

inferences. Five years later, with co-editor Thomas Bohan, Damask began his final forensic series, *Forensic Accident Investigation*, the second volume of which was issued late last year. In all these endeavors, Damask applied rigorous quantitative methods of analysis to the types of problem that all too often had been treated more with hand waving than with numbers. These problems included the nature and magnitude of crash-induced inertial forces and their effect on human bodies.

In 1984, Damask—who previously had cowritten, with Narciso Garcia, the textbook *Physics for Computer Science Students*—received broad national attention when he became the first person to use computer-generated animations to illustrate testimony in a criminal trial. Since he had thought that he was doing nothing unusual, this attention very much surprised him. Indeed, it was to him a source of continual surprise—and, usually, satisfaction—that, by introducing simple physics principles and illustrations into the courtroom, he was often able to clarify and help resolve fiercely disputed issues. He viewed this kind of intervention both as a valuable public service and as interesting applied science. His March 1987 *PHYSICS TODAY* cover story “Forensic Physics of Vehicle Accidents” was part of his effort to recruit more physical scientists to forensics and to join him in dispelling bogus legal arguments. (In the article, he recounted how the argument, “The laws of physics are obeyed in the laboratory but not in rural New Jersey,” actually prevailed over his own scientific testimony!)

In addition, Damask served as an editor of the *Journal of Physics and Chemistry of Solids* from 1974.

Damask was a wonderful friend and colleague and a great role model for his two sons, as well as his students. He had an outgoing personality and a fine sense of humor. He will be greatly missed.

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Siegfried Flügge

On 15 December 1997, Siegfried Flügge, an emeritus professor of theoretical physics at the University of Freiburg, closed his eyes forever. He died at the age of 85 in Freiburg, Germany, after a short illness.

Born and raised in Dresden, Flügge

began his graduate studies in physics at the University of Dresden. He transferred to the University of Frankfurt, but then moved again, to the University of Göttingen, where he earned his PhD in 1933 under the guidance of Max Born. In his dissertation, Flügge explored the structure of stars based on new discoveries about neutrons.

That same year, Hitler took power in Germany, the political storms intensified, Born fled the country, the circle in Göttingen he had founded broke apart and Flügge moved from one research facility to another. He first worked with Erwin Madelung in Frankfurt, then with Werner Heisenberg and Friedrich Hund in Leipzig, and then, in 1937, moved to Berlin to become the theorist-in-residence with Lise Meitner at the Kaiser Wilhelm Institute for Chemistry, which was then under the directorship of Otto Hahn. Flügge remained there even after Lise Meitner had to leave the institute—and Germany—in the summer of 1938 under what he called deplorable circumstances.

In 1938, Flügge finished his *habilitation* at the University of Frankfurt in nuclear physics and became a university lecturer at the University of Berlin. In 1944, late in World War II, he was appointed an associate professor of theoretical physics at the University of Königsberg in the province of East Prussia (then part of Germany).

Following the end of the war and the loss of Germany's eastern provinces, Flügge became a lecturer at the University of Göttingen. In 1947, he was appointed to a physics chair at the University of Marburg. His final academic home was the University of Freiburg, where he held a full professorship from 1961 until his retirement in 1977.

Throughout his numerous scholarly publications, Flügge specialized in theoretical nuclear physics, but equally important are his papers in other fields, which included astrophysics, viscosity, the slowing down of electron beams and surface absorption.

Another area in which Flügge was productive was fundamental quantum theory. In fact, quantum theory and modern methods of theoretical physics occupied a central place not only in Flügge's original publications, but also in his many textbooks, which covered virtually the entire curriculum of theoretical physics and its mathematical methods. His *Practical Quantum Mechanics* (Springer-Verlag), which was first published in German in 1947, went through many editions and was translated into several languages. Flügge also occasionally wrote episte-



SIEGFRIED FLÜGGE

mological essays on the general foundations of physics. Among his other literary achievements, his sole editorship of the 54-volume *Encyclopedia of Physics* (Springer-Verlag, 1956–84) remains truly invaluable.

Of historical note, Flügge witnessed the first splitting of the atom, which occurred at Otto Hahn's institute, and he wrote an article in 1939 that used mass defect calculations to estimate the energy released by the fission of uranium. That article, which appeared in *Naturwissenschaften* just days before censorship banned further publications on the topic in Germany, created an immediate sensation. It included the words: “All in all it must be pointed out once again that our present knowledge makes it possible to build a ‘uranium device’ of the kind described, but the available quantitative calculations have too great a margin of error to allow us to elevate this possibility to a certainty.”

Returning from the war after six years as a soldier, I had the good fortune to meet Flügge at Göttingen. He subsequently became my doctoral dissertation supervisor in a field in which he himself had done pioneer research—namely, the theory of nuclear reactions. But Flügge's impact as a teacher went far beyond the mere supervision of dissertations. His lectures on the history of physics influenced me and others, as did his stimulating private conversations on the place of physics within human knowledge.

Flügge's passing away is not only a loss for the entire scholarly community, but, for those who were fortunate enough to have been close to him, it is also cause for deep sadness. In our memories, he will live forever.

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