

Environmental Consultant**Tel:** portable: (33.6.) 3263.0431

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ADDRESS e-mail: ari.rabl@gmail.com Based mostly in Paris, but also in Boulder, CO, ...**EDUCATION**

Ph.D. 1969, physics, University of California, Berkeley, CA.

B.Sc. 1963, math and physics (magna cum laude and ØBK), Beloit College, Beloit, WI.

Fulbright scholar.

SYNOPSIS OF PROFESSIONAL EXPERIENCE*** with teaching appointments**, courses taught: environmental impact analysis, solar energy, heat transfer, high energy physics, physics for nonscience majors, introd. physics.

(overlap in dates due to concurrent appointments and leaves of absence)

Princeton University (1980-1989, Research Scientist*, rank equivalent to Associate Professor); **University of Colorado** (1996-2001, concurrent appointment as Research Professor); **Ecole des Mines** (1988-2007, senior scientist, *until obligatory retirement at 65*)**Research on environmental impacts:**

- Risk analysis, in particular health risks of pollution.
- Assessment of environmental impacts and costs of pollution (development of methodology, as well as applications to energy, transport, agriculture and waste treatment).
- Management of several large (>400 K€) multinational research projects of the EU.

Research on energy:

Design and analysis of reflectors for illumination (lighting and industrial infrared heaters).

- Energy use in buildings (instrumentation; experimental tests; monitoring and analysis of energy flows and end-uses; comparison with theoretical models; system identification and optimal control).
- Energy analyst for Princeton University campus (economic and technical evaluation of energy technologies: cogeneration with diesel, gas turbine, fluidized bed; retrofits of buildings).

Argonne National Laboratory (1974-1980); **University of Chicago** (1976-1980); **Solar Energy Research Institute** (now NREL) (1978-1981)**Research on solar energy:**

- Analysis of solar energy systems (wrote computer simulations; developed short hand procedures for design and optimization of process heat systems; proposed new more efficient process heat system).
- Analysis of solar radiation data (developed complete set of statistical correlations for system performance calculations).
- Optical and thermal analysis of collectors (ponds, flat plate, CPC, parab. trough and dish); design, analysis and testing of CPC collectors.

Weizmann Institute* (1969-1971); **Ohio State University*** (1972-1974)**Research in theoretical physics:**

- Strong, electromagnetic and weak interactions of elementary particles.

PUBLICATIONSBooks: *Active Solar Collectors and Their Applications*. 503 p. Oxford University Press, 1985.*Heating and Cooling of Buildings: Design for Efficiency*. With J. F. Kreider and P. S. Curtiss. 890 p. McGraw-Hill, 1994, 2nd ed 2001.

More than 130 articles in refereed journals and book chapters + comparable number of reports and conference presentations (high energy physics, optics, heat transfer, solar energy, energy policy, energy economics, environmental impact analysis).

11 patents.

PERSONAL DATA: born 1942; citizen of USA and of France; trilingual (English, French, German).