

seems harsh, but the simple truth is that Velikovsky is not worth discussing scientifically. To do so would be as pointless as trying to determine the chronology of the Earth from Biblical sources—a fascinating intellectual exercise, perhaps, but divorced from scientific reality.

DAVID MORRISON
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Kilowatt deaths

The recent letter by Paul Baldwin (December, page 13) shows half lives of persons engaging continuously in various activities.

I have another table that I find useful in expressing health problems. This comes from knowing—or estimating—accidents and disease deaths from various power uses. The rates can be expressed in the useful unit "Death/Kilowatt hour" (for electricity use, multiply by 3 for the efficiency of generation).

Deaths per Kilowatt Hour in USA
(based on 1965 figures)

Coal mining:	
Black Lung disease	10^{-9}
accidents	6×10^{-11}
Petroleum refining	
oil-well accidents	7×10^{-12}
Uranium mining cancers	
no breeder	1.5×10^{-11}
breeder	7×10^{-14}
Uranium processing	
fuel fabrication	
accidents (estimate)	
no breeder	2×10^{-11}
breeder	2×10^{-13}
Coal/gas/oil	
air-pollution deaths	3×10^{-9}
Radiation cancers from	
normal operation	
of reactors and	
processing plants	3×10^{-13}
(0.1 mr/yr at year 2000)	
Potential reactor accidents	
(1 per 30 years of WASH 740	
severity by year 2000):	
direct deaths	3×10^{-11}
possible extra	
cancer deaths	3×10^{-11}
Gas main explosions	3×10^{-1}
Gas poisoning	6×10^{-12}
Dam failures	
(1 per 50 years as in Vaiont, Italy)	
	6×10^{-10}

Again this table does not express the whole problem—people have become more careful since 1965, but these figures indicate where physicists should express their public concern. It can also be a stimulus to thought as you turn on the light.

RICHARD WILSON
Harvard University
Cambridge, Mass.

- **MONDAY:** Measured reduction of dark current in a photomultiplier tube mounted in one of our new thermoelectric coolers.
- **TUESDAY:** Measured leakage resistance of a group of photomultiplier tube sockets prior to assembly of voltage divider networks.
- **WEDNESDAY:** Set the high voltage at 100.00 volts with the aid of a DVM. Measured current through a group of high-meg resistors and calculated their resistance. With the DVM on the output measured 10^{11} ohms.
- **THURSDAY:** Made 1 cm. cube of a new potting compound and measured volume

resistivity at various voltages.

■ **FRIDAY:** Sales Manager demonstrated the instrument to a company making an air pollution monitoring system using an electro-optical principle. We booked the order for three units.

■ **SUNDAY:** President of the company borrowed the unit to use with his photoelectric telescope system. He measures variable stars on clear nights (a clear night is one without a meeting).

■ **MONDAY:** He didn't forget it; it's back to work as usual.

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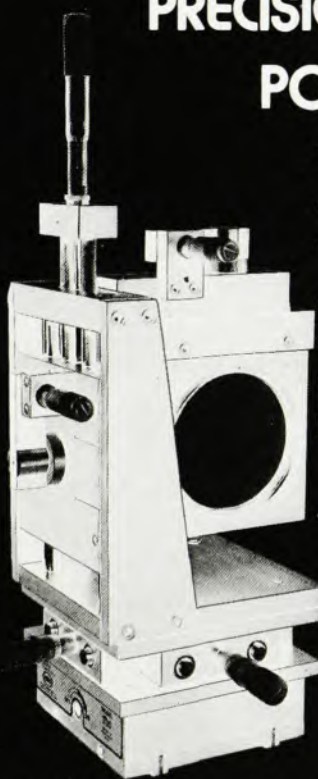
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