

Dr. Willie H. K. LEE, IASPEI Medal 2015

I was surprised to receive the IASPEI medal, and I am very grateful. I am a strong supporter of the mission of IASPEI: to promote international study of the structure, properties, and processes of the Earth. In addition, I feel honored to follow 2013 medalist Robin Adams, my friend and colleague for many decades, as a recipient of the award.

I entered geophysics by chance, focusing on the field after more general study of physics, chemistry, and mathematics. I graduated from the University of Alberta, in 1962, and I would like to acknowledge the inspiration of faculty members George D. Garland, Keeva Vozoff, and Jack A. Jacobs. I chose to do graduate study in California, in order to spend time in a warm climate after four years in Canada. I treasured the memory of a 2.5 month cruise to the Caribbean, Atlantic, and Mediterranean soon after my arrival at La Jolla. My graduate work benefitted from such distinguished mentors as Freeman Gilbert, George Backus, Walter Munk, Gordon J.F. MacDonald, Edward Bullard, W. Gary Ernst, William M. Kaula, William W. Rubey, and Seiya Uyeda. Thanks to Sir Edward Bullard, I became the first Secretary of Heat Flow Committee in the summer of 1963 and edited the book *Terrestrial Heat Flow* (1965) two years later. I then completed my Ph.D. degree in February 1967, working on the thermal history of the earth.

I joined the U.S. Geological Survey in June, 1967. The USGS had recently begun its program of intensive seismological monitoring of the central San Andreas fault system, and within two years my research focus had changed to the study of microearthquakes. The work was scientifically fascinating and presented challenging issues concerning the location of large numbers of microearthquakes, the determination of their magnitudes from records with limited dynamic range, and the hypocenter biasing of locally recorded earthquakes by lateral velocity inhomogeneity. From among a number of important colleagues of this period, I would like to specifically acknowledge Keiiti Aki, E. Robert Engdahl, and Robin Adams.

Igor Nersesov came to the U.S. for a visit in the winter of 1976, and I had the pleasure of welcoming him in my office. I showed him a copy of the Lawson report of the 1906 California earthquake, which interested him greatly. This ultimately led to the IASPEI/UNESCO project to microfilm historical seismograms, which has been mentioned in the medal citation. The project was, from many perspectives, very successful, but the job of preserving historical seismograms is still only half finished. It is now necessary to preserve the historical data as digital scanned images and, ultimately, as digital time series. This is a job for my successors who recognize the value of preserving historical data, but it needs to be done soon, because the microfilmed data are physically deteriorating. I have particularly appreciated the wisdom and collegiality of Hiroo Kanamori during my work on preserving historical data.

In the summer of 1995, I retired from the U.S. Geological Survey. I have had many wonderful colleagues at the USGS through the years. The medal citation specifically mentions my USGS colleagues Jerry Eaton, John Lahr, and Sam Stewart, but I wish also to gratefully acknowledge my other USGS colleagues, who enriched my career in so many ways before and after retirement.

By the summer of 1995, Hiroo Kanamori, Paul C. Jennings, Carl Kisslinger and I had begun 8-year editorship of the major work, "International Handbook of Earthquake and Engineering Seismology". This work enlisted the efforts of a large number of scientists as contributors and reviewers, including some who will be attending the 2015 IASPEI meeting. I express sincere appreciation to those of you who helped with that project, and to those who helped with other projects that are mentioned in the citation.