PHOENICS Publications 2020-2001

2021

Giorgio Besagni, Nicolo Cristiani, Lorenzo Croci, Gael Raymond Guedon, Fabio Inzoli

Vitor Goncalves, Yewande Ogunjimi & Yeonsook Heo

Xiaodong Liu, Li Yang, Shengnan Niu

Saso Medved, Suzana Domjan, Ciril Arkar
Contribution of energy storage to the transition from net zero to zero energy buildings (2021) Elsevier: Energy and Buildings 236 – 110751

Wei Wu, Hiroyoshi Sota, Toshiki Hirogaki, Eiichi Aoyama

Zouhair Hafsia, Saliha Nouri, Salah Mahmoud Boulaaras, Ali Allahem, Salem Alkhalf & Aldo Munoz Vazquez

G.V Messa, M.R.Malin, V.Matousek

2020

Zhenglong Fang & Toshiyuki Obikawa

Andrei V. Tchouvelev, William J. Buttner, Daniele Melideo, Daniele Baraldi, Benjamin Anger
Salah El Din El-Morshedy, Adel Alyan, Abdelfatah Abdelmaksoud
Numerical study of the closure flow within the chimney of a typical MTR reactor.

P. Eslami-Nejad, A. Nguyen, M. Cimmino, A. Bastini, M. Badache
Performance comparison of a vertical direct expansion geothermal evaporator: PART 1, single U-pipe using different refrigerants

P. Eslami-Nejad, M. Cimmino, A. Nguyen, M. Badache, A. Bastani
Performance comparison of a vertical direct expansion geothermal evaporator: PART 11, multiple U-pipes.

Shanbi Peng, Qikun Chen, Enbin Liu.
The role of computational fluid dynamics tools on investigation of pathogen transmission: Prevention and control.

N.R.M Sakiyama, J.C Carlo, J. Frick, H Garrecht
Perspectives of naturally ventilated buildings: A review.
(2020) Elsevier: Renewable and Sustainable Energy Reviews 130 – 109933

K Hata & Q.S Liu
Conductive and viscous sub-layers on forced convection and mechanism of critical heat flux during flow boiling of subcooled water in a platinum circular tube 3mm inner diameter and 32.7 mm heated length at high liquid Reynolds number.

Wenjun Liu, Paul G. Chen, Jalil Quazzani, Qiusheng Liu.
Thermocapillary flow transition in an evaporating liquid layer in a heated cylindrical cell

Fueyo, N. & Malin, M.R.
Brian Spalding and turbulent combustion.

Malin, M.R.
Brian Spalding : Some contributions to computational fluid dynamics during the period 1993 to 2004

Messa, G.V & Matousek, V
Analysis and Discussion of two fluid modelling of pipe flow of fully suspended slurry.

Vladimir, A Perminov, V
Mathematical modelling of wildland fire initiation and spread
(2020) Environmental Modelling and Software 125, 104640.

Chi-Ming Chu, Christopher
Lazy Plume Stack Effect Above Chimneys
Faculty of Engineering, University Malaysia Sabah
2020 www.researchgate.net/publication/344296770

Dario Fumagalli
Numerical Investigation of Turbulent Flow in Pipe Bends (Master of Science Thesis)
(2020) Politecnico di Milano – Dipartimento di Ingegneria Civile & Ambientale

2019

A Novel Multiphase Methodology Simulating Three Phase Flows in a Steel Ladle.

Adair, D., Mukhambetlyar, A., Jaeger, M., Malin, M.R.
The influence of finite rupture times on flow dynamics within micro-shock tubes


Turkcan, OFSF
Computational Method for Early-Stage Design Optimization of Naturally Ventilated Terminals
(2019) MSc. Thesis Delft University of Technology

Domjan, S Arkar, C Begelj, Z Medved, S
Evolution of all-glass nearly Zero Energy Buildings with respect to the local climate and free-cooling techniques

Medved, S Begelj, Z Domjan, S Suklje, T Cerne, B Arkar, C
The dynamic thermal response model and energy performance of multi-layer glass and BIPV facade structures.

