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early frequency control activities—many of which activities he himself had helped to mold. Gerber never lost his enthusiasm and zest, whether he was describing his own work—for example, showing the influence of crystal plate parallelism on mode spectrum purity (1943–44)—or recounting stories of Arnold Sommerfeld's lectures or of the patent rivalry between Bechmann-Telefunken and Straubel-Zeiss over the discovery of the first temperature-stable quartz cuts.

ARTHUR BALLATO
*US Army ET&D Laboratory
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Stanley Corrsin

Stanley Corrsin, an internationally known specialist in turbulence, died of cancer 2 June at his home in Ridgewood, Maryland. He was 66 years old.

Corrsin was born in Philadelphia, Pennsylvania, and was a graduate of the University of Pennsylvania. He did his graduate work at Caltech, where he studied in the Guggenheim Aeronautical Laboratory under Theodore von Kármán. Corrsin received his PhD in 1947, the first advisee of Hans W. Liepmann. In 1947 he was hired by the fledgling department of aeronautics of Johns Hopkins University; he was at various times affiliated with the departments of chemical engineering, mechanics and materials science, mechanical engineering and biomedical engineering.

Corrsin was awarded the 1983 Fluid Dynamics Prize by the division of fluid dynamics of The American Physical Society. Just before his death, the aerospace, engineering mechanics and hydraulics divisions of the American Society of Civil Engineers awarded him the von Kármán Medal for his contributions to the study of turbulence.

Corrsin made a number of fundamental contributions to the study of turbulence, profoundly increasing our understanding of turbulent mixing, the interfaces between turbulent and non-turbulent fluid, and the deformation of material lines and surfaces by turbulence. In addition, Corrsin interested himself in various problems in biomechanics, notably human locomotion, maternal blood flow in the human placenta, arterial flutter, the pumping of mucus by cilia, the restoration of the pre-corneal tear film after blinking, and the aerodynamics of the albatross and of formation flying in bird flocks.

During the course of nearly 40 years at Johns Hopkins, Corrsin had 25 PhD students and dozens of postdoctoral associates and visitors. He was a particularly gregarious and cheerful man,

as well as being sensitive and perceptive. His students and colleagues will remember especially the regular morning coffee hours and receptions for successful PhD candidates where, with Corrsin's considerate encouragement, they mixed without regard for rank and learned to view their work seriously but lightheartedly. Corrsin's informal style of research management (which he would never have referred to in those words) has become a model in many institutions for the management of what Einstein referred to as "this delicate flower."

JOHN LUMLEY
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Serge Nikitine

Serge Nikitine died on 30 June 1986. He was born in 1904 in Odessa, Russia. After the October Revolution his parents emigrated to Yugoslavia and then to France, where Nikitine graduated in both literature and the sciences. He obtained his doctorate from the University of Paris in 1941. During the war he escaped to Switzerland, where he was a *Privatdozent* at the University of Zurich from 1943 until 1946. Between 1946 and 1950, he was professor and director at the Physical Institute of the University Farouk I, in Alexandria. After his return to France in 1950, he became Maître de Recherches at CNRS and then director at the same agency. In 1957 he became a professor at the University of Strasbourg, France.

Nikitine is considered, jointly with the Japanese physicist Hagashi and the Russian physicist Evgeni Gross, to be the father of experimental exciton physics. With great enthusiasm and enormous scientific understanding and skill, he devoted his research activities to the study of the optical properties of semiconductors. Since 1951, Nikitine and his group had studied a variety of substances, in particular the oxides and halogenides of copper, but also mercury iodide, cadmium sulfide, lead iodide, silver chloride and related substances. He discovered a variety of new optical transitions that he attributed to excitons. In numerous detailed experiments and theoretical studies he clarified the various excitonic states observed in absorption and emission spectroscopy.

With the advent of the laser, it became possible to generate high densities of excitons. Nikitine and his co-workers were also pioneers in exploiting this capability and, for example, discovered biexcitons—molecules of excitons—whose kinetics of formation Nikitine studied in great detail. He