appendix D on the Fourier integral and in appendix K on time-dependent perturbation theory. In appendix L on the Born approximation, it would be preferable to have the interesting discussion of the validity of the approximation at the beginning rather than the end of the appendix. Finally, to add a note of social criticism, it is a shame that after all these years of attempts to include women in our universe, the student is still referred to as "he"; however, this may reflect on the editors rather than the authors.

In conclusion, those who liked the first edition of this book will like the second edition even more. Those who objected to the exclusion of certain traditional topics in the first edition will find them included in the new appendices. And those who felt the beauty and elegance of quantum mechanics were drowned in a sea of words in the first edition will find the situation unchanged.

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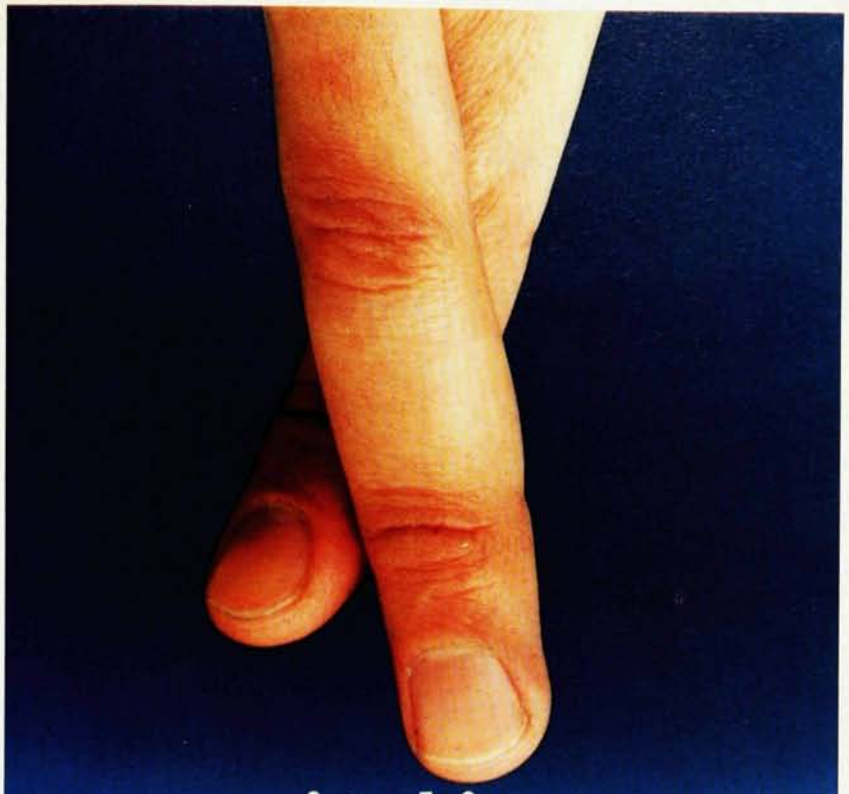
Radiant Science, Dark Politics: A Memoir of the Nuclear Age

Martin D. Kamen
348 pp. Univ. California P., New York, 1985. $19.95

"May you live in interesting times." In the 20th century we are all subject to this traditional curse, but some times and places are more interesting than others. Martin Kamen's have been very interesting indeed.

The decades from about 1930 to 1960, which saw World War II, the development of big science, and the advent of the atomic bomb, the computer and molecular biology, produced their share of folktales, heroes and villains among scientists. It is remarkable that so few of the legendary figures—Ernest Lawrence, Enrico Fermi, Harold Urey, Robert Oppenheimer, Leo Szilard and Edward Teller, for example—have given or left us memoirs or autobiographies, yet we are curious to learn why and how they played their roles.

Kamen is himself something of a legend. He is a biochemist whose achievements, particularly the discovery of carbon-14, clearly put him in the same class as the more publicly celebrated persons mentioned above. His career developed among them. He is also a musician on a par with the best. ("I am really a better violist than a biochemist," he said once, a matter difficult for most of us to judge.) In the critical years covered by this memoir he was singled out by Congressional committees, the FBI and the *Chicago Tribune* as an appropriate victim of the security hysteria of the period. It turns



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out they were wrong in their suspicion of him.

As the story unfolds we are led from his life as a child of an immigrant family in the 1920s, through his time at the University of Chicago in the 1930s and to his work at the Radiation Lab at Berkeley under Lawrence's hard-driving leadership in the late thirties and into the war period. Kamen describes how his skill in working with radioactive tracers drew him toward biology, and how his work gradually transcended a particular technique and moved toward an understanding of energy-transfer processes in living cells. He also gives entertaining glimpses of his musical life and a perceptive account of the great events going on around him.

