



Prof. Frank Press

President of the US National Academy of Sciences



Most important awards, prizes and academies

Awards: Légion d'honneur, France (1989); Japan Prize (1993); US National Medal of Science (1994); Cross of Merit, Germany (1993); Lomonosov Gold Medal of Russian Academy of Sciences (1998). *Academies:* US National Academy of Sciences; Royal Society of London; Académie des sciences, France; Russian Academy of Sciences; American Philosophical Society; Japan Academy of Engineering; American Academy of Arts and Sciences. *Honorary Degrees:* Princeton, Yale, Columbia, Sorbonne, Notre Dame, others.

Summary of scientific research

Research and teaching in earth and planetary sciences with specialization in geophysics and oceanography.

Main publications

Press, F. and Ewing, M., Propagation of explosive sound in a liquid layer overlying a semi-infinite elastic solid, *Geophysics*, 15, pp. 426-46 (1950); Press, F. and Ewing, M., Crustal structure and surface wave dispersion, Part II: Solomon Island earthquake of 29 July 1950, *Bull. Seism. Soc. Am.*, 42, pp. 315-25 (1952); Press, F. and Ewing, M., Mantle Rayleigh waves from the Kamchatka

earthquake of 4 November, 1952, *Bull. Seism. Soc. Am.*, 44, pp. 471-9 (1954); Press, F., Oliver, J.E., and Ewing, M., Crustal structure and surface wave dispersion, Part IV: Atlantic and Pacific Ocean Basins, *Bull. Geol. Soc. Am.*, 66, pp. 913-46 (1953); Press, F. and Ewing, M., Rayleigh wave dispersion in the period range 10-500 seconds, *Trans. Am. Geophys. Union*, 37, pp. 213-5 (1956); Press, F., Determination of crustal structure from phase velocity of Rayleigh waves, Part I: Southern California, *Bull. Geol. Soc. Am.*, 67, pp. 1647-58 (1956); Press, F., Ewing, M., and Jardetsky, W.S., *Elastic Waves in Layered Media* (McGraw-Hill Book Co., New York, 1957); Press, F. and Ewing, M., Determination of crustal structure from phase velocity of Rayleigh waves, Part III: The United States, *Bull. Seism. Soc. Am.*, 70, pp. 229-44 (1959); Press, F., Benioff, H. and Smith, S., Excitation of the free oscillations of the earth by earthquakes, *J. Geophys. Res.*, 66, pp. 605-19 (1961); Press, F., Ben Menahem, A. and Toksoz, M.N., Experimental determination of earthquake fault length and rupture velocity, *J. Geophys. Res.*, 66, pp. 3471-85 (1961); Press, F. and Harkrinder, D., Propagation of acoustic-gravity waves in the atmosphere, *J. Geophys. Res.*, 67, pp. 3889-3908 (1962); Press, F. and Biehler, S., Influences on crustal velocities and densities from P-wave delays and gravity anomalies, *J. Geophys. Res.*, 69, pp. 2979-95 (1964); Press, F., Displacements, strains and tilts at teleseismic distances, *J. Geophys. Res.*, 70, pp. 2395-2412 (1965); Press, F., Earth models obtained by Monte Carlo inversion, *J. Geophys. Res.*, 73, p. 16 (1968); Press, F., Regionalized earth models, *J. Geophys. Res.*, 75, pp. 6575-81 (1970); Press, F., The earth and the moon, *Quarterly J. Roy. Astron. Soc.*, 12, pp. 232-43 (1971); Press, F., Science and Technology in the White House, 1977 to 1980: Parts 1 and 2, *Science*, 211, pp. 139-45, pp. 249-56 (1981); Press, F., Science: The best and the worst of times, *Science*, 231, pp. 1351-2 (1986); Press, F., Growing up in the golden age of science, *Annual Review of Earth and Planetary Science*, 231, pp. 1351-2 (1986); Press, F., Patterns of seismic release in the Southern Californian region, *J. of Geophys. Res.*, 100, n. B4, pp. 6421-30 (1995); Press, F., The dilemma of the golden age (address to the members of the National academy of Sciences at the 125th annual meeting), *Science, Technology, and Human Values*, 13, nos. 3 and 4 (summer and autumn, 1988); Press, F., Science and society in the years ahead, *1995 Sigma Xi Forum, Vannevar Bush II: Science for the 21st Century*, March 2-3 (1995); Press, F. and Siever R., *Understanding Earth*, 4th edn. (W.H. Freeman and company, New York, 2003).