Zhao, Y & Zhao, B
Investigations for Reducing Personal Exposure to PM(2.5) from Residential Chinese Cooking Based on CFD Simulation.

Messa, G.V. Malavasi, S. Zhang, J. Shirazi, S.A.
Numerical Prediction of the Impact Erosion Produced by Dense Slurry Jets
(2019) 19th International Conference on Transport and sedimentation of Solid Particles 24-27 September, Cape Town, South Africa

2018

Messa, G.V., De Lima Branco R, Gilberto Dalfre Filho J, Malavasi, S.
A combined CFD-experimental method for abrasive erosion testing of concrete.

Burman, J., Jonsson, L. Rutgersson, A.
On possibilities to estimate local concentration variations with CFD-LES in real urban environments
Messa GV, De Lima Branco R, Dalfre Filho J.G, Malavasi, S.  
A combined CFD-experimental method for abrasive erosion testing of concrete  

Numerical study of the drift and evaporation of water droplets cooled down by a forced stream of air  

Adair, D., Mukhambetiyar, A, Jaeger, M., Malin, M.R.  
The influence of finite diaphragm rupture times on flow dynamics within micro-shock tubes  
(2018) 12th Int. Conf. in Advances on Fluid Mechanics, Ljubljana, Slovenia.

Hongqiao, Qin Bo, Hong & Runsheng, Jiang  
Are Green Walls Better Options than Green Roofs for Mitigation PM Pollution? CFD Simulations in Urban Street Canyons  
(2018) Sustainability 10,2833; doi:10.3390/su10082833

Milanovic,SM Jovanovic, MM Spasic,ZT & Nikolic,BD  
Two-Phase Flow in Channels with Non-Circular Cross-Section of Pneumatic Transport of Power Material  

2017

E.Martinez-Espinosa, W.Vicente, M.Salinas-Vazquez  
Numerical Analysis for Saving Fin Material in Helical Segmented-Tubes  

Messa G.V., Malavasi S.  
A CFD-based method for slurry erosion prediction  

Mukhambetiyar A, Jaeger M and Adair D  
CFD Modelling of Flow Characteristics in Micro Shock Tubes  

Budiyanto, M.A Shinoda, T Nasruddin  
Study on the CFD simulation of refrigerated container.  

De Marchi Neto, I Altemani, CAC  
A matrix to evaluate the conjugate cooling of a heaters’ array.  

Michael P Kinzel, Jules W. Lindau & Robert F Kunz  
A Unified Homogenous Multiphase CFD Model for Cavitation  
2017 Proceedings of ASME 2017 Fluids Engineering division Summer Meeting-July 30-August 03, Waikoloa Hawaii, USA

2016

Spalding, D Brian
The Discretised Population Model of Turbulence  
Palermo University, Italy, September

Spalding, Brian  
The Shape of CFDs to Come  
(2016) OpenFoam 4th Annual User Conference, Cologne, Germany, October

Messa G.V, Malavasi S,  
A numerical strategy to account for the effect of self-induced geometry changes in wear estimation  

Agranat V, Perminov V  
Multiphase CFD Model of Wildland Fire Initiation and Spread  
(2016) Proceedings for the 5th International Fire Behaviour and Fuels Conference, April 11-15 2016, Portland, Oregon, USA

Peng, L Nielsen PV Wang, X Sadrlzadeh, S Liu, L Li, Y  
Possible user-dependent CFD predictions of transitional flow in building ventilation.  
(2016) Elsevier Building and Environment

Milanovic,SM Jovanovic,MM Nikolic,BD & Blagojevic, VA  
The Influence of Secondary Flow in a Two-Phase Gas-Solid System in Straight Channels with a Non-Circular Cross-Section  
(2016) Thermal Science Vol.20, Suppl.5 pp S1419-S1434

N.Simisiroglou, M Karatsioris, K Nilsson, S.P.Breton, S. Ivanell  
The actuator disc concept in PHOENICS  

