

## Announcement: The 2008 François Naftali Frenkiel Award for Fluid Mechanics

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The recipient of the 25th François Naftali Frenkiel Award for Fluid Mechanics is **Jonathan B. Freund** for his paper “Leukocyte margination in a model microvessel,” which was published in *Physics of Fluids*, Vol. **19**, 023301 (2007). He was presented with this award on 23 November 2008 at the annual meeting of the APS Division of Fluid Dynamics in San Antonio, Texas. He received a check of \$1000 plus a scroll bearing the following citation:

For insightful numerical simulations which elucidate the mechanism leading to leukocyte margination observed in microvessels.

The purpose of this Award, which is named after Dr. F. N. Frenkiel, founder and longtime editor of *Physics of Fluids*, is to recognize significant contributions in fluid mechanics by young investigators. The Award is sponsored by the Division of Fluid Dynamics of the APS, and is given annually to a young author of a paper that has been published in *Physics of Fluids*, during the calendar year preceding the presentation. “Young” will normally be defined as being under 40 years of age. More than one author may be involved, and one author may be a thesis advisor sharing the Award if he/she is also under 40. The winner of this Award is selected by a committee appointed by Chair of the Division of Fluid Dynamics of the APS.



**Jonathan B. Freund** received all his university degrees from Stanford University. He completed his B.S. in 1991, during which he did experiments on vehicle drag reduction with Professor Godfrey Mungal. For his M.S. (1992) and Ph.D. (1998), he was co-advised by Professor Parviz Moin and Professor Sanjiva Lele and wrote his dissertation on compressible turbulence in high-Mach-number free shear flows. After completing his Ph.D., he became an assistant professor in Mechanical and Aerospace Engineering at the University of California, Los Angeles, where he stayed until 2001, when he joined the faculty of the Department of Theoretical and Applied Mechanics at the University of Illinois at Urbana-Champaign. In 2006, that department was merged with Mechanical Engineering to form Mechanical Science and Engineering, and at that time Professor Freund took a joint appointment with

Aerospace Engineering. His early work on compressible turbulence has led to a series of investigations, mostly simulation based, on the mechanics and control of jet noise. More recently, he has also studied the dynamics of atomically thin liquid films, blood flow in the microcirculation, and the mechanics of tissue injury by strong pressure waves. Outside of fluid mechanics, he has studied the mechanics of thermal transport in nanostructured semiconductors and the atomic detail of ion bombardment of silicon.

**François Naftali Frenkiel**, who was born in Warsaw, Poland, on 19 September 1910, received his undergraduate education in Mechanical and Aeronautical Engineering at the University of Ghent, Belgium, and his Ph.D. in Physics from the University of Lille in France where he studied under the direction of Kampé de Fériet. He came to the States in 1947 and was associated successively with Cornell University, the U.S. Naval Ordnance Laboratory, the Johns Hopkins University Applied Physics Laboratory, and, from 1960 until his retirement, with the David W. Taylor Naval Ship Research and Development Center. In addition to being the founder and longtime editor of *Physics of Fluids*, he served on a large number of national and international committees, e.g., to name but a few, the International Union of Theoretical and Applied Mechanics, the U.S. National Committee on Theoretical and Applied Mechanics, and the Division of Fluid Dynamics of the American

Physical Society of which he was the chairman and secretary on numerous occasions. He published extensively in the field of turbulent flows and pioneered the application of high-speed digital computing methods to the measurement of turbulence and the mathematical modeling of urban pollution. He was elected Fellow of the American Physical Society, the American Geophysical Union, and the American Association for the Advancement of Science. Dr. Frenkiel retired in 1981 and passed away on 9 July 1986, in Washington, D.C.