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**Research Papers:** Flows in Complex Systems

## Scale-Up Correlation for the Flow of Surfactant-Based Fluids in Circular Coiled Pipes

Ahmed H. Ahmed Kamel and Subhash N. Shah

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*Eng.* 2010;132(8):081101-081101-12.  
doi:10.1115/1.4002007.

Numerical Simulation  
of the Transient Flow in

## a Centrifugal Pump During Starting Period

Zhifeng Li, Dazhuan Wu, Leqin Wang and Bin Huang

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*Eng.* 2010;132(8):081102-081102-8.  
doi:10.1115/1.4002056.

**Research Papers:** Fundamental Issues and Canonical Flows

## Patterns of Airflow in Circular Tubes Caused by a Corona Jet With Concentric and Eccentric Wire Electrodes

Reza Baghaei Lakeh and Majid Molki

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*Eng.* 2010;132(8):081201-081201-10.  
doi:10.1115/1.4002008.

Mass Transfer in a  
Rigid Tube With

## Pulsatile Flow and Constant Wall Concentration

T. E. Moschandreou, C. G. Ellis and D. Goldman

*J. Fluids*

*Eng.* 2010;132(8):081202-081202-11.  
doi:10.1115/1.4002213.

Numerical Modeling  
and Analysis of

## Entrainment in Turbulent Jets After the End of Injection

Satbir Singh and Mark P. B. Musculus

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*Eng.* 2010;132(8):081203-081203-10.  
doi:10.1115/1.4002184.

The Peak  
Overpressure Field

## Resulting From Shocks Emerging From Circular Shock Tubes

A. J. Newman and J. C. Mollendorf

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*Eng.* 2010;132(8):081204-

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**Research Papers: Multiphase  
Flows**

## Developing Laminar Gravity-Driven Thin Liquid Film Flow Down an Inclined Plane

H. Lan, J. L. Wegener, B. F. Armaly and J. A. Drallmeier

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*Eng.* 2010;132(8):081301-081301-8.  
doi:10.1115/1.4002109.

**A Level Set Method  
Coupled With a Volume**

## of Fluid Method for Modeling of Gas-Liquid Interface in Bubbly Flow

Bogdan A. Nichita, Iztok Zun and John R. Thome

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*Eng.* 2010;132(8):081302-081302-15.  
doi:10.1115/1.4002166.

**Research Papers: Techniques  
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## A Methodology to Measure Aerodynamic Forces on Cylinders in Channel Flow

Alan A. Thrift, Scott J. Brumbaugh, Karen A. Thole and Atul Kohli

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*Eng.* 2010;132(8):081401-081401-9.  
doi:10.1115/1.4002198.

**Technical Briefs**

## Far-Field Boundary Condition Effects of CFD and Free-Wake Coupling Analysis for Helicopter Rotor

Seong Yong Wie, Jae Hoon Lee, Jang Hyuk Kwon and Duck Joo Lee

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*Eng.* 2010;132(8):084501-084501-6.  
doi:10.1115/1.4002110.

**Microscale Falling  
Cylinder Viscometer With**

## Slip Boundary

Khaled M. Bataineh, Moh'd A. Al-Nimr and Wafa Batayneh

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*Eng.* 2010;132(8):084502-084502-5.  
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**Shear Flow Over a  
Wavy Surface With**

## Partial Slip

C. Y. Wang

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**Drag Reduction of  
Tractor-Trailers Using**

## Optimized Add-On Devices

Fu-Hung Hsu and Roger L. Davis

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