2015

E. Martinez, W.Vicente, M.Salinas-Vazquez, I.Carvajal, M.Alvarez  

M Zhunussova, M Jaeger & Sesmond Adair  
Environmental Impact of Developing Large Buildings close to Residential Environments  
(2015) International Conference on Sustainable Mobility Applications, Renewables & Technology (SMART)

Spalding, D Brian  
CHT/CFD for Heat Exchanger Design: Some Recent Developments  
(2015) CHT-15, Rutgers University, New Jersey, May

Spalding, D Brian  
A Turbulence Model for the Fully-Stirred Reactor  
Sugawara, M., Komatsu, Y., Beer, H.  
Melting of ice stuck on cylinders placed horizontally in a water flowing duct  

Jia, J.-F., He, W.  
Effect of ventilation tube diameter on thermal performance of food refrigerated warehouse floor antifreezing mechanical ventilation system  

Estimating steady state and transient characteristics of molten salt natural circulation loop using CFD  

Hata, K., Takeuchi, Y., Hama, K., Shiotsu, M.  
Natural convection heat transfer from horizontal rod bundles in liquid sodium. Part 2: Correlations for horizontal rod bundles based on theoretical results  

Zulfikar A. Adamu & Andrew Price  
The Design and simulation of natural personalised ventilation (NPV) system for multi-bed hospital wards  

Vladimir Agranat, Michael R Malin, Igor Pioro & Rand Abdullah  
CFD modelling of supercritical water heat transfer in a vertical bare tube upward flow  

New method for predicting the incipient cavitation index by means of single-phase computational fluid dynamics models  
(2015) Research Article: Advances in Mechanical Engineering

Elina S, Perminov V, Reyno V,  
Simulation of impact assessment of crown forest fires on boundary layer of atmosphere using software PHOENICS  

Artemov, VI Minko, KB Yan’kov GG  
Numerical simulation of fluid flow in an annular channel with outer transversally corrugated wall.  

Damiani Rocha,A Bannwart,AC Ganzarolli,MM  
Numerical and experimental study of an axially induced swirling pipe flow.  

2014

Mullen, D. T., Keane, M. M., Geron, M., & Monaghan, R. F. D.  
Automatic extraction of Reduced order models from CFD simulations for building energy modelling.  

Spalding, D Brian  
Four Decades of Design of Heat Transfer Equipment by CFD  
(2014) Institute of Mechanical Engineerings Conference, 14 December
Zhang, Y.-H., Zhao, Q., Huang, Z.-A., Zhang, Y.-F., Tian, Y., Gao, Y.-K.  
Numerical simulating research on changing law of humidity in refuge chamber  

Doulati Ardejani, F., Jannesar Malakooti, S., Ziaedin Shafaei, S., Shahhosseini, M.  
A numerical multi-component reactive model for pyrite oxidation and pollutant transportation in a pyritic, carbonate-rich coal waste pile in northern Iran.  

Vittorio Messa, G., Malavasi, S.  
Computational investigation of liquid-solid slurry flow through an expansion in a rectangular duct  

Shabani, K.S., Ardejani, F.D., Gharaei, A.A., Badii, K.  
Modeling of ions biological adsorption by phanerochaete Chrysosporium fungus from acid mine drainage  

Ibraimo, M., Annegarn, H.J., Pemberton-Pigott, C.  
Modelling of bottom-lit down-draft (BLDD) clean-burning coal stove  

Agranat, V.M., Zhubrin, S.V., Pioro, I.  
MULTI-group two-phase flow model of drift drop plume  

Zhou, X.P., Yan, C.W., Li, W.  
Numerical research on indoor wind environment of green building  

Miao, Y., Chiou, S.-C.  
Numerical simulation and design strategy for wind environments: A case study of the typical Southern Fujian village  

Han, Y., Chai, B.-H., Zhou, W., Wei, G.-R., Bi, K.-M., Long, Y.-Y., Feng, B.  
Numerical simulation of potassium heat pipe based on porous medium model  

