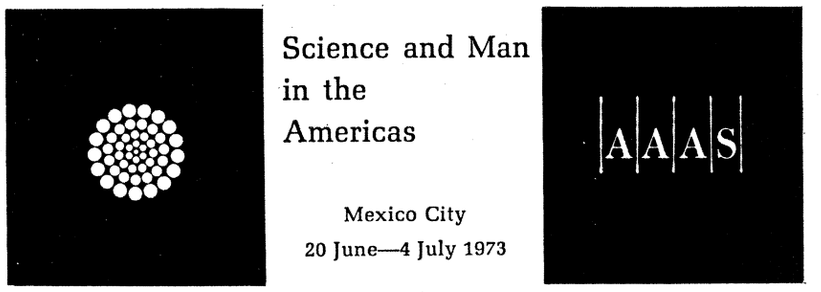

An inter-American meeting jointly planned by the Consejo Nacional de Ciencia y Technologia and the American Association for the Advancement of Science.

20–22 June

Earthquakes and Earthquake Engineering

"Science and Man in the Americas" includes among its nine central themes the general topic of "Earthquakes and Earthquake Engineering." Coarrangers for the four-session meeting (20–22 June) are Enrique del Valle [Instituto de Ingenieria, Universidad Nacional Autonoma de Mexico (UNAM)] and Don Tocher (vice president of the Seismological Society of America and director, U.S. Earthquake Mechanism Laboratory, San Francisco).

It is the intent of the coarrangers that the sessions included under this central theme shall provide a broad review of the current state of research on earthquake engineering in the American countries. The program will emphasize the translation of the most recent results of earthquake engineering research into practical terms for general use by the practicing architects, structural and civil engineers, construction engineers, and building officials in the American countries. It is hoped that in this way, this central theme will be especially valuable for participants from those countries located in active seismic areas that do not have their own well-developed programs for earthquake engineering research. Among the particular topics receiving attention in the program are: strong ground motion; soil-structure interaction; zoning and building codes; low-building problems; and tall-building problems.

A general introduction to the central theme will be given by Emilio Rosenblueth (UNAM). This will be followed by four speakers—Matthiesen and Tocher (United States), Fiedler (Nicaragua), and del Valle (Mexico)—who will discuss the Managua, Nicaragua, earthquake of 23 December 1972. Low and tall buildings will be discussed by Husid (Chile) and Paparoni (Venezuela); Blume (United States) will conclude the session with an analysis on the reserve energy technique.

Session 2 (21 June) includes papers on strong ground motions by Husid (Chile), Hudson (United States), and Prince (Mexico); on seismicity, seismic zoning, and seismic risk analysis by Grases (Venezuela), Davenport (Canada), and Milne (Canada).

Session 3 starts with reviews of the state of the art of earthquake engineering research by Kuroiwa (Peru), Penzien (United States), and Rosenblueth (Mexico), followed by discussions of probabilistic applications in aseismic design by Ruiz (Chile) and of earthquake resistant masonry construction by Meli (Mexico). Giesecke (Peru) and Carmona (Argentina) will conclude this session with reviews of recent work in their respective countries.

The closing session begins with three papers—Arias (Chile) on seismic intensity and smoothed spectra; Matthieson (United States) on seismic zoning and structural design; and Esteva (Mexico) on formulation of seismic building codes. These papers will serve as an introduction to a round-table discussion of unresolved problems in earthquake engineering in the Americas by Rosenblueth, Penzien, Arias, Kuroiwa, Grases, and Davenport.

Three symposia on topics of related interest to some or all of the participants in this central theme also have been scheduled. "Hurricane Prediction and Modification" (two ½-day sessions), arranged by Louis Battan (University of Arizona) and Julian Adem (UNAM), will deal with new techniques of hurricane observation, the physical properties of hurricanes, techniques of hurricane prediction, and a review of hurricane modification techniques. "Geodynamics" (ten ½-day sessions), sponsored by the Mexican National Committee on Geodynamics, is being arranged by Cinna Lomnitz (UNAM) as an international event under the geodynamics project. "Volcanism in Mexico and Central America" (four ½-day sessions), arranged by R. E. Stoiber and R. W. Decker (Dartmouth College) and Frederico Mooser (Federal Commission of Electricity, Mexico), will focus on topics of volcanism most relevant to mankind: forecasting eruptions, volcanic gases, and geothermal power.

The arrangers of "Earthquakes and Earthquake Engineering" sincerely hope that the Mexico City meeting will provide a forum for the airing of the earthquake engineering problems of greatest import in the Americas, and that it will serve to join the interests and talents of earthquake engineers in private practice, the academic sector, and in government in a mutually stimulating way.

DON TOCHER
U.S. Earthquake Mechanism Laboratory, San Francisco, California

20–21 June

Archaeoastronomy in Pre-Columbian America

Cochairmen are Anthony F. Aveni (Colgate University, Hamilton, New York) and Horst Hartung (University of Guadalajara).

Questions to be explored—What was the extent of astronomical knowledge possessed by ancient people of the New World? What astronomical skills and techniques were employed and what influence did astronomy have upon other aspects of Pre-Columbian civilizations? Subjects encompass the origin and development of the Maya calendar, the role of astronomy in the design and function of Pre-Columbian ceremonial centers and the extent of the astronomical record evidenced in the rock art of the desert southwestern United States.