Editorial: The 2017 François Naftali Frenkiel Award for Fluid Mechanics

The recipients of the 34th François Naftali Frenkiel Award for Fluid Mechanics are **Charles Loussert, Anne Bouchaudy, and Jean-Baptiste Salmon** for their paper “Drying dynamics of a charged colloidal dispersion in a confined drop” which was published in [Phys. Rev. Fluids **1**, 084201 \(2016\)](#). They were presented with this award on November 19, 2017 at the annual meeting of the APS Division of Fluid Dynamics in Denver, Colorado. They each received a check for \$500 plus a scroll acknowledging the award. The Award honors their meticulously detailed and insightful study of the fluid dynamics interior to a single colloidal droplet undergoing drying. An ambitious combination of theory, analysis, and multiple experimental techniques are employed to clarify the intricate time-dependent interplay between buoyancy and diffusional effects during the drying process. The experimental findings are also connected to existing transport theories.

The purpose of this Award, which is named after Dr. F. N. Frenkiel, founder and longtime editor of *Physics of Fluids*, from which *Physical Review Fluids* evolved, 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 beginning with the 2017 award, will be given annually to a young author of a paper that has been published in *Physical Review 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 the age of 40. The winner of this Award is selected by a committee appointed by the Chair of the Division of Fluid Dynamics of the APS.

François Naftali Frenkiel was born in Warsaw, Poland on September 19, 1910. He received 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 U.S. 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, including 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. Dr. Frenkiel retired in 1981 and passed away on July 9, 1986, in Washington, DC.

Jean-Baptiste Salmon received a Ph.D. in the rheology of complex fluids at Centre de Recherche Paul Pascal (Pessac, France, 2003). Since 2004, he has worked as a CNRS scientist at the joint Laboratory of the Future (LOF) between Solvay, CNRS and the University of Bordeaux (Pessac, France). His research focuses on soft matter physics, chemical engineering, and microfluidics.

Charles Loussert obtained his Ph.D. in photonics in 2014 at LOMA laboratory (Talence, France). He then joined LOF as a CNRS post-doctoral fellow, and set up optical tools for probing complex fluid drying, particularly coatings and confined drops. His research focuses on soft matter physics, optics, and instrumentation.

Anne Bouchaudy is currently a Ph.D. student at LOF. She is interested in condensed matter physics and chemistry. More specifically, her work focuses on the drying of colloidal dispersions in confined geometries.

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Editors

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