The last chapters are the most remarkable. I have not seen before a commentary on Lawrence and Oppenheimer that so clearly brings them into focus. They were simpler men than we supposed. But the most impressive person portrayed in these chapters is the author himself. Here he was, passionately busy with photosynthetic bacteria, while at the same time fighting off Congressional investigators and media types determined to get him fired or jailed, as well as the Department of State, which sought to deprive him of the right to travel. Yet meanwhile he still played quartets now and then and kept his sense of humor. As he makes clear, he could not have won his battles without strong friends and supporters. But the victories could not have been achieved by, and for, a lesser man, and they have benefited us all.

A reader looking for a portrait of this critical era through the eyes of a participant could hardly do better. The brief introduction by Edward McMillan is also well worth reading.

JAMES R. ARNOLD
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new books

Particles, Nuclei and High-Energy Physics

Proceedings of the Winter College on Fundamental Nuclear Physics. (3 Vols.) Proc. Wint. College, Trieste, Italy, February–March 1984. K. Dietrich, M. Di Toro, H. J. Mang, eds. 1972 pp. World Scientific, Singapore (US dist. Taylor and Francis, Philadelphia), 1985. $184.00

Proceedings of the International Conference on Nuclear Physics. Proc. Conf., Bombay, December 1984. B. K. Jain, B. C. Sinha, eds. 541 pp. World Scientific, Singapore (US dist. Taylor and Francis, Philadelphia), 1985. $90.00

Coincident Particle Emission from Continuum States in Nuclei. Proc. Wksp., Bad Honnef, W. Germany, June 1984. H. Machner, P. Jahn, eds. 628 pp. World Scientific, Singapore (US dist. Taylor and Francis, Philadelphia), 1985. $75.00

Few-Body Problems in Physics. Proc. Conf., Tbilisi, Georgia, USSR, August 1984. L. D. Faddeev, T. I. Kopaleishvili, eds. 532 pp. World Scientific, Singapore (US dist. Taylor and Francis, Philadelphia), 1985. $67.00

Hadron Spectroscopy—1985. *AIP Conference Proceedings 132.* Proc. Int. Conf., College Park, Md., April 1985. S. Oneda, ed. 485 pp. AIP, New York, 1985. $49.75

Heavy Ion Fusion. Proc. Int. Symp., Tsukuba, Japan, September 1984. K. Furuno, T. Kishimoto, eds. 448 pp. World Scientific, Singapore (US dist. Taylor and Francis, Philadelphia), 1985. $49.00

Perspectives in Particles and Fields. *NATO ASI Series.* Proc. Sum. Inst., Cargèse, France, July 1983. M. Lévy, J.-L. Basdevant, D. Speiser, J. Weyers, M. Jacob, R. Gastmans, eds. 598 pp. Plenum, New York, 1985. $95.00

Progress in Particle and Nuclear Physics, Vol. 14. A. Faessler, ed. 346 pp. Pergamon, New York, 1985. $102.00. *Compendium*

Quark Confinement and Liberation: Numerical Results and Theory. Proc. Conf., Berkeley, May 1985. F. R. Klinkhamer, M. B. Halpern, eds. 250 pp. World Scientific, Singapore (US dist. Taylor and Francis, Philadelphia), 1985. $75.00

Quark Model and High Energy Collisions. V. V. Anisovich, M. N. Kobrinsky, J. Nyiri, Yu. M. Shabelski. 435 pp. World Scientific, Singapore (US dist. Taylor and Francis, Philadelphia), 1985. $35.00. *Monograph*

Solitons and Particles. C. Rebbi, G. Solian, eds. 819 pp. World Scientific, Singapore (US dist. Taylor and Francis, Philadelphia), 1985. $75.00 hardcover; $33.00 paper. *Compendium*

The Santa Fe Meeting. Proc. Mtg. Div. of Particles and Fields APS, Santa Fe, October–November 1984. T. Goldman, M. M. Nieto, eds. 543 pp. World Scientific, Singapore (US dist. Taylor and Francis, Philadelphia), 1985. $67.00

The State of High Energy Physics. *AIP Conference Proceedings 134.* M. Month, P. F. Dahl, M. Dienes, eds. 376 pp. AIP, New York, 1985. $46.00

Student Texts and Popularizations

The Mechanical Universe: Introduction to Mechanics and Heat. R. P. Olenick, T. M. Apostol, D. L. Goodstein. 584 pp. Cambridge U.P., New York, 1985. $24.95

Evolution of Matter and Energy on a Cosmic and Planetary Scale. M. Taube. 289 pp. Springer-Verlag, New York, 1985. $24.00. *Introductory text*

Introduction to Concepts and Theories in Physical Science. Second edition. G. Holton, S. G. Brush. 589 pp. Princeton U.P., Princeton, N.J., 1985. $19.95. *Text*

Physics with Health Science Applications. P. P. Urone. 496 pp. Harper and Row, New York, 1985. $20.50. *Introductory text* □