Hara, H., Hashimoto, M., Yamashita, H.  
Preoperative planning of upper airway surgery with DICOM viewer  

Jimenez, B., Rimpl, D., Moennich, K.  
Validation and comparison of wind resource models in highly complex terrain  

Messa GV, Malin MR, Malavasi S  
Numerical prediction of fully-suspended slurry flow in horizontal pipes  
(2014) Elsevier

Maragkogiannis, K Kolokotsa D Maraavelakis E, Konstantaras, A  
Combining terrestrial laser scanning and computational fluid dynamics for the study of the urban thermal environment.
Zamora, B Kaiser, AS
3d effects in numerical simulations of convective flows in cubical open cavities.

Zamora, B
Comparative evaluation of the performance of sinuous symmetrically-heated natural convection channels.
(2014) International Communications in Heat and mass Transfer 55, pp15-21

Edwin,L Chisale,P Yamba,F & Malin,M.R
A parametric analysis of conversion efficiency of earthen charcoal making kiln using a numerical method.

Wenjing,Ji Bin, Zhao
Numerical Study of the Trees on Outdoor Particle Concentration Distributions

Gianandrea V Messa & Stefano Malavasi
Numerical prediction of dispersed turbulent liquid-solid flows in vertical pipes.

Q.Xue & R.O Fox
Multi-fluid CFD modelling of biomass gasification in polydisperse fluidized-beb gasifiers.

2013

Castellani, F. & A.Vignaroli
An application of the actuator disc model for wind turbine wakes calculations.

Spalding, D Brian
Benjamin Franklin and Computational Fluid Dynamics: The Population Approach to Turbulence.

Spalding, D Brian
The Cyclic Pattern of Engineering Progress, with Lessons for Today.(2013) ASME SummerConference, Minneapolis, July (Sessions in Honour of Professor Spalding’s 90th)

Spalding, D Brian
Trends, Tricks and Try-ons in CFD/CHT.

Jia, J.-F., He, W.
Effect of thickness of heat insulating material in bulkhead on cabin temperature of reefer ship for agricultural products

Wu, J., Wang, X., Ma, Z.
A comparative study of N2 and SF6 arcing process for 252kV puffer circuit breaker based on a novel simulation model
(2013) IEEE Region 10 Annual International Conference, Proceedings/TENCON, art. no. 6718943, .
Naphade, P., Borgohain, A., Raj, R.T.K., Maheshwari, N.K.
Experimental and CFD study on natural circulation phenomenon in lead bismuth eutectic loop

Sinha, A.K., Piccone, T.J., Miller, P.D.
Mathematical modeling of draining of dual-strand caster tundish with unequal throughputs at united states steel corporation
(2013) *ASME 2013 Heat Transfer Summer Conf. Collocated with the ASME 2013 7th Int. Conf. on Energy Sustainability and the ASME 2013 11th Int. Conf. on Fuel Cell Science, Engineering and Technology*, HT 2013, 3, art. no. V003T21A007,

Liu, J., Pei, Q.-Q.
Numerical simulation and experiment study of indoors thermal environment in summer air-conditioned room

Dong, W.-L., Liang, D.
Simulation of the atrium fire smoke flow and research about control studies

Miao, Y., Chiou, S.-C.
Study on the wind environment of the architecture communities: Traditional typical min nan human settlements' case
(2013) *Mathematical Problems in Engineering*, 2013, art. no. 467076,

He, W., Jia, J.-F.
Effect of ventilation tube spacing on refrigerated warehouse floor antifreezing mechanical ventilation system

Basok, B.I., Belyaeva, T.G., Kuzhel', L.N., Khibina, M.A.
Simulation of the Heat Accumulation and Extraction Processes in the Heat Exchanger-Ground System

A simple three-dimensional terrain modeling method for complex terrain wind environment simulation

Li, Y.J., Yang, Y.A.
Influence of Workstation screen for indoor mechanical ventilation

Inter-comparison and validation of computational fluid dynamics codes in two-stage meandering channel flows

