ΗΜΟΣΙΕΥΣΕΙΣ

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2010


A new class of exact solutions of the Navier–Stokes equations for swirling flows in porous and rotating pipes
Author(s): A. Fatsis, J. Statharas, A. Panoutsopoulou & N. Vlachakis
Abstract: WESSEX 2010

2009

Pre-stressed plate on elastic foundation under impact loading
Conference Information: 4th IASME/WSEAS International Conference on Continuum Mechanic (CM 09), FEB 24-26, 2009 Univ Cambridge, Cambridge, ENGLAND
2008

A PRACTICAL METHOD TO PREDICT PERFORMANCE CURVES OF CENTRIFUGAL WATER PUMPS
A Fatsis. A.Panoutsopoulou, V. Vlachakis, N. Vlachakis
2008 American Society of Agricultural and Biological Engineers
ISSN 0883-8542 Vol. 24(2) 153-157

LNG DISPERSION OVER THE SEA
Fatsis A, Statharas J, Panoutsopoulou A, Vlachakis N.
Conference Information: 16th International Conference on Modelling, Monitoring and Management of Air Pollution, SEP, 2008 Wessex Inst Technol, Skiathos, GREECE
AIR POLLUTION XVI
WIT TRANSACTIONS ON ECOLOGY AND THE ENVIRONMENT
Volume:116 Pages: 67-75 Published 2008

PERFORMANCE TESTING OF REFLECTIVE INSULATION APPLIED IN A PROTOTYPE EXPERIMENTAL CHAMBER IN GREECE : EXPERIMENTAL RESULTS FOR SUMMER AND WINTER PERIODS
Heat Transfer 2008
Advanced Computational Methods and Experimental Measurements in Heat Transfer
9-11 July 2008

2007

CREEP SAGGING ANALYSIS OF PRESSURE PIPES II: DAMAGE ACCUMULATION UNDER VARIABLE TEMPERATURE AND PRESSURE CONDITIONS.
D.G.Pavlou, N.V.Vlachakis, F.I.Mavrothanasis, S.Avlonitis, M.G.Pavlou and V.N.Vlachakis
Computational Materials Science, 11 January 2007

EXPERIMENTAL AND NUMERICAL INVESTIGATIONS IN THE NEAR-BURNER REGION OF A VERSATILE MULTI-FUEL BURNER

MATHEMATICAL FORMULATION OF 3D NON-REFLECTING BOUNDARY CONDITIONS FOR HYPERBOLIC EQUATIONS FOR INTERNAL FLOWS IN THERMAL ENGINES
Fatsis, A. (Dept. of Mech. Eng., TEI of Chalkis, Chalkis, Greece); Tsitouras, C.; Panoutsopoulou, A.; Vlachakis, N.
EVALUATION OF A NATURAL VENTILATION CONFIGURATION AT A PUBLIC BUILDING

EXPERIMENTAL SURVEY OF THE PRESSURE CONE AND TEMPERATURE FIELD OF AN A/T MISSILE SYSTEM
Krallis K, Orfanoudakis NG, Founti M.,Vlachakis N
Conference Information: 3rd International Conference on Computational Ballistics, JUN 06-08, 2007 New Forest, ENGLAND
Computational Ballistics III
WIT TRANSACTIONS ON MODELLING AND SIMULATION
Volume: 45 Pages: 141-150 Published: 2007

DESIGN, EVALUATION MEASUREMENTS AND MODELLING OF A SMALL SWIRL STABILISED LABORATORY BURNER.
N. G. Orfanoudakis, A. Hatziapostolou, K. Krallis & N. Vlachakis.
European Meeting of the Combustion Institute, Crete 2007.

