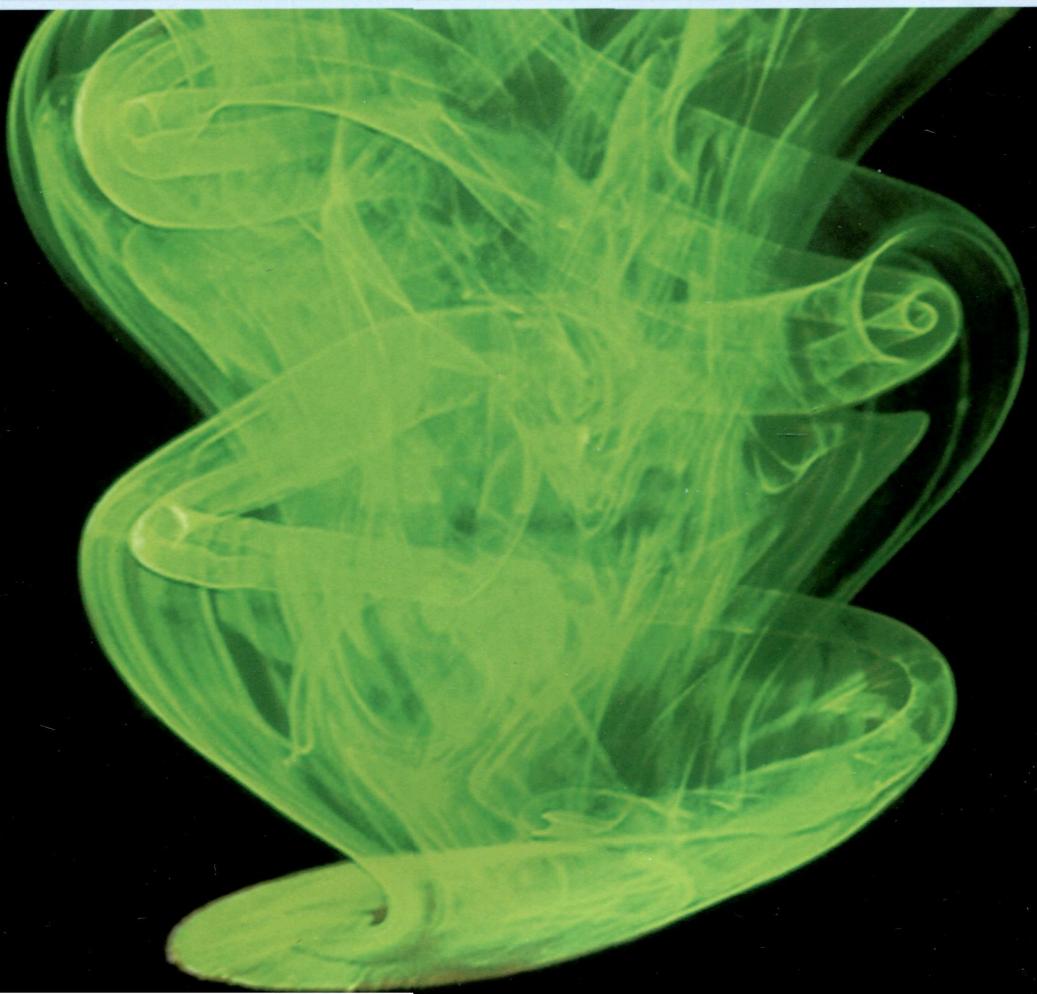


IBRIDGE
RSITY PRESS

10 October 2013

Journal of Fluid Mechanics

VOLUME 732



- 1 Instabilities in laminar separation bubbles
J.-C. Robinet
- 5 The elastic Landau–Levich problem
H. N. Dixit & G. M. Homsy
- 29 Scaling laws for the thrust production of flexible pitching panels
P. A. Dewey, B. M. Boschitsch, K. W. Moore, H. A. Stone & A. J. Smits
- 47 On the scaling of air entrainment from a ventilated partial cavity
S. A. Mäkiharju, B. R. Elbing, A. Wiggins, S. Schinasi, J.-M. Vanden-Broeck, M. Perlin, D. R. Dowling & S. L. Ceccio
- 77 *Experimental investigation of freely falling thin disks.* Part 2. Transition of three-dimensional motion from zigzag to spiral
C. Lee, Z. Su, H. Zhong, S. Chen, M. Zhou & J. Wu
- 105 Prandtl number dependence and instability mechanism of the near-field flow in a planar thermal plume
T. Hattori, S. E. Norris, M. P. Kirkpatrick & S. W. Armfield
- 128 Effects of convection and diffusion of the vapour in evaporating liquid films
K. Kanatani
- 150 On the scaling of shear-driven entrainment: a DNS study
H. J. J. Jonker, M. van Reeuwijk, P. P. Sullivan & E. G. Patton
- 166 Dynamics of nearly spherical bubbles in a turbulent channel upflow
J. Lu & G. Tryggvason
- 190 Gravity-driven thin-film flow on a flexible substrate
P. D. Howell, J. Robinson & H. A. Stone
- 214 Three-dimensional quasi-geostrophic convection in the rotating cylindrical annulus with steeply sloping endwalls
M. A. Calkins, K. Julien & P. Marti
- 245 Statistical accuracy of scattered points filters and application to the dynamics of bubbles in gas-fluidized beds
A. Acosta-Iborra, S. Sánchez-Delgado, S. A. Scott, C. R. Müller & J. S. Dennis
- 282 Stabilization of fluidized beds of particles magnetized by an external field: effects of particle size and field orientation
M. J. Espin, J. M. Valverde & M. A. S. Quintanilla
- 304 On the heat transferred to the air surrounding a semi-infinite inclined hot plate
M. J. Gollner, A. L. Sánchez & F. A. Williams
- 316 Vorticity moments in four numerical simulations of the 3D Navier–Stokes equations
D. A. Donzis, J. D. Gibbon, A. Gupta, R. M. Kerr, R. Pandit & D. Vincenzi
