

**Nathan M. Newmark** Faculty Member, Department of Civil Engineering, 1934-81 Head, Department of Civil Engineering, 1956-73 Chairman, Digital Computer Laboratory, 1947-57

National leader in Civil Engineering education and research, and prominent consulting engineer

Fields of technical endeavor: structural engineering, engineering mechanics, numerical methods, materials, structural and soil dynamics, and earthquake engineering

Born: Died:	Plainfield, NJ, September 22, 1910 Urbana, IL, January 25, 1981

University of Illinois, MS and PhD, 1932 and 1934, respectively

Founding Member, National Academy of Engineering, 1964

Member, National Academy of Sciences, 1966

Recipient of the National Medal of Science, 1968

Awarded honorary doctorates by Rutgers University, the University of Leige, the University of Notre Dame, and the National Civil Engineering Laboratory of Lisbon

Recipient of the Washington Award

Honorary member of the American Society of Civil Engineers

Recipient of five major national awards of ASCE, as well as numerous other awards and honors

The University of Illinois at Urbana-Champaign Department of Civil and Environmental Engineering presents

The Fall 2023

# Newmark Distinguished Lecture



**Prof. Yozo Fujino** 

President Josai University

Lessons Learned from 50-years of Bridge Research Monday, September 11, 2023



Newmark Civil Engineering Laboratory

### 4:00 – 5:00 pm CEE Building, Room 1017 Reception to follow on the Bridge

#### Latino-Americana Tower in Mexico City Seismic design by Nathan M. Newmark

Newmark served as the earthquake design consultant on the forty-three story Latino-Americana Tower in Mexico City. A plaque is mounted on that building, which withstood strong earthquakes in 1957 and 1985 without damage, attesting to his design accomplishment.

### The Fall 2023 Newmark Distinguished Lecture

**Prof. Yozo Fujino** 

President Josai University

## Lessons Learned from 50-years of Bridge Research

Abstract: Bridges are very useful and popular civil structures in our community that are often in service for more than 100 years. During their lifetime, bridges often experience significant vibration due to earthquakes, winds, and traffic loading. Based on Prof. Fujino's extensive experience, various vibration problems displayed by existing bridges and their control are surveyed. The importance of measured vibration responses will be illustrated through several examples. It is strongly stressed that monitoring in situ performance of bridges under in-service loads is essential not only for better understanding of bridge behavior, but also for better lifecycle management.

Bio: Prof. Yozo Fujino is President of Josai University and Professor Emeritus of the University of Tokyo and Yokohama National University. His areas of expertise include dynamics, control, and monitoring of bridges and structures, and earthquakeand wind-effects on structures. Professor Fujino has been involved in many bridge projects including: the Akashi Kaikyo and Tatara Bridges in Japan, the Millennium Bridge (vibration control) in the UK, the Stonecutters Bridge in Hong Kong, and the Padma in Bangladesh. He has received numerous awards, Bridge including the Purple Ribbon Medal from the Emperor of Japan (2007), and Japan Academy Medal (2019), the ASCE Scanlan Medal (2011), the ASCE George Winter Medal (2015), and the ASCE George Housner Medal (2020). He is the former president of the International Association of Structural Control and Monitoring (IASCM).