2006

A 3D SIMULATION OF UNSTEADY FLOW INSIDE CENTRIFUGAL COMPRESSOR IMPELLERS.
A.Fatsis, A.Panoutsopoulou, N.Vlachakis, N.V. Vlachakis

EXACT SOLUTION OF THE NAVIER-STOKES EQUATIONS FOR THE PULSATING DEAN FLOW IN A CHANNEL WITH POROUS WALLS.
S. Tsangaris, D.Kondaxakis, N.W.Vlachakis

EXACT SOLUTION FOR THE PULSATING FINITE GAP DEAN FLOW.
Tsangaris, S.,Vlachakis N.W.

EXACT SOLUTION FOR FLOW IN A POROUS PIPE WITH UNSTEADY WALL SUCTION AND/OR INJECTION,
Tsangaris S., Kondaxakis D., Vlachakis N.W.
“Communications in Nonlinear Science and Numerical Simulations”, 24 February 2006

AN INDUSTRIAL METHOD FOR PERFORMANCE MAP EVALUATION FOR A WIDE RANGE OF CENTRIFUGAL PUMPS
Fatsis, A. (Dept. of Mech. Eng., Technol. Univ. of Chalkis, Greece); Vrachopoulos, M.G.; Mavrommatis, S.; Panoutsopoulou, A.; Vlachakis, N.; Vlachakis, V.
Advances in Fluid Mechanics VI, p 9 pp., 2006
AN EXACT SOLUTION OF THE NAVIER–STOKES EQUATION FOR SWIRL FLOW MODELS THROUGH POROUS PIPES
N. Vlachakis, A. Fatsis, A. Panoutsopoulou, E. Kioussis, M. Kouskouti & V. Vlachakis
ADVANCES IN FLUID MECHANICS VI – 2006

AN EXACT SOLUTION OF THE NAVIER-STOKES EQUATIONS FOR SWIRL FLOW MODELS THROUGH POROUS PIPES
Vlachakis, N. (Technological University of Chalkis, Department of Mechanical Engineering, Greece); Fatsis, A.; Panoutsopoulou, A.; Kioussis, E.; Kouskouti, M.; Vlachakis, V.
WIT Transactions on Engineering Sciences, v 52, p 583-591, 2006, Advances in Fluid Mechanics VI

A COMPUTATIONAL METHOD FOR PRESSURE WAVE MACHINERY TO INTERNAL COMBUSTION ENGINES AND GAS TURBINES
A. Fatsis, M. Gr. Vrachopoulos, S. Mavromatis, A. Panoutsopoulou & F. Layrenti
ADVANCES IN FLUID MECHANICS VI – 2006

2005

INTERNAL COMBUSTION ENGINE’S PRESSURE WAVE SUPERCHARGER UNSTEADY FLOW MODELLING
A. Fatsis, N G Orfanoudakis, D G Pavlou, A. Panoutsopoulou and N. Vlachakis
Proceedings of the Institution of Mechanical Engineers Part D, 2005

DESIGN AND EVALUATION MEASUREMENTS OF A SWIRL STABILISED LABORATORY BURNER
N G Orfanoudakis, A Hatziapostolou, K Krallis and N Vlachakis
Proceedings of the Institution of Mechanical Engineers Part C, 2005

CREEP SAGGING ANALYSIS OF PRESSURE PIPES
D.G. Pavlou, N.V. Vlachakis, Ch. Tsitouras, M.G. Pavlou and A. Fatsis
Computational Materials Science, 17 June 2005

AN ANALYTICAL SOLUTION OF THE ANNULAR PLATE ON ELASTIC FOUNDATION
Pavlou DG, Vlachakis NV, Pavlou MG
STRUCT ENG MECH 20 (2): 209-223 MAY 30 2005

