RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
011101 High-Resolution Numerical Simulation of Low Reynolds Number Incompressible Flow About Two Cylinders in Tandem / Sintu Singha and K. P. Sinhamahapatra
011102 Vorticity Dynamics in Axial Compressor Flow Diagnosis and Design — Part II: Methodology and Application of Boundary Vorticity Flux / Qiushi Li, Hong Wu, Ming Guo, and Jie-Zhi Wu

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
011201 Slip Flow in the Hydrodynamic Entrance Region of Circular and Noncircular Microchannels / Zhipeng Duan and Y. S. Muzychka

MULTIPHASE FLOWS
011301 Effect of Grooves on Cavitation Around the Body of Revolution / Yongjian Li, Haosheng Chen, Jiadao Wang, and Darong Chen
011302 Modeling Blockage of Particles in Conduit Constrictions: Dense Granular-Suspension Flow / A. J. Parry and O. Millet
011303 Liquid Sheet Breakup in Gas-Centered Swirl Coaxial Atomizers / V. Kulkarni, D. Sivakumar, C. Oommen, and T. J. Tharakan
011304 Effect of Capsule Density and Concentration on Pressure Drops of Spherical Capsule Train Conveyed by Water / Deniz Ulusarslan

TECHNIQUES AND PROCEDURES

TECHNICAL BRIEFS
014501 General Geometrical Model of Scroll Compression Chamber for Scroll Fluid Machine / Qiang Jianguo
014502 Single Phase Compressible Steady Flow in Pipes / David Hullender, Robert Woods, and Yi-Wei Huang
RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
021101 A Method to Generate Propulsor Side Forces / Stephen A. Huyer, Amanda Dropkin, James Dick, and David Beal
021102 Computational Investigation of a Race Car Wing With Vortex Generators in Ground Effect / Yuichi Kuya, Kenji Takeda, and Xin Zhang
021103 Comparison of Experiments and Simulation of Joule Heating in ac Electrokinetic Chips / Stuart J. Williams, Pramod Chamarthy, and Steven T. Wereley
021105 Large Eddy Simulation of Turbulent Axial Flow Along an Array of Rods / F. Abbasian, S. D. Yu, and J. Cao
021106 A Single-Stage Centripetal Pump — Design Features and an Investigation of the Operating Characteristics / Mihael Sekavčnik, Tine Gantar, and Mitja Mori

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
021202 On the Streamwise Development of Density Jumps / A. Regev and S. Hassid

MULTIPHASE FLOWS
021302 Computational and Experimental Studies on Cavity Filling Process by Cold Gas Dynamic Spray / Hidemasa Takana, HongYang Li, Kazuhiro Ogawa, Tsunemoto Kuriyagawa, and Hideya Nishiyama
021303 Thermodynamic Effect on a Cavitating Inducer — Part I: Geometrical Similarity of Leading Edge Cavities and Cavitaiton Instabilities / Jean-Pierre Franc, Guillaume Boitel, Michel Riondet, Éric Janson, Pierre Ramina, and Claude Rebattet
021304 Thermodynamic Effect on a Cavitating Inducer — Part II: On-Board Measurements of Temperature Depression Within Leading Edge Cavities / Jean-Pierre Franc, Guillaume Boitel, Michel Riondet, Éric Janson, Pierre Ramina, and Claude Rebattet
021305 An Experimental Investigation for Bubble Rising in Non-Newtonian Fluids and Empirical Correlation of Drag Coefficient / Fan Wenyuan, Ma Youguang, Jiang Shaokun, Yang Ke, and Li Huaizhi
RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
031101 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
031102 The Effects of Fins on the Intermediate Wake of a Submarine Model / Juan M. Jiménez, Ryan T. Reynolds, and Alexander J. Smits
031103 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
031104 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

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
031201 The Linear Stability Analysis of the Lamb–Oseen Vortex in a Finite-
Length Pipe / S. Wang, S. Taylor, and K. Ku Akil

MULTIPHASE FLOWS
031301 Performance of a Novel Rotating Gas-Liquid Separator / G. P. Willems,
J. P. Krokes, M. Golombok, B. P. M. van Esch, H. P. van
Kemenade, and J. J. H. Brouwers
031302 Asymptotic Generalizations of the Lockhart–Martinelli Method for Two
Phase Flows / Y. S. Muzychka and M. M. Awad

