



IAEE Initiative

“Masters” Program Meet / Greet 2020

Luis ESTEVA-MARABOTO (Mexico)

The 17th World Conference on
Earthquake Engineering
Sendai, Japan
September 14-17, 2020

The final aim of research in Earthquake Engineering must be the development of efficient design and construction criteria and methods leading to an optimum balance of life-cycle benefits and costs, accounting for the large uncertainties involved and keeping risks at socially acceptable levels.

Edited and Issued by:
IAEE Central Office, Tokyo, Japan
(the International Association for Earthquake Engineering)

Copyright all reserved by IAEE

When I first met Prof. Esteva about forty years ago, as a student of the earthquake engineering course in the master’s program at the UNAM, he used to be the first person to start working, every day, in the Institute of Engineering before 7AM. His sense of responsibility moved him to schedule lectures sometimes on Saturdays. I said to myself: there must be something good on what he is doing to keep him so amazed, interested and devoted with total passion even forgetting about himself.

He used to say how fortunate we are to be working on what we love to do and even get paid for that. Recently, he has expressed his sorrow for having to slow down a bit his work pace and to adjust his office schedule, because of some problems with his health. But long time ago, he installed a work-place at his home and at his off-town home near Cuernavaca, to keep working even during the weekends, on vacations and when he has been sick.

His scientific rigor has put a high standard, not very common on Engineering, and contributed to make a bit scary the experience of being his thesis student, or having a paper for his review. He has always submitted original papers to every technical meeting he has attended. He use to take every task people around the world asked him to take, from colleagues looking for the revision of their papers, the many editorial committees he belongs to, up to the young researches asking for a recommendation letter. All of this, facing the rising pressure of his wife to slow down. He keeps very busy because his opinion is valued and well respected around the world.

The 1985 and 2017 earthquakes that Mexico experienced, made him to emphasize the need to keep learning and to improve preparedness. Also, he had insisted on the topic of cumulative seismic damage to assess existent structures that are not repaired immediately after the earthquakes. Also, he has been pushing to improve the rationale of the repair/retrofit of damaged structures to pursue towards the improvement of the built environment with optimal criteria.

Recent recognitions like the Honorary Member by IALCEE, Honoris Causa doctorate that was awarded by UNAM and his nomination as President of the Ethics Committee of the Colegio de Ingenieros Civiles de Mexico, reflect the acknowledgement to his lifetime achievements (for more than 60 years) and to the commitment, ethics, congruency, straightness and fidelity among many other virtues as an engineer and as a human being. And yes! It is the most enriching and inspiring experience being close to this Master, a unique model to learn from.

Prof. David De León Escobedo
Universidad Autónoma del Estado de México (UAEM)

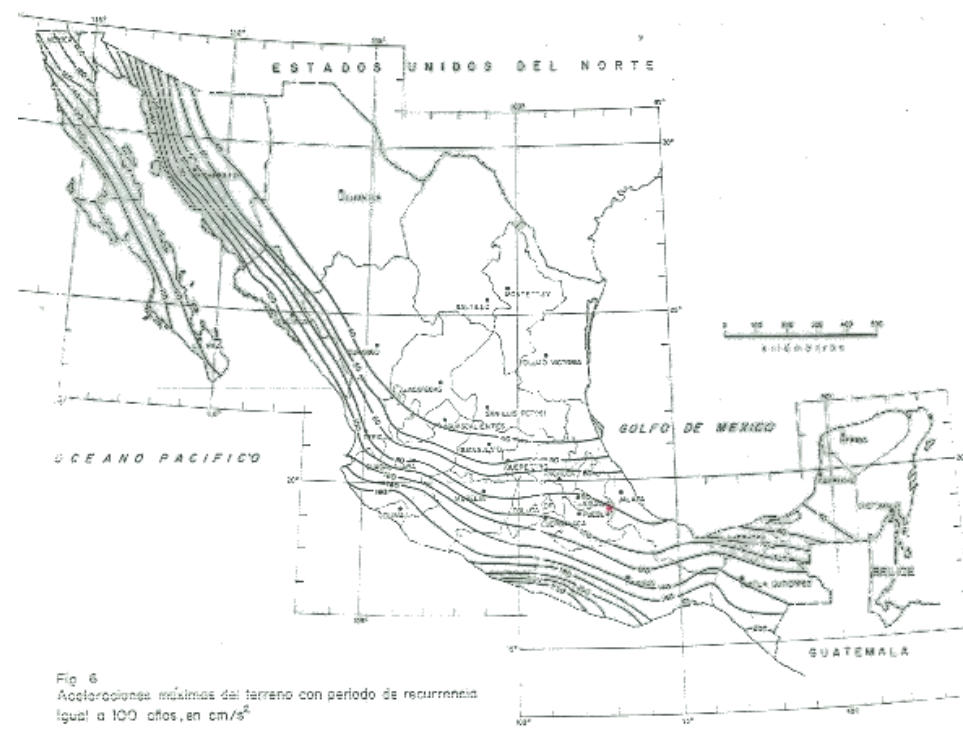
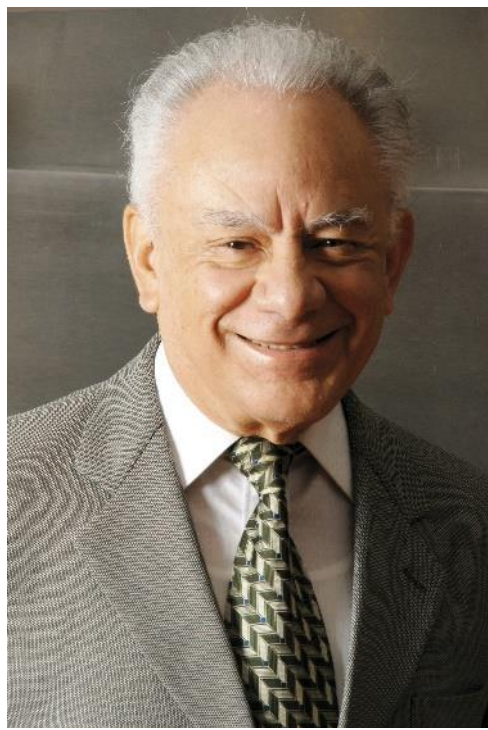


