David E. Aspnes received the 1987 Wood Prize for "his pioneering role in the development of the technique of spectroscopic ellipsometry as a probe for materials characterization." Aspnes received his BS and MS in electrical engineering from the University of Wisconsin, Madison, in 1960 and 1961, respectively, and earned a PhD in physics from the University of Illinois, Urbana, in 1965. He became a member of the technical staff at Bell Labs in 1967; since 1983, he has been a district manager at Bell Communications Research.

The 1987 C. E. K. Mees Medal was presented to Adolf W. Lohmann in acknowledgment of "his stimulation of optical research activities in academic and industrial centers in several countries as well as his interdisciplinary contributions to physical optics and optical signal processing." The biennial Mees Medal honors achievements in optics that transcend national and disciplinary boundaries. Lohmann attended the University of Hamburg, where he received an MSc in physics in 1951 and a PhD in physics two year later. After graduating, he served on the faculty of the Technical University of Braunschweig and worked as a researcher at the Royal Institute of Technology, Stockholm. He moved to IBM in 1963, and in 1967 he became a professor of applied physics and information science at the University of California, San Diego. In 1973 he began his current position as a professor of physics at the University of Erlangen–Nuremberg.

IN BRIEF

Steven L. Richardson, formerly a program director for the condensed matter theory program at NSF and a senior research scientist at the Kodak Company's Corporate Research Laboratories in Rochester, New York, has been appointed associate director of the newly formed Materials Science Research Center of Excellence and associate professor of electrical engineering at Howard University in Washington, DC.

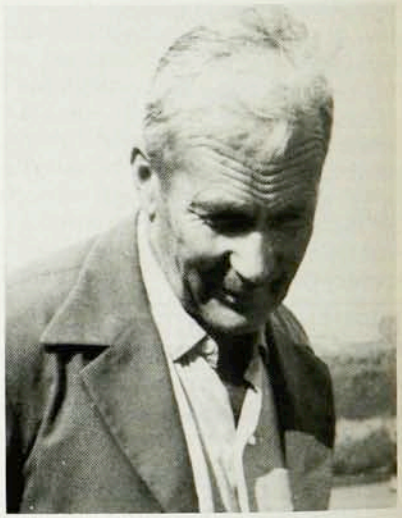
OBITUARIES

A. N. Kolmogorov

Andrei Nikolaevich Kolmogorov, who died on 20 October 1987 at the age of 84, was one of the greatest scientists in Russian history. His work in probability theory, turbulence (the "law of $^2/_3$") and dynamical systems ("chaos") was fundamental and is now regarded as classic. The range of his contributions was enormous—from poetics to stratigraphy, from genetics to celestial mechanics, from topology to mathematical logic and algorithmic complexity theory.

Kolmogorov's first work was in the history of the medieval Novgorod Republic. But when he found that history professors required at least five different proofs of every result, Kolmogorov chose mathematics, where one proof suffices. At the age of 19 he constructed an integrable function with a Fourier series divergent almost everywhere, and this unexpected result made him an internationally recognized mathematician.

At that time a mathematics graduate student at Moscow University was obliged to pass 14 examinations in various mathematical subjects, but it was possible to substitute an original article on a relevant topic in place of an examination. Kolmogorov never took any of the examinations, but instead wrote many articles containing new results in function theory, set theory, topology, mathematical logic, probability theory and other topics.



A. N. Kolmogorov

In May 1934, a little before James Alexander, Kolmogorov introduced the cohomology ring, one of the most important topological invariants of a space. The idea had come to him from physics: He generalized such notions as the distributions of charges and currents in space, on surfaces and on lines, considering the similar "functions of sets" for a more abstract mathematical situation. (In modern mathematics this derivation of the