"DESIGN, EVALUATION MEASUREMENTS AND MODELLING OF A SMALL SWIRL STABILISED LABORATORY BURNER".
N. G. Orfanoudakis, A. Hatziapostolou, K. Krallis, E. Mastorakos, K. Sardi, D. G. Pavlou, & N. Vlachakis,
IFRF web Journal, Article Number 200510, December 2005.
DEVELOPING EFFICIENT TOOLS TO EVALUATE INDOOR ENVIRONMENT ISSUES:
ONSITE MEASUREMENTS AND NUMERICAL SIMULATION OF INDOOR AIR FLOW IN A TEST ROOM
M. Gr. Vrachopoulos, M. K. Koukou, N. W. Vlachakis, N. G. Orfanoudakis,
G. Thanos, A. E. Filios, and J. Kaldelis
WSEAS TRANSACTIONS on ENVIRONMENT and DEVELOPMENT
Issue 2, Volume 1, November 2005 ISSN 1790-5079

“EXPERIMENTAL AND NUMERICAL INVESTIGATIONS IN THE NEAR BURNER REGION
OF A LABORATORY SCALE BURNER”.
N. G. Orfanoudakis, A. Hatziapostolou, K. Krallis, K. Sardi, A. Fatsis, N.
Vlachakis, St. A. Mavromatis,

“EMISSION REDUCTION TECHNIQUES AND ECONOMICS”.
N. G. Orfanoudakis, K. Krallis, A. Vakalis, A. Hatziapostolou and N. Vlachakis:

“EMISSION REDUCTION TECHNIQUES & ECONOMICS IN COAL FIRED POWER
PLANTS.”.
N. G. Orfanoudakis, A. Vakalis+, K. Krallis, A. Hatziapostolou, N. Vlachakis

RELIABLE PERFORMANCE MODELING OF PHOSPHORIC ACID FUEL CELLS FOR
POWER APPLICATIONS”.
1st International Conference on Experiments/Process/System
Modelling/Simulation/Optimization, July 6,2005 Greece, Athens

INVESTIGATION OF STABLE COMBUSTION IN A LABORATORY BURNER”.
Orfanoudakis N.g., Hatziapostolou A., Krallis K., Koukou M.K., Xenogiannis A.D., Sardi K., Vlachakis N., Vrachopoulos M.G., Chatzifotis D., Panagiotidis P.
1st International Conference on Experiments/Process/System
Modelling/Simulation/Optimization, July 6,2005 Greece, Athens

“INVESTIGATION OF SAFE COMBUSTION CONDITIONS IN A LABORATORY BURNER”,
N. G. Orfanoudakis, A. Hatziapostolou, K. Krallis, M.K. Koukou, A.D.
Xenogiannis, K. Sardi, N. Vlachakis, M.G. Vrachopoulos, D. Chatzifotis, P.
Panagiotidis
1st International Conference on Experiments/Process/System
Modelling/Simulation/Optimization,
1st IC-EpsMsO, Athens, 6-9 July, 2005.

STUDYING TRANSPORT PHENOMENA IN FUEL CELLS: EFFECT OF FLOW PATTERN ON THE PERFORMANCE OF PHOSPHORIC ACID FUEL CELLS.
P. Zervas, M. Koukou, N. Vlachakis, N.-C. Markatos.
IASME TRANSACTIONS, Issue 3, Volume 2, May 2005
2004

**PC BASED SCADA SYSTEM AND ADDITIONAL SAFETY MEASURES FOR SMALL DESALINATION PLANTS**
Avlonitis SA, Pappas M, Moutesidis K, Avlonitis D, Kouroumbas K, Vlachakis N
DESALINATION 165, 15 August 2004

**ESTIMATION OF FATIGUE CRACK GROWTH RETARDATION DUE TO CRACK BRANCHING**
Pavlou DG, Vlachakis NV, Pavlou MG, Vlachakis VN
COMP MATER SCI 29 (4): 446-452 APR 2004

**“EMISSION REDUCTION TECHNIQUES AND ECONOMICS IN COAL-FIRED POWER PLANTS”**.
N. G. Orfanoudakis, A. Vakalis, K. Krallis, A. Hatziapostolou, and N. Vlachakis:

**“EMISSION REDUCTION TECHNIQUES AND ECONOMICS, PART 1: NOX”**,  
N. G. Orfanoudakis, A. Vakalis, K. Krallis, A. Hatziapostolou & N. Vlachakis,  
Air Pollution 2004, pp. 791-800.

