

Linbeck Distinguished Lecture Series

in Earthquake Engineering: Challenges of the New Millennium

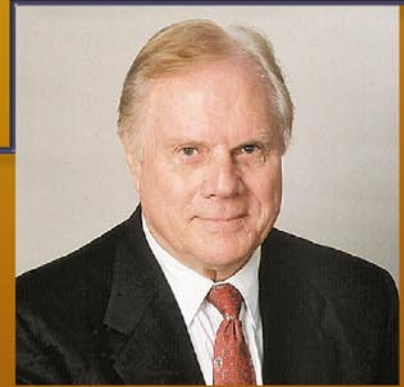
*Bringing together practitioners and researchers to tackle the challenges
of protecting our nation's infrastructure against seismic hazards*

ALL LECTURES WILL BE WEBCAST LIVE.
FOR MORE INFORMATION VISIT:
www.nd.edu/~linbeck

Joseph Penzien

*Senior Principal
International Civil Engineering Consultants, Inc.*

*Professor Emeritus of Structural Engineering
University of California, Berkeley*



Earthquake Engineering for Transportation Structures – Past, Present, and Future

**Friday, October 19, 2001
4PM – Room 160 COBA
Reception to follow the lecture**

Advances over the past fifty years in earthquake engineering as applied to transportation structures will be discussed with focus on seismic loading criteria, dual strategy of design, modeling and analysis, design detailing, and assessment of seismic performance. Current state-of-the-art methodologies used in the seismic design of bridges will be reviewed, pointing out areas of needed improvements, including the characterization of free-field ground motions for functional and life-safety levels of design, evaluation of soil-foundation-structure interaction effects, modeling of structural components for seismic demand and capacity evaluations, and seismic performance assessments. Advancing the state-of-the-art of bridge engineering through future research, both analytical and experimental, and advancing the state-of-the-practice through the development of new performance-focused code specifications will be encouraged.