

# Biographical Sketch for: Yan Kagan

BORN: September 23, 1935, at Moscow, Russia. Naturalized US citizen since 1980.

E-Mail: ykagan@ucla.edu

## EDUCATION:

1952-1957: M.S. in Geophysical Engineering: Moscow Oil Institute.

1968: Ph.D. in Physical and Mathematical Sciences: Institute of the Physics of the Earth, USSR Academy of Sciences, Moscow.

## POSITIONS HELD:

- (1) Researcher, Geophysical Research Institute, Moscow; investigated the crustal structure, particularly in recording of PS converted waves from distant earthquakes (1957-1960).
- (2) Research Geophysicist, Skochinsky Mining Institute, USSR Academy of Sciences (1960-1974)
- (3) Research Geophysicist, Institute of Geophysics and Planetary Physics/Department Earth and Space Sciences: University of California, Los Angeles (1974-present)

## PRESENT RESEARCH INTERESTS:

Statistical analysis of earthquake occurrence.

## SELECTED PUBLICATIONS:

Antsyferov, M. S., N. G. Antsyferova, and Y. Y. Kagan, 1964. Propagation of ultrasonic waves in dry sand under pressure, *Bull. Acad. Sci. USSR, Geophys. Ser.*, 1774-1781, (English translation).

Kagan, Y. Y., 1968. Location of the sources of seismoacoustic pulses, *Izv. Acad. Sci. USSR, Phys. Solid Earth*, 321-325, (English translation).

Antsyferov, M. S., N. G. Antsyferova, and Y. Y. Kagan, 1971. Seismoacoustical studies and the problem of prediction of dynamic events, *Nauka, Moscow*, pp. 136, (in Russian).

Kagan, Y. Y., 1973. A probabilistic description of the seismic regime, *Izv. Acad. Sci. USSR, Phys. Solid Earth*, 213-219, (English translation).

Kagan, Y., and Knopoff, L., 1976. Statistical search for non-random features of the seismicity of strong earthquakes, *Phys. Earth Planet. Inter.*, 12, 291-318.

Kagan, Y. Y., and Knopoff, L., 1980. Spatial distribution of earthquakes: The two-point correlation function, *Geophys. J. R. astr. Soc.*, 62, 303-320.

Kagan, Y. Y., and Knopoff, L., 1981. Stochastic synthesis of earthquake catalogs, *J. Geophys. Res.*, 86, 2853-2862.

Kagan, Y. Y., 1982. Stochastic model of earthquake fault geometry, *Geophys. J. R. astr. Soc.*, 71, 659-691.

Kagan, Y. Y., and Knopoff, L., 1987. Statistical short-term earthquake prediction, *Science*, 236, 1563-1567.

Kagan, Y. Y., 1991. Seismic moment distribution, *Geophys. J. Int.*, 106, 123-134.

Kagan, Y. Y., and D. D. Jackson, 1991. Seismic gap hypothesis: Ten years after, *J. Geophys. Res.*, 96, 21,419-21,431.

Kagan, Y. Y., and D. D. Jackson, 1994. Long-term probabilistic forecasting of earthquakes, *J. Geophys. Res.*, 99, 13,685-13,700.

Kagan, Y. Y., 1994. Observational evidence for earthquakes as a nonlinear dynamic process, *Physica D*, 77, 160-192.

Geller, R. J., D. D. Jackson, Y. Y. Kagan, and F. Mulargia, 1997. Earthquakes cannot be predicted, *Science*, 275, 1616-1617.

Kagan, Y. Y., 1997. Are earthquakes predictable?, *Geophys. J. Int.*, 131, 505-525.

Kagan, Y. Y., 1999. Universality of the seismic moment-frequency relation, *Pure Appl. Geoph. (PAGEOPH)*, 155, 537-573.