Basok, B.I., Belyaeva, T.G., Kuzhel, L.N., Khibina, M.A.
Simulation of the heat accumulation and extraction processes in the heat exchanger-ground system

Dong, J.N., Su, X., Chen, T., Wang, M., Li, X.X.
Numerical optimization of oilfield heating furnace research

Zhou, C.H., Zeng, Y.M.
Optimization research on ventilation modes of anatomy laboratory
Hata, K., Shirai, Y., Masuzaki, S., Hamura, A.  
Computational study of twisted-tape-induced swirl flow heat transfer and pressure drop in a vertical circular tube under velocities controlled  

Chiang, W.H., Hsu, H.H., Huang, J.S.  
Facade design effect on cross-ventilation in Taiwanese school buildings  

Maher, D., Ghazi, B., Jamel, C.  
A two time scales turbulence model of turbulent bubbly flows  

Plasmans, J., Donnat, L., de Carvalho, E., Debelle, T., Marechal, B., Baillou, F.  
Challenges with the use of CFD for major accident dispersion modeling  

Wang, J.-J., Gao, Y.-K., Tong, X.-L., Liu, P.-P.  
Temperature changing regulation in coalmine refuge chamber  

Agah, A., Doulati Ardejani, F., Ghoreishi, H.  
Two-dimensional numerical finite volume modeling of processes controlling distribution and natural attenuation of BTX in the saturated zone of a simulated semi-confined aquifer  

Tang, H., Mao, Y., Ma, L., Guo, Z.  
CFD model development for gaseous reduction of iron ore fines using multilayer moving-fluidized bed  

Lin, C.-S., Yu, C.-C., Te-Chi, C., Wang, S.-C., Chian-Yu, P.  
Safety verification of mechanical properties of reinforced concrete beam in the fire by applying CFD  

Lin, C.-S., Chen, T.-C., Yu, C.-C., Wang, S.-C.  
Simulation and analysis on mechanical strength of reinforced concrete beam undergoing a fire  

Tang, H.-Q., Zhao, Z.-L., Guo, Z.-C.  
Numerical simulation of iron ore fines reduction using COREX gas in Z-path moving-fluidized bed  

Yu, C.-C., Wang, S.-C., Lin, C.-S., Chen, T.C.  
CFD application for performance based safety verification of reinforced concrete beam in computer simulation building fire  

Sengupta, S., Vijayan, P.K., Sasidharan, K., Raina, V.K.  
A numerical study of flow and mixing characteristics inside the chimney structure of a pool type research reactor  

Castellani, F., Vignaroli, A.  
An application of the actuator disc model for wind turbine wakes calculations  
Gómez, E.R., Zenit, R., Rivera, C.G., Trápaga, G., Ramírez-Argáez, M.A.
Mathematical modeling of fluid flow in a water physical model of an aluminum degassing ladle equipped with an impeller-injector

Malateaux, E.C., Milanez, L.F.
Numerical analysis of the thermal dissipation in horizontal isothermal eccentrically insulated cylinders by free convection

2012

Spalding, D Brian
A Role for Computational Heat Transfer in Engineering Education.

Spalding, D Brian
Teaching Heat Transfer and Fluid Flow by Means of Computational Fluid Dynamics (CFD)

Sinnasamy, Y., Arbiahyahaya, N., Basri, S., Jafar, A.A., Rafie, A.S.M.
Assessment on effects of under-relaxation factors on 2d incompressible laminar flow over a backward-facing step (BFS)

Ramos-Gómez, E., González-Rivera, C., Ramírez-Argáez, M.A.
Mathematical modeling of fluid flow in aluminum ladles for degasification with impeller - Injector

Dogan, A., Akkus, S., Baskaya, Ş.
Numerical analysis of natural convection heat transfer from annular fins on a horizontal cylinder

Sinnasamy, Y., Yahaya, N.A., Jaafar, A.A., Rafie, A.S.M.
Study on formation of main recirculation region over a backward-facing step flow at moderate range of Reynolds numbers

