

# Journal of Fluids Engineering

March,  
2010 |  
Volume  
132 |  
Issue 3

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Research Papers: Flows in Complex Systems

## Reliable and Accurate Prediction of Three-Dimensional Separation in Asymmetric Diffusers Using Large-Eddy Simulation

Hayder Schneider, Dominic von Terzi, Hans-Jörg Bauer and Wolfgang Rodi

*J. Fluids*

*Eng.* 2010;132(3):031101-031101-7.  
doi:10.1115/1.4001009.

The Effects of Fins on the Intermediate Wake of a Submarine

## Model

Juan M. Jiménez, Ryan T. Reynolds and Alexander J. Smits

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*Eng.* 2010;132(3):031102-031102-7.  
doi:10.1115/1.4001010.

Flow Force Analysis of a Variable Force Solenoid Valve for

## Automatic Transmissions

Gee Soo Lee, Hyung Jin Sung, Hyun Chul Kim and Hyun Woo Lee

*J. Fluids*

*Eng.* 2010;132(3):031103-031103-7.  
doi:10.1115/1.4001070.

Parametric Design of a Waterjet Pump by Means of Inverse

## Design, CFD Calculations and Experimental Analyses

Duccio Bonaiuti, Mehrdad Zangeneh, Reima Aartojarvi and Jonas Eriksson

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*Eng.* 2010;132(3):031104-031104-15.  
doi:10.1115/1.4001005.

Research Papers: Fundamental Issues and Canonical Flows

## The Linear Stability Analysis of the Lamb–Oseen Vortex in a Finite-Length Pipe

S. Wang, S. Taylor and K. Ku Akil

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*Eng.* 2010;132(3):031201-031201-13.  
doi:10.1115/1.4001106.

Research Papers: Multiphase Flows

Performance of a Novel

## Rotating Gas-Liquid Separator

G. P. Willems, J. P. Kroes, M. Golombok, B. P. M. van Esch, H. P. van Kemenade and J. J. H. Brouwers

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*Eng.* 2010;132(3):031301-031301-11.

doi:10.1115/1.4001008.

## Asymptotic Generalizations of the Lockhart–Martinelli Method for Two Phase Flows

Y. S. Muzychka and M. M. Awad

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*Eng.* 2010;132(3):031302-  
031302-12.

doi:10.1115/1.4001157.

**Research Papers:** Techniques and  
Procedures

## A Novel 2D Incompressible Viscous Inverse Design Method for Internal Flows Using Flexible String Algorithm

Mahdi Nili-Ahmadabadi, Ali Hajilouy-Benisi, Farhad Ghadak and Mohammad Durali

*J. Fluids*

*Eng.* 2010;132(3):031401-  
031401-10.

doi:10.1115/1.4001072.

**Technical Briefs**

## Development Length Requirements for Fully Developed Laminar Pipe Flow of Yield Stress Fluids

R. J. Poole and R. P. Chhabra

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*Eng.* 2010;132(3):034501-  
034501-4.

doi:10.1115/1.4001079.

**Adjustment of Aerodynamic-  
Compensation Characteristics of a**

## Pitot Tube by Rear-Body Shape Manipulation

Jehanzeb Masud and Farooq bin Akram

*J. Fluids*

*Eng.* 2010;132(3):034502-  
034502-6.

doi:10.1115/1.4001156.