Fig. 6
Aceleraciones máximas del terreno con periodo de recurrencia igual a 100 años, en cm/s^2

Seismic Hazard Map in Mexico, 1960 – Peak Accelerations at Firm Ground Sites, for Given Return Intervals

Academic and professional career of Prof. Esteva started shortly after the earthquake that affected Mexico City in 1957, generating the largest economic and human losses that the city had ever experienced. This event fostered the initiation of the development of Earthquake Engineering in Mexico, as well as the academic career of Prof. Esteva. He was selected to do this job when he was starting my career as a researcher in UNAM.

Research activities of Prof. Esteva reflect his permanent interest in contributing to the solution of many problems faced by individual structural engineers and by bodies in charge of writing building codes and of preparing simple and efficient tools for the practice of structural design. His permanent interest in the development of rational criteria for the establishment of structural design requirements and safety margins led to his involvement in the probabilistic analysis of structural reliability and seismic hazard and risk.

He developed a set of probabilistic seismic hazard maps for the whole country, starting from intensity attenuation equations based on ground motion records obtained in California, because this type of information was not available for any site in the Mexican territory.

He has served in many national and international committees and boards, including the President of Mexico's Advisory Council on Science; ACI, ASCE-IABSE and IASPEI technical committees, UNESCO committees and missions to earthquake struck regions (Lima, 1966; Caracas, 1967; Iran, 1990), among others. He is also an active participant in a large number of Mexican, Latin American and international associations, as well as diverse academic and technical groups.



Participating in IV WCEE, Santiago Chile, 1969

By 1969, he was recognized in Latin America, because of his participation in many technical events in the region. In particular, he acted as member of a UNESCO mission in support of Venezuela, after the disastrous Caracas earthquake of July 29, 1967. Because of this, he was invited to present a keynote lecture in the IV WCEE, for which he proposed the title "SEISMIC RISK AND SEISMIC DESIGN DECISIONS"

From 2002 to 2006 he served as President of the International Association for Earthquake Engineering. In 2006 he was appointed as Chairman of IFIP Working Group WG7.5 on Reliability and Optimization of Structural Systems.

Educations:

Born in Mexico City in 1935, Dr. Esteva graduated as a Civil Engineer in 1958 at the National Autonomous University of Mexico (UNAM); in 1959, obtained the degree of Master of Science in Engineering, at the Massachusetts Institute of Technology (MIT) and in 1968 a PhD degree in Engineering at UNAM.

Work experiences:

Dr. Esteva started his research at the Institute of Engineering, UNAM, in 1959. From 1982 to 1991 he was Director of the Institute; from 1991 to 1993 he was Dean of Science of the University; in 1969 he was a visiting Professor at the Massachusetts Institute of Technology, in 1988 at the University of Innsbruck (Austria) and in 2001-2002 at Stanford University. Currently, he is a Distinguished Professor at UNAM.

Awards:

He has been the recipient of many national and international awards and expressions of recognition, and has been appointed as foreign correspondent of the academies of engineering of several Latin American countries. In Mexico, he has been a recipient of the highest prizes bestowed by the Mexican Government (National Award on Sciences in the field of Design and Technology in 1981) and by UNAM (UNAM Award in 1993). Since 1996 he is an Honorary Member of the International Association for Earthquake Engineering. Since 2000 he is a Foreign Associate of the National Academy of Engineering of the United States.