Ultimate strength analysis for a concrete beam after a sustained building fire

Kotcioglu, I., Nasiri Khallaji, M., Uğurlu, A.
Numerical analysis in a rectangular duct heat exchanger with heat sink plate-fins using CFD

Bo-Ot, L.M., Wang, Y.-H., Chiang, C-M., Lai, C.-M.
Effects of a green space layout on the outdoor thermal environment at the neighborhood level

Uzuegbunam, F.O., Chukwuani, C.B., Mba, H.C.
Evaluation of the effectiveness of design strategies for passive ventilation in hot-humid tropical environment: A case study of the design strategies used in student hostels of university of Nigeria, enugu campus
Ghozlani, B., Hafsia, Z., Maalel, K.
Numerical study of flow around an oscillating diamond prism and circular cylinder at low Keulegan-Carpenter number

Tang, H.-Q., Mao, Y., Guo, Z.-C., Ye, S.-F.
Simulation on reformed COG reduction of iron ore fines in Z-path moving-fluidized bed

Doulati Ardejani, F., Badii, K., Farhadi, F., Aziz Saberi, M., Jodeiri Shokri, B.
A Computational Fluid Dynamic Model for Prediction of Organic Dyes Adsorption from Aqueous Solutions

Tang, H., Guo, Z., Kitagawa, K.
Simulation study on performance of Z-path moving-fluidized bed for gaseous reduction of iron ore fines

Hata, K., Shirai, Y., Masuzaki, S., Hamura, A.
Computational study of turbulent heat transfer for heating of water in a short vertical tube under velocities controlled

Zamora, B., Kaiser, A.S.
Numerical simulation of turbulent air flow with dispersed droplets in cooling tower eliminators [Simulación numérica del flujo turbulento de aire con gotas dispersas de agua a través de separadores de torres de refrigeración]

Stephens, D., Tabib, M., Schwarz, M.P., Davis, M.
CFD simulation of bath dynamics in the HIs melt smelt reduction vessel for iron production

Ramechecandane, S., Gravdahl, A.
Numerical investigations on wind flow over complex terrain

Alamgholiou, A., Esmailzadeh, E.
Numerical investigation on effects of secondary flow into duct for cooling of the ribs by passive enhancement method

Crowther, J.M., Dandy, G.C.
Model comparisons for tracer experiments at a clear water storage tank

Mishra, S.K., Jha, P.K., Sharma, S.C., Ajmani, S.K.
Effect of blockage of outlet nozzle on fluid flow and heat transfer in continuously cast multistrand billet caster tundish

Kumar, V., Wee, A.P., Birla, S., Subbiah, J., Thippareddi, H.
A 3-D computational fluid dynamics model for forced air cooling of eggs placed in trays

Qin, C., Zhao, L.
The energy saving effect of natural ventilation for residential building in Guangzhou
Zhou, C., Xue, N.
The study of vent form of double-skin facade based on CFD

Wang, F Manzanares-Bennett, A Tucker, J Roaf, S Heath, N
A feasibility study on solar-wall systems for domestic heating: An affordable solution for fuel poverty.

2011
Spalding, D Brian
Numerical Simulation of Heat Exchangers: A Review.
Spalding, D Brian
2500 Years of Swirling-Flow Science in 25 Minutes.
(2011) Moscow, October
Spalding, D Brian
Mapping Turbulence and Combustion: Pop7ulation CFD, Keynote Lecture

Smida, K., Lamloumi, H., Hafsia, Z., Maalel, K.
CFD analysis of water solitary wave reflection

Oliveira, M., Labaki, L., Vatavuk, P.
Design alterations in urban self-built houses in Campinas, Brazil: Analysis of their effects on ventilation through CFD

Kozarev, N., Ilieva, N.
Gas pollutant dispersion in the atmosphere at particular meteorological conditions

Seifpanahi Shabani, K., Doulati Aredejani, F., Singh, R.N., Marandi, R., Soleimanyfar, H.
Numerical modeling of Cu 2+ and Mn 2+ ions biosorption by aspergillus niger fungal biomass in a continuous reactor