2003

**EXACT SOLUTION OF THE NAVIER-STOKES EQUATIONS FOR THE OSCILLATING FLOW IN A DUCT OF A CROSS-SECTION OF RIGHT-ANGLED ISOSCELES TRIANGLE.**
Tsangaris S, Vlachakis NW

**AIR QUALITY IN AN UNDERGROUND GARAGE: COMPUTATIONAL AND EXPERIMENTAL INVESTIGATION OF VENTILATION EFFECTIVENESS**
K. Papakostantinou, A. Chaloulakou, A. Duci, N. Vlachakis, N. Markatos

**ENERGY CONSUMPTION AND MEMBRANE REPLACEMENT COST FOR SEA WATER RO DESALINATION PLANTS**
Avlonitis SA, Kouroumbas K, Vlachakis N
DESALINATION 157 (1-3): 151-158 Sp. Iss. SI AUG 1 2003
FATIGUE CRACK PROPAGATION TRAJECTORIES UNDER MIXED-MODE CYCLIC LOADING
Pavlou DG, Labeas GN, Vlachakis NV, Pavlou FG
ENG STRUCT 25 (7): 869-875 JUN 2003

EXACT SOLUTION OF THE NAVIER-STOKES EQUATIONS FOR THE FULLY DEVELOPED, PULSATING FLOW IN A RECTANGULAR DUCT WITH A CONSTANT CROSS-SECTIONAL VELOCITY
Tsangaris S, Vlachakis NW

WATER RESOURCES MANAGEMENT FOR THE PREFECTURE OF DODEKANISA OF GREECE
Avlonitis SA, Poulios I, Vlachakis N, Tsimidilis S, Kouroumbas K, Avlonitis D, Pavlou M
DESALINATION 152 (1-3): 41-50 FEB 10 2003

“EXPERIMENTAL AND NUMERICAL INVESTIGATIONS IN THE NEAR BURNER REGION OF A VERSATILE MULTI FUEL BURNER”.
N. G. Orfanoudakis, A. Hatziapostolou, E. Mastorakos, K. Krallis, K. Sardi and N. Vlachakis
International Multiphase Conference in Santa-Fe, New Mexico, USA, November 2003.

“EVALUATION OF BOILER ROOM LOSSES THROUGH CONVENTIONAL AND INFRARED CAMERA METHODS”,
K. Krallis, N. Orfanoudakis, M. Founti, G. Zannis, N. Vlachakis:
3rd Combustion Institute meeting, November 2003, in Patras Greece.

“VELOCITY / TEMPERATURE MEASUREMENTS IN A SWIRL STABILISED LABORATORY BURNER”
N. Orfanoudakis, A. Hatziapostolou, E. Mastorakos, K. Sardi, K. Krallis & N. Vlachakis
Combustion Institute meeting, November 2003, in Orleane France.

“EMISSION REDUCTION TECHNIQUES & ECONOMICS; THE IPPC EC DIRECTIVE”,
N. Orfanoudakis, K. Krallis, A. Vakalis, A. Hatziapostolou, N. Vlachakis:
"Air Pollution 2003, Catania", September 2003 Italy.

DESIGN, EVALUATION MEASUREMENTS AND CFD MODELING OF A SMALL SWIRL STABILISED LABORATORY BURNER,
N. Orfanoudakis, A. Hatziapostolou, E. astorakos, E. Sardi, N. Vlachakis, S. Mavromatis,

AN EXACT SOLUTION OF NAVIER-STOKES FOR THE FLOW THROUGH A DIVERGING ARTERY,
D.Pavlou, N. Vlachakis, M. Pavlou, V. Vlachakis, M. Kouskouti,
International Conference of Biomedicine 2003 in Slovenia
FUNDAMENTAL SOLUTION OF THE CRACKED DISSIMILAR ELASTIC SPACE, 
D.Pavlou, N. Vlachakis, M. Pavlou, V. Vlachakis, M. Kouskouti, I. Statharas, 
International Conference of Computational Methods in Sciences and Engineering 

