qualifications: Candidates should have a Ph.D. in Civil Engineering or a related field, and have a good record of research, publications, and strong communication skills. Candidates with a background in life-cycle modeling, bridge engineering, structural reliability, probabilistic risk analysis, performance-based engineering, statistical learning techniques and/or optimization are highly encouraged to apply. Experience with software for finite element and fragility analysis including OpenSees, LS-DYNA, and Matlab is preferred but not required.

Appointment: The anticipated appointment start date is August 15, 2014 but can be adjusted. The duration of the appointment is anticipated as 1 year with the potential to renew depending upon performance and funding. The salary and benefits are competitive and commensurate with experience.

To Apply: Please contact Prof. Jamie E. Padgett by email at jamie.padgett@rice.edu and provide a CV including publications and the contact information of at least two references. Additional supporting information may be requested upon review. A hard copy may also be sent to:

Jamie E. Padgett  
Dept. of Civil & Environmental Engineering  
Rice University  
6100 Main St., MS-318  
Houston, TX 77005

Additional Information: Additional details on the Padgett Research Group are provided at [http://www.owlnet.rice.edu/~jp7/](http://www.owlnet.rice.edu/~jp7/). Information on the Civil and Environmental Department can be found at [www.ceve.rice.edu](http://www.ceve.rice.edu). As one of the largest and most diverse cities in the country, Houston, Texas boasts endless events, festivals, restaurants, cultural and recreational activities, warm weather, low cost of living, and a gateway for travel world-wide.