Wu, J., Wang, X., Ma, Z., Rong, M., Yan, J.
Numerical simulation of gas flow during arcing process for 252 kv puffer circuit breakers

Kozarev, N., Ilieva, N.
Plume rise in particular meteorological conditions

Chakrabarty, A., Edel, M., Raibagkar, A., Aloqaily, A.
Thermal hazard evaluation for process buildings using CFD analysis techniques

Januzeviciene, I., Venckus, Z.
The numerical modeling of nitrogen oxides and coal monoxide in the atmosphere, when applying phoenics programme.
Panagopoulos, I.K., Karayannis, A.N., Kassomenos, P., Aravossis, K.
A CFD simulation study of VOC and formaldehyde indoor air pollution dispersion in an apartment as part of an indoor pollution management plan

Ma, L., Zou, H., Zhu, J.
Study on prediction and assessment methods of outdoor wind environment of residential district - Taking "letian home" in Leshan, Sichuan for example

Sapra, M.K., Bajaj, M., Kundu, S.N., Sharma, B.S.V.G.
Experimental and CFD investigation of 100 mm size cone flow elements

Mishra, S.K., Jha, P.K., Sharma, S.C., Ajmani, S.K.
Numerical investigation of the effect of transitory strand opening on mixing in a multistrand tundish

Basok, B.I., Rezakova, T.A.
Propagation dynamics of a liquid injected into an aquifer

López-González, J., Silva-Casarín, R., Mendoza-Baldwin, E.G.
The use of energy from currents with an impulse hydro-generator [Aprovechamiento de la energía de las corrientes con el hidrogenerador impulsan]

Jia, J., He, W.
Simulation study on heat insulating material used in refrigerated cargo hold shipboard of fishing vessel

Xie, D., Zhang, W.-L.
The effect of natural wind to the atrium building smoke migration

Zhao, H., Wang, X., Ma, Z., Rong, M., Li, Y.
Simulation of breaking characteristics of a 550 kV single-break tank circuit breaker

Lorenz, M., Biollay, H.
Backlayering stratification parameters

Kwan, S., Vasquez, J.A., Millar, R.G., Steffler, P.M.
A fast method for 3D CFD modeling of a long river reach

Sharan, G., Clus, O., Singh, S., Muselli, M., Beysens, D.
A very large dew and rain ridge collector in the Kutch area (Gujarat, India)
Çalişkan, S., Altunok, T., Başkaya, S., Güngüneş, H.M.  
Numerical analysis of a commercial display cabinet with air curtain  

Zhang, R., Cai, Z., Pan, J.  
Numerical simulation of the molten pool character in high power fiber laser welding  

Mohamed, A.M.I., Hoettiba, R., Saif, A.M.  
The effect of the corrugation rib angle of attack on the fluid flow and heat transfer characteristics inside corrugated ribbed passage  

Kumar, M., Borghain, A., Maheshwari, N.K., Vijayan, P.K.  
Simulation of natural circulation in a rectangular loop using CFD code PHOENICS  

Nguyen, A.T., Reiter, S.  
The effect of ceiling configurations on indoor air motion and ventilation flow rates  

Chiang, W.-H., Hsu, H.-H., Huang, J.-S.  
Fenestration effects on cross ventilation for a typical Taiwanese school building when applying wind profile  

Bioclimatic design of open public spaces in the historic centre of Tirana, Albania  

Hourri, A., Angers, B., Bénard, P., Tchouvelev, A., Agranat, V.  
Numerical investigation of the flammable extent of semi-confined hydrogen and methane jets  

Stevanović, Z.Z., Živković, M., Mirkov, N.  
CFD modelling of fire protection system in office building  

Streckiene, G., Martinaitis, V., Vaitiekunas, P.  
Simulation of thermal stratification in the heat storage for CHP plant  

Yan, Jconst., Pei, Y., Fang, M.T.C.  
The development of an object based simulation tool for switching arcs  

Zhang, R.-H., Pan, J.-L., Katayama, S.  
The mechanism of penetration increase in A-TIG welding  

Chakrabarty, A., Edel, M., Raibagkar, A., Aloqaily, A.  
Thermal hazard evaluation for process buildings using CFD analysis techniques  
Chakrabarty, A., Aloqaily, A.
Using CFD to assist facilities comply with thermal hazard regulations such as new API RP-752 recommendations (2011) *Institution of Chemical Engineers Symposium Series*, (156), pp. 205-212.