Εργαστήριο Υδραυλικών Στροβηλομηχανών - Υδροδυναμικές Μηχανές I , ΕΚΔΟΣΕΙΣ 
PΑΤΑΚΗ, 
Βλαχάκης Ν.Β. και Μπαλντούκας Α.Κ. (2003)

2002

AN EXACT SOLUTION OF A 3D SPIRAL FLOW MODEL FOR A VISCOUS FLUID IN 
A STATIONARY POROUS PIPE WITH APPLICATION TO BLOOD VESSELS, 
Vlachakis, N.W., Baldoukas, A.K. 
3rd WSEAS International Conference on Differential Equations-Theory and Applications 
in Wolin-Island Poland (2002)

FORCE AND TORQUE MEASURING DEVICES FOR DRILLING AND MILLING 
SIMULATION, 
Baldoukas, A.K, Demosthenous G.A., Sofianos, D, Vlachakis, N.W., Kodourgiotis, K. 
WSEAS International Conference on Simulation and Modelling in Skiathos-Greece (2002).

NUMERICAL SIMULATION OF SUBSONIC WIND TUNNELS : A PRELIMINARY 
APPROACH, 
Filos, A.E., Margaris D.P., Bouras, A.G., Koukou, M.K., Vlachakis, N.W. 
4th Congress on Computational Mechanics in Patras, Greece, GRACM (2002)

ON THE CENTRIFUGAL PUMPS PERFORMANCE CURVES ESTIMATION USING 
EMPIRICAL EQUATIONS ”, 
Vlachakis, N.W. and Baldoukas, A.K., 
WSEAS 4th Mechanical Engineering Multiconference,, Cancun, Mexico (2002)

1999

"INVESTIGATION OF THE PRESSURE CONE AND TEMPERATURE FIELD OF THE 
FAGOT AT MISSILE SYSTEM". 
K. Krallis, N.G. Orfanoudakis, M. Founti, N. Vlachakis and G. Seirlis 
3rd Meeting of the Greek Section of the Combustion Institute. FORTH - CPERI, Thermi, 
1994

“BLOOD MEDIA OF COMPLEX STRUCTURES WITH COMRESSIBLE AND INCOMPRESSIBLE COMPONENTS AND THEIR FLOW MECHANISMS IN CONTINUOUS AND DISCONTINUOUS ARTERIAL CROSS-SECTIONS”
Vlachakis NW, Kioussis EK
Z ANGEW MATH MECH 74 (9): 429-432 1994

1992

"FLOW OF BUBBLES THROUGH ARTERIAL NOZZLES ANALYSIS OF DYNAMICS AND CONVECTIVE FLOW OF GAS BUBBLES IN BLOOD THROUGH ARTERIES OF CHANGING RADIUS“, Vlachakis,N.W. und Kioussis, E.K.,

1990

2-PHASE CHARACTER OF 2-DIMENSIONAL BLOOD-FLOW OF LIQUID-CRYSTAL METHOD WITH INTERNAL-ROTATION PROPERTIES
Vlachakis NW, Kioussis EK
Z ANGEW MATH MECH 70 (8): 340-351 1990

1989

“TWO DIMENSIONAL, TWO PHASE MICROPOLAR BLOOD FLOW“
Vlachakis,N.W. and Kioussis, E.K.,

Χαρακτήρες Εφαρμοσμένης Ρεολογίας , ΕΚΔΟΣΕΙΣ ΣΤΑΥΡΙΑΝΑΚΟΣ. Βλαχάκης Ν.Β. και Κιουσσής Ε.Κ. (1988)

1986

“MICROPOLAR FLUIDS. MODERN RHEOLOGICAL CONSIDERATIONS FROM A COSSERAT MECHANICS POINT OF VIEW “.
Vlachakis,N.W.