TECHNIQUES AND PROCEDURES
031401 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

TECHNICAL BRIEFS
034501 Development Length Requirements for Fully Developed Laminar Pipe
Flow of Yield Stress Fluids / R. J. Poole and R. P. Chabra
034502 Adjustment of Aerodynamic-Compensation Characteristics of a Pitot
Tube by Rear-Body Shape Manipulation / Jehanzeb Masud and
Farooq bin Akram
RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
041101 Performance Improvement of Weis-Fogh Type Ship’s Propulsion Mechanism Using a Wing Restrained by an Elastic Spring / Kideok Ro
041102 Experimental Analysis of Microchannel Entrance Length Characteristics Using Microparticle Image Velocimetry / Tariq Ahmad and Ibrahim Hassan
041103 Combined Effect of Surface Roughness and Heterogeneity of Wall Potential on Electroosmosis in Microfluidic/Nanofluidic Channels / S. Bhattacharyya and A. K. Nayak
041104 Application of Realizability and Shock Unsteadiness to $k-\varepsilon$ Simulations of Under-Expanded Axisymmetric Supersonic Free Jest / Babak Emami, Markus Bussmann, and Honghi Tran
041105 Analysis of Unsteady Confined Viscous Flows With Variable Inflow Velocity and Oscillating Walls / Dan Mateescu, Manuel Muñoz, and Olivier Scholz

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
041202 On Self-Similarity in the Inner Wall Layer of a Turbulent Channel Flow / Bérengère Podvin, Yann Fraigneau, Julien Jouanguy, and J.-P. Laval
041203 Review of Hydraulic Roughness Scales in the Fully Rough Regime / Karen A. Flack and Michael P. Schultz

MULTIPHASE FLOWS
041301 CFD Simulation of the Bubbling and Slugging Gas-Solid Fluidized Beds / Seyyed Hossein Hosseini, Wenqi Zhong, Mohsen Nasr Esfahany, Leila Pourjafar, and Salar Azizi
041302 Implicit LES Predictions of the Cavitating Flow on a Propeller / Rickard E. Bensow and Göran Bark
041303 An Examination of Trapped Bubbles for Viscous Drag Reduction on Submerged Surfaces / Kelly A. Stephani and David B. Goldstein

TECHNICAL BRIEFS
044501 On the Suppression of Vortex Shedding From Circular Cylinders Using Detached Short Splitter-Plates / Behzad Ghadiri Dehkordi and Hamed Houri Jafari
044502 Buoyancy Effects on Thermal Boundary Layer Over a Vertical Plate With a Convective Surface Boundary Condition / O. D. Makinde and P. O. Olanrewaju
RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
051102 Analysis and Prevention of Vortex Breakdown in the Simplified Discharge Cone of a Francis Turbine / Romeo Susan-Resiga, Sebastian Muntean, Vlad Hasmatuchi, Ioan Anton, and François Avellan
051103 LES of the Slipstream of a Rotating Train / Hassan Hemida, Nahia Gil, and Chris Baker
051104 Influence of the Slant Angle of 3D Bluff Bodies on Longitudinal Vortex Formation / Patrick Gilliéron, Annie Leroy, Sandrine Aubrun, and Pierre Audier
051105 Particle Trajectory Study in Submerged Flows With Baffles Using $v^2-f$ and $k-\varepsilon$ Turbulence Models / A. Mehdizadeh, B. Firoozabadi, and S. A. Sherif
051106 Investigation of the Flow Field in a Rectangular Vessel Equipped With a Side-Entering Agitator / C. Gómez, C. P. J. Bennington, and F. Taghipour
051107 A Study of Cycle-to-Cycle Variations and the Influence of Charge Motion Control on In-Cylinder Flow in an IC Engine / Mayank Mittal and Harold J. Schock
051108 Fluid Force Moment on the Backshroud of a Francis Turbine Runner in Precession Motion / Bingwei Song, Hironori Horiguchi, Yumeto Nishiyama, Shinichiro Hata, Zhenyue Ma, and Yoshinobu Tsujimoto
051109 Axial Flow Fan Tip Leakage Flow Control Using Tip Platform Extensions / Ali Aktürk and Cengiz Camci
051110 Prediction of the Nonuniform Tip Clearance Effect on the Axial Compressor Flow Field / Young-Seok Kang and Shin-Hyoun Kang
051111 Flow and Dipole Source Evaluation of a Generic SUV / Jonas Ask and Lars Davidson

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
051201 Flows and Their Stability in Rotating Cylinders With a Porous Lining / M. Subotic and F. C. Lai
051202 Active Control of Flow Separation in a Radial Blower / David Greenblatt and Guy Arzuan
051203 Spectral Linear Stochastic Estimation of the Turbulent Velocity in a Square Three-Dimensional Wall Jet / Joseph W. Hall and Daniel Ewing
051204 Experimental Study of Turbulence Transport in a Dilute Surfactant Solution Flow Investigated by PIV / Weiguo Gu, Yasuo Kawaguchi, Dezhong Wang, and Saito Akihiro
051205 Flow Characteristics of Microglass Fiber Suspension in Polymeric Fluids in Spherical Gaps / Hiroshi Yamaguchi, Xin-Rong Zhang, Xiao-Dong Niu, and Yuta Ito
051206 Shape Optimization of Symmetric Cylinder Shape on Buoyancy Using Fourier Series Approximation / Hyeongkeun Kim, Dongmin Choi, Youngjin Kim, Seunghyun Baik, and Hyungpil Moon

MULTIPHASE FLOWS
051301 Separation of a Two-Phase Slug Flow in Branched 90 deg Elbows / F. Sanchez-Silva, V. Hernandez-Perez, I. Carvajal-Mariscal, J. G. Barbosa-Saldaña, and J. A. Cruz-Mayo
051302 Microbubble Drag Reduction Downstream of Ventilated Partial Cavity / Eduard Amromin
051303 Mitigation of Damage to Solid Surfaces From the Collapse of Cavitation Bubble Cloud / Parag V. Chitnis, Nicholas J. Manzi, Robin O. Cleveland, Ronald A. Roy, and R. Glynn Holt

TECHNIQUES AND PROCEDURES
051401 Shape Optimization of a Multi-Element Foil Using an Evolutionary Algorithm / Yu-Tai Lee, Vineet Ahuja, Ashvin Hosangadi, and Michael Ebert

TECHNICAL BRIEFS
054501 A Serendipitous Application of Supercavitation Theory to the Water - Running Basilisk Lizard / Eric R. White and Timothy F. Miller
054502 On the Derivation of Pressure Field Distribution at the Entrance of a Rectangular Capillary / Prashant R. Waghmare and Sushanta K. Mitra
RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
061101 Flowfield Investigation at Propeller Thrust Reverse / Eric W. M. Roosenboom and Andreas Schröder
061102 An Analytical Modeling of the Central Core Flow in a Rotor-Stator System With Several Preswirl Conditions / Roger Debuchy, Fadi Abdel Nour, and Gérard Bois
061105 Rotordynamic Forces Acting on Three-Bladed Inducer Under Supersynchronous/Synchronous Rotating Cavitation / Yoshiki Yoshida, Masato Eguchi, Taiichi Motomura, Masaharu Uchiumi, Hirotaka Kure, and Yoshiyulki Maruta

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
061201 Effects of Channel Scale on Slip Length of Flow in Micro/Nanochannels / Xiaofan Yang and Zhongquan C. Zheng

MULTIPHASE FLOWS
061301 Unsteady Cavitation at the Tongue of the Volute of a Centrifugal Pump / Rudolf Bachert, Bernd Stoffel, and Matevž Dular
061302 Maximum Spread of Droplet on Solid Surface: Low Reynolds and Weber Numbers / Ri Li, Nasser Ashgriz, and Sanjeev Chandra

TECHNIQUES AND PROCEDURES
061401 Passenger Train Slipstream Characterization Using a Rotating Rail Rig / N. Gil, C. J. Baker, C. Roberts, and A. Quinn
061402 A Comparison of Phase Doppler Analyzer (Dual-PDA) and Optical Patternotator Data for Twin-Fluid and Pressure-Swirl Atomizer Sprays / Ariel R. Muliadi, Paul E. Sojka, Yudaya R. Sivathanu, and Jongmook Lim
061403 Factors of Safety for Richardson Extrapolation / Tao Xing and Frederick Stern

TECHNICAL BRIEFS
064501 Development-Length Requirements for Fully Developed Laminar Flow in Concentric Annuli / R. J. Poole
064502 Impact of Surface Roughness on Compressor Cascade Performance / Seung Chul Back, June Hyuk Sohn, and Seung Jin Song
RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
071101 Effect of J-Groove on the Suppression of Swirl Flow in a Conical Diffuser / Junichi Kurokawa, Hiroshi Imamura, and Young-Do Choi
071102 Rotordynamic Moment on the Backshroud of a Francis Turbine Runner Under Whirling Morion / Bingwei Song, Hironori Horiguchi, Zhenyue Ma, and Yoshinobu Tsujimoto
071103 An Experimental Study of the Flow Around a Formula One Racing Car Tire / Emin Issakhanian, Chris J. Elkins, Kin Pong Lo, and John K. Eaton

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
071201 PIV Study of Laminar Wall Jets of Non-Newtonian Fluids / K. F. K. Adane and M. F. Tachie
071202 Low Reynolds Number Flow in Spiral Microchannels / Denis Lepchev and Daniel Weihs

MULTIPHASE FLOWS
071301 Influence of Gas-Liquid Two-Phase Intermittent Flow on Hydraulic Sand Dune Migration in Horizontal Pipelines / Afshin Goharzadeh, Peter Rodgers, and Chokri Touati
071304 Pressure Loss in a Horizontal Two-Phase Slug Flow / A. R. Kabiri-Samani and S. M. Borghei

TECHNICAL BRIEFS
074501 Study of Unguided Flow in a Chaber / A. Abdel-Fattah
074502 The Analysis of Cavitation Problems in the Axial Piston Pump / Shu Wang
RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
081101 Scale-Up Correlation for the Flow of Surfactant-Based Fluids in Circular Coiled Pipes / Ahmed H. Ahmed Kamel and Subhash N. Shah
081102 Numerical Simulation of the Transient Flow in a Centrifugal Pump During Starting Period / Zhifeng Li, Dazhuan Wu, Leqin Wang, and Bin Huang

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
081201 Patterns of Airflow in Circular Tubes Caused by a Corona Jet With Concentric and Eccentric Wire Electrodes / Reza Baghaei Lakeh and Majid Molki
081202 Mass Transfer in a Rigid Tube With Pulsatile Flow and Constant Wall Concentration / T. E. Moschandreou, C. G. Ellis, and D. Goldman
081203 Numerical Modeling and Analysis of Entrainment in Turbulent Jets After the End of Injection / Satbir Singh and Mark P. B. Musculus
081204 The Peak Overpressure Field Resulting From Shocks Emerging From Circular Shock Tubes / A. J. Newman and J. C. Mollendorf

MULTIPHASE FLOWS
081301 Developing Laminar Gravity-Driven Thin Liquid Film Flow Down an Inclined Plane / H. Lan, J. L. Wegener, B. F. Armaly, and J. A. Drallmeier

TECHNIQUES AND PROCEDURES
081401 A Methodology to Measure Aerodynamic Forces on Cylinders in Channel Flow / Alan A. Thrift, Scott J. Brumbaugh, Karen A. Thole, and Atul Kohli

TECHNICAL BRIEFS
084501 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
084502 Microscale Falling Cylinder Viscometer With Slip Boundary / Khaled M. Bataineh, Moh’d A. Al-Nimr, and Wafa Batayneh
084503 Shear Flow Over a Wavy Surface With Partial Slip / C. Y. Wang
084504 Drag Reduction of Tractor-Trailers Using Optimized Add-On Devices / Fu-Hung Hsu and Roger L. Davis
RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
091101 Improvement of the Performance of a Centrifugal Compressor by Modifying the Volute Inlet / Semi Kim, Junyoung Park, Kukyoung Ahn, and Jehyun Baek
091102 Dynamic Modeling of Hydrokinetic Energy Extraction / Veronica B. Miller and Laura A. Schaefer
091103 Impact of Fan Gap Flow on the Centrifugal Impeller Aerodynamics / Yu-Tai Lee

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
091201 The Application of Eddy-Viscosity Stress Limiters for Modeling Cross-Flow Separation / P. A. Gregory, P. N. Joubert, M. S. Chong, and A. Ooi
091202 Critical Reynolds Number in Constant-Acceleration Pipe Flow From an Initial Steady Laminar State / Charles W. Knisely, Kazuyoshi Nishihara, and Manabu Iguchi

MULTIPHASE FLOWS
091301 Comparison of Lagrangian and Eulerian Simulations of Slurry Flows in a Sudden Expansion / P. Frawley, A. P. O'Mahony, and M. Geron
091302 A Three-Dimensional Resolved Discrete Particle Method for Studying Particle-Wall Collision in a Viscous Fluid / Zhi-Gang Feng, Efthathios E. Michaelides, and Shaolin Mao

TECHNOLOGY REVIEWS
094001 Reynolds Number Dependence, Scaling, and Dynamics of Turbulent Boundary Layers / Joseph C. Klewicki
RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
101101 Relaminarization of Axisymmetric Turbulent Flow With Combined Axial Jet and Side Injection in a Pipe / Snehamoy Majumder and Dipankar Sanyal
101103 Integral Force/Moment Waterjet Model for CFD Simulations / Manivannan Kandasamy, Seng Keat Ooi, Pablo Carrica, and Frederick Stern
101104 Numerical and Experimental Study on Jet Trajectories and Mixing Behavior of Venturi-Jet Miner / S. Sundararaj and V. Selladurai

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
101201 Unsteady Peristaltic Pumping in a Finite Length Tube With Permeable Wall / Y. V. K. Ravi Kumar, S. V. H. N. Krishna Kumari, P. M. V. Ramana Murthy, and S. Sreenadh
101202 Rotational and Quasiviscous Cold Flow Models for Axisymmetric Hybrid Propellant Chambers / Joseph Majdalani and Michel Akiki
101203 Experimental and Numerical Study of Laminar Round Jet Flows Along a Wall / K. F. K. Adane and M. F. Tachie
101204 Stokes Flow Through a Periodically Grooved Tube / Chiu-On Ng and C. Y. Wang

MULTIPHASE FLOWS
101301 Numerical Prediction of Impact Force in Cavitating Floks / Hong Wang and Baoshan Zhu
101302 Non-Newtonian Drops Spreading on a Flat Surface / A. Dechelette, P. E. Sojka, and C. R. Wassgren

TECHNIQUES AND PROCEDURES
101401 Relationship between accuracy and number of velocity particles of the finite-difference lattice Boltzmann method in velocity slip simulations / Minoru Watari
101402 Three-Dimensional Vortex Method for the Simulation of Bubbly Flow / Tomomi Uchiyama and Shoji Matsumura
RESEARCH PAPERS
FLOWS IN COMPLEX SYSTEMS
111101  Investigation of the Flow Field on a Transonic Turbine Nozzle Guide Vane With Rim Seal Cavity Flow Ejection / M. Pau and G. Paniagua
111102  Pressure Fluctuation Characteristics of Complex Turbulent Flow in a Single Elbow With Small Curvature Radius for a Sodium-Cooled Fast Reactor / Shinji Ebara, Yuta Aoya, Tsukasa Sato, Hidetoshi Hashizume, Yuki Kazuhisa, Kosuke Aizawa, and Hidemasa Yamano

FUNDAMENTAL ISSUES AND CANONICAL FLOWS
111201  Laminar Flow in Microchannels With Noncircular Cross Section / Ali Tamayol and Majid Bahrami
111202  On a New Passive Scalar Equation With Variable Mass Diffusivity: Flow Between Parallel Plates / Fabio Gori and Andrea Boghi
111203  Effect of Initial Constant Acceleration on the Transition to Turbulence in Transient Circular Pipe Flow / Manabu Iguchi, Kazuyoshi Nishihara, Yusuke Nakahata, and Charles W. Knisely
111204  Swirling Flow in a Fixed Container: Generation and Attenuation of a Vortex Column / A. Nahas, A. Calvo, and M. Piva

MULTIPHASE FLOWS
111301  Prediction of Small-Scale Cavitation in a High Speed Flow Over an Open Cavity Using Large-Eddy Simulation / Ehsan Shams and Sourabh V. Apte
111302  Comparison of Local Interfacial Structures Around 90 and 45-Degree Elbows in Horizontal Bubbly Flows / Mohan Yadav, Justin D. Talley, and Seungjin Kim
111303  A Contribution to Study on the Lift of Ventilated Supercavitating Vehicle With Low Froude Number / Yu Kaiping, Zhou Jingjun, Min Jingxin, and Zhang Guang
111304  Study on Aeration for Disengaged Wet Clutches Using a Two-Phase Flow Model / Shihua Yuan, Kai Guo, Jibin Hu, and Zengxiong Peng
111305  Thermodynamic Effect on a Cavitating Inducer in Liquid Hydrogen / Eric Goncalves, Regiane Fortes Patella, Julien Rolland, Benoit Pouffary, and Guillaume Challier

TECHNICAL BRIEFS
114501  Mass Transfer Coefficients for a Non-Newtonian Fluid and Water With and Without Antifoam Agents / Robert A. Leishear, Hector N. Guerrero, Michael L. Restivo, and David J. Sherwood
114502  Parallel Flow Through Ordered Fibers: An Analytical Approach / A. Tamayol and M. Bahrami
<table>
<thead>
<tr>
<th>No</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>121101</td>
<td>Forces and Surface Pressure on a Blade Moving in Front of the Admission Region</td>
<td>Soo-Yong Cho, Chong-Hyun Cho, Kook-Young Ahn, and Young-Cheol Kim</td>
</tr>
<tr>
<td>121102</td>
<td>Stall Inception Mechanism in an Axial Flow Fan Under Clean and Distorted Inflows</td>
<td>Pramod B. Salunkhe and A. M. Pradeep</td>
</tr>
<tr>
<td>121103</td>
<td>Parametric Investigation of Circumferential Grooves on Compressor Rotor Performance</td>
<td>Yanhui Wu, Wuli Chu, Haoguang Zhang, and Qingpeng Li</td>
</tr>
<tr>
<td>121104</td>
<td>Computational Investigations Into Draining in an Axisymmetric Vessel</td>
<td>Adam Robinson, Hervé Morvan, and Carol Eastwick</td>
</tr>
<tr>
<td>121201</td>
<td>Experimental Observation of Inertia-Dominated Squeeze Film Damping in Liquid</td>
<td>Antoine Fornari, Matthew Sullivan, Hua Chen, Christopher Harrison, Kai Hsu, Frederic Marty, and Bruno Mercier</td>
</tr>
<tr>
<td>121203</td>
<td>Partially Averaged Navier–Stokes (PANS) Method for Turbulence Simulations — Flow Past a Square Cylinder</td>
<td>Eunhwan Jeong and Sharath S. Girimaji</td>
</tr>
<tr>
<td>121204</td>
<td>Experimental Determination of the Virtual Mass Coefficient for Two Spheres Accelerating in a Power Law Fluid</td>
<td>Abbas H. Sulaymon, Catherine A. M. E. Wilson, and Abeer I. Alwared</td>
</tr>
<tr>
<td>121301</td>
<td>Large Eddy Simulation of Turbulent-Cavitation Interactions in a Venturi Nozzle</td>
<td>Nagendra Dittakavi, Aditya Chunekar, and Steven Frankel</td>
</tr>
<tr>
<td>121302</td>
<td>Research on Two Phase Waterjet Nozzles</td>
<td>S. Gowing, T. Mori, and S. Neely</td>
</tr>
<tr>
<td>121401</td>
<td>A Fast Method for Determining the Flow Conductance of Gas Microfluidic Devices</td>
<td>Matteo Martinelli and Vladimir Viktorov</td>
</tr>
<tr>
<td>121402</td>
<td>Numerical Simulation of Droplet Size Distribution in Vertical Upward Annular Flow</td>
<td>Y. Liu and W. Z. Li</td>
</tr>
</tbody>
</table>