2010

Spalding, D Brian
PTAs and PTBs, Facilitating the Comparison of Experiments and DNS-, LES-, PDF-transport & MFM-Models of Turbulence”

Spalding, D Brian
Benjamin Franklin and Computational Fluid Dynamics.
(2011) Symposium Lecture, Villenova University, College of Engineering, Philadelphia, USA, Franklin Award Week, April 28.

Spalding, Brian
Capillary-Porous CFD.
(2011) *A V Luikov Centenary Conference, Minsk*

Nagai, N., Ito, T., Nishijiri, N.
Visualization and numerical simulation of two-phase flow between electrodes on alkaline water electrolysis

Xenidou, T.C., Prud'Homme, N., Vahlas, C., Markatos, N.C., Boudouvis, A.G.
Reaction and transport interplay in Al MOCVD investigated through experiments and computational fluid dynamic analysis

Computational fluid dynamic investigations and experimental validation of frozen seal sodium valve assembly of a fast reactor

Adoua, R., Mietton-Peuchot, M., Milisic, V.
Modelling of oxygen transfer in wines

Vasarevičius, S., Mineikaite, A., Vaitiekunas, P.
Investigation into heavy metals in storm wastewater from vilnius žirmūnai district and pollutants spread model in neris river

Arafat, A., Chakrabarty, A.
Jet flame length and thermal radiation: Evaluation with CFD simulations
Aloqaily, A., Chakrabarty, A.
Jet flame length and thermal radiation: Evaluation with CFD simulations

Vaidya, A.M., Borgohain, A., Maheshwari, N.K., Govindan, D., Vijayan, P.K.
Numerical investigation of heat transfer in the vertical annulus between pressure tube and calandria tube of the advanced water cooled reactor

Transient heating of an evaporating droplet

Chai, B.-H., Du, K.-W., Wei, G.-R., Wei, G.-F., Feng, B., Bi, K.-M.
Steady numerical analysis of potassium heat pipe

Effect of current changes on velocity and temperature profiles of GTAW arc

Vaidya, A.M., Maheshwari, N.K., Vijayan, P.K.
Estimation of fuel and clad temperature of a research reactor during dry period of de-fuelling operation

Zamora, B., Kaisera, A.S., Vicenteb, P.G.
Improvement in learning on fluid mechanics and heat transfer courses using computational fluid dynamics

Gamiño, B., Aguillón, J.
Numerical simulation of syngas combustion with a multi-spark ignition system in a diesel engine adapted to work at the Otto cycle

Ardejani, F.D., Shokri, B.J., Bagheri, M., Soleimani, E.
Investigation of pyrite oxidation and acid mine drainage characterization associated with Razi active coal mine and coal washing waste dumps in the Azad shahr-Ramian region, northeast Iran

Wang, C., Jia, X., Zhao, H., Hao, M.
Numerical simulation of liquid-solid coaxial annular flow

Wang, Z.-M., Zhao, Y.-B., Zhang, C.-X., Deng, M., Zhang, D.-H.
RETRACTED ARTICLE: Simulation of flow through vibrating screens with moving body method

2009

Spalding, D Brian and Artemov, V I
Numerical Modelling of Problems Involving Hydrodynamics, Heat Transfer and Elasticity; Thermal Stresses Arising in Air-Cooled Gas-Turbine Blades'

Spalding, D Brian

Population Models of Turbulent Heat & Mass Transfer
Rome, Italy, September 14 – 18.
Turbulence, Heat & Mass Transfer 6, Eds: K Hanjalic, Y Nagano, S Jakirlic, Begell House, USA,

Spalding, