

# VOLUME 21 2005

## NUMBER 1, NOVEMBER 2005

Special Issue: Fluid-Structure and Flow-Acoustic Interactions involving  
Bluff Bodies

DE LANGRE, E. AND AXISA, F., Preface .....	1
CHAPLIN, J.R., BEARMAN, P.W., HUARTE, F.J.H. AND PATTENDEN, R.J., Laboratory measurements of vortex-induced vibrations of a vertical tension riser in a stepped current .....	3
CHAPLIN, J.R., BEARMAN, P.W., CHENG, Y., FONTAINE, E., GRAHAM, J.M.R., HERFJORD, K., HUARTE, F.J.H., ISHERWOOD, M., LAMBRAKOS, K., LARSEN, C.M., MENEGHINI, J.R., MOE, G., PATTENDEN, R.J., TRIANTAFYLLOU, M.S. AND WILLDEN, R.H.J., Blind predictions of laboratory measurements of vortex-induced vibrations of a tension riser .....	25
MEYNEN, S., VERMA, H., HAGEDORN, P. AND SCHÄFER, M., On the numerical simulation of vortex-induced vibrations of vibrating conductors .....	41
WANG, Z.J., ZHOU, Y., HUANG, J.F. AND XU, Y.L., Fluid dynamics around an inclined cylinder with running water rivulets .....	49
WEAVER, D.S. AND VELJKOVIC, I., Vortex shedding and galloping of open semi-circular and parabolic cylinders in cross-flow .....	65
MUREITHI, N.W., ZHANG, C., RUËL, M. AND PETTIGREW, M.J., Fluidelastic instability tests on an array of tubes preferentially flexible in the flow direction .....	75
FEENSTRA, P.A., WEAVER, D.S. AND EISINGER, F.L., Acoustic resonance in a staggered tube array: Tube response and the effect of baffles .....	89
MOHANY, A. AND ZIADA, S., Flow-excited acoustic resonance of two tandem cylinders in cross-flow .....	103

## NUMBER 2, NOVEMBER 2005

BILLON, A., VALEAU, V. AND SAKOUT, A., Two feedback paths for a jet-slot oscillator ..	121
DEVILLERS, J.F. AND COUTIER-DELGOSHA, O., Influence of the nature of the gas in the edge-tone phenomenon .....	133
ZHOU, L., CHENG, M. AND HUNG, K.C., Suppression of fluid force on a square cylinder by flow control .....	151

ÉTIENNE, S. AND PELLETIER, D., A general approach to sensitivity analysis of fluid-structure interactions . . . . .	169
GRZĘDZIŃSKI, J., Limitation of application of the center manifold reduction in aeroelasticity . . . . .	187
SEITANIS, S.A., ANAGNOSTOPOULOS, P. AND BEARMAN, P.W., An experimental study of the in-line oscillations of a closely spaced row of cylinders in cross-flow . . . . .	211
Conference Announcements . . . . .	227

### NUMBER 3, NOVEMBER 2005

#### Special Issue: Aeronautical and Marine Fluid-Structure Interactions

CESNIK, C.E.S., EATOCK TAYLOR, R. AND DE LANGRE, E., Preface . . . . .	229
NOGER, C., REGARDIN, C. AND SZÉCHÉNYI, E., Investigation of the transient aerodynamic phenomena associated with passing manoeuvres . . . . .	231
IEMMA, U. AND GENNARETTI, M., Reduced-order modeling for linearized aeroelasticity of fixed wings in transonic flight . . . . .	243
MARSDEN, C.C. AND PRICE, S.J., The aeroelastic response of a wing section with a structural freeplay nonlinearity: An experimental investigation . . . . .	257
PESEUX, B., GORNET, L. AND DONGUY, B., Hydrodynamic impact: Numerical and experimental investigations . . . . .	277
SULISZ, W., WILDE, P. AND WISNIEWSKI, M., Wave impact on elastically supported horizontal deck . . . . .	305
CIAPPI, E. AND MAGIONESI, F., Characteristics of the turbulent boundary layer pressure spectra for high-speed vessels . . . . .	321
TRIM, A.D., BRAATEN, H., LIE, H. AND TOGNARELLI, M.A., Experimental investigation of vortex-induced vibration of long marine risers . . . . .	335