- 332 Vortex development on pitching plates with lunate and truncate planforms
C. Hartloper & D. E. Rival
- 345 Interactions between aquatic plants and turbulent flow: a field study using stereoscopic PIV
S. M. Cameron, V. I. Nikora, I. Albayrak, O. Miler, M. Stewart & F. Siniscalchi
- 373 Evolution of a stratified rotating shear layer with horizontal shear. Part 2. Nonlinear evolution
E. Arobone & S. Sarkar
- 401 Numerical investigation of the flow dynamics past a three-element aerofoil
S. Deck & R. Laraufie
- 445 Wall pressure coherence in supersonic turbulent boundary layers
A. Di Marco, R. Camussi, M. Bernardini & S. Pirozzoli
- 457 Inertial instability of intense stratified anticyclones. Part 1. Generalized stability criterion
A. Lazar, A. Stegner & E. Heifetz

Contents continued on inside back cover.

- S 485 Inertial instability of intense stratified anticyclones.
Part 2. Laboratory experiments
**A. Lazar, A. Stegner, R. Caldeira, C. Dong,
H. Didelle & S. Viboud**
- 510 Pressure jump interface law for the Stokes–Darcy coupling: confirmation by direct numerical simulations
**T. Carraro, C. Goll, A. Marciak-Czochra &
A. Mikelic**
- 537 Two-layer shallow-water dam-break solutions for gravity currents in non-rectangular cross-area channels
M. Ungarish
- 571 Weakly nonlinear stages of boundary-layer transition initiated by modulated Tollmien–Schlichting waves
I. B. de Paula, W. Würz, E. Krämer, V. I. Borodulin & Y. S. Kachanov
- 616 On continuous spectra of the Orr–Sommerfeld/Squire equations and entrainment of free-stream vortical disturbances
M. Dong & X. Wu
- 660 Steady gravity waves due to a submerged source
C. J. Lustri & S. J. Chapman
- 687 Short-time asymptotics of hydrodynamic dispersion in porous media
T. R. Brosten
- 706 Turbophoresis attenuation in a turbulent channel flow with polymer additives
A. Nowbahar, G. Sardina, F. Picano & L. Brandt

JFM Rapids (online only)

- R1 The non-stationary hysteresis phenomenon in shock wave reflections
M. Geva, O. Ram & O. Sadot
- R2 Coupled systems of two-dimensional turbulence
R. Salmon

- R3 Unravelling the Rayleigh–Taylor instability by stabilization
A. Poehlmann, R. Richter & I. Rehberg

S indicates supplementary data or movies available online.