### NUMBER 4, DECEMBER 2005

ALAM, M.M., SAKAMOTO, H. AND ZHOU, Y., Determination of flow configurations and fluid forces acting on two staggered circular cylinders of equal diameter in cross-flow . . . . .	363
KLASEBOER, E., KHOO, B.C. AND HUNG, K.C., Dynamics of an oscillating bubble near a floating structure . . . . .	395

KOROBKIN, A.A. AND IAFRATI, A., Hydrodynamic loads during initial stage of floating body impact . . . . .	413
KLAMO, J.T., LEONARD, A. AND ROSHKO, A., On the maximum amplitude for a freely vibrating cylinder in cross-flow . . . . .	429
SARPKAYA, T., On the parameter $\beta=Re/KC=D^2/\nu T$ . . . . .	435

NUMBERS 5–7, DECEMBER 2005

Special Issue: In Honour of Professor Michael P. Paidoussis

AMABILI, M., DOWELL, E. AND EPUREANU, B.I., Preface . . . . .	441
AMABILI, M., GARZIERA, R. AND CARRA, S., The effect of rotary inertia of added masses on vibrations of empty and fluid-filled circular cylindrical shells . . . . .	449
FOLLEY, C.N. AND BAJAJ, A.K., Spatial nonlinear dynamics near principal parametric resonance for a fluid-conveying cantilever pipe . . . . .	459
LEE, Y.S., VAKAKIS, A.F., BERGMAN, L.A., MCFARLAND, D.M. AND KERSCHEN, G., Triggering mechanisms of limit cycle oscillations due to aeroelastic instability . . . . .	485
ATTAR, P.J. AND DOWELL, E.H., A reduced order system ID approach to the modelling of nonlinear structural behavior in aeroelasticity . . . . .	531
YIN, S.-H. AND EPUREANU, B.I., Enhanced nonlinear dynamics and monitoring bifurcation morphing for the identification of parameter variations . . . . .	543
HASSAN, M.A., WEAVER, D.S. AND DOKAINISH, M.A., A new tube/support impact model for heat exchanger tubes . . . . .	561
KARAGIOZIS, K.N., AMABILI, M., PAÏDOUSSIS, M.P. AND MISRA, A.K., Nonlinear vibrations of fluid-filled clamped circular cylindrical shells . . . . .	579
MATSUMOTO, M., MIZUNO, K., OKUBO, K. AND ITO, Y., Torsional flutter and branch characteristics for 2-D rectangular cylinders . . . . .	597
MODARRES-SADEGHI, Y., PAÏDOUSSIS, M.P. AND SEMLER, C., A nonlinear model for an extensible slender flexible cylinder subjected to axial flow . . . . .	609
MCDONALD, R.J. AND SRI NAMACHCHIVAYA, N., Pipes conveying pulsating fluid near a 0:1 resonance: Local bifurcations . . . . .	629
MCDONALD, R.J. AND SRI NAMACHCHIVAYA, N., Pipes conveying pulsating fluid near a 0 : 1 resonance: Global bifurcations . . . . .	665

ZIADA, S., JEBODHSINGH, D., WEAVER, D.S. AND EISINGER, F.L., The effect of fins on vortex shedding from a cylinder in cross-flow . . . . .	689
--	-----

NUMBER 8, DECEMBER 2005

HOO, E., DO, K.D. AND PAN, J., An investigation on the lift force of a wing pitching in dynamic stall for a comfort control vessel . . . . .	707
--	-----

BESSERT, N. AND FREDERICH, O., Nonlinear airship aeroelasticity . . . . .	731
---	-----

BELOIU, D.M., IBRAHIM, R.A. AND PETTIT, C.L., Influence of boundary conditions relaxation on panel flutter with compressive in-plane loads . . . . .	743
--	-----

LUONG, T., HOWE, M.S. AND MCGOWAN, R.S., On the Rayleigh conductivity of a bias-flow aperture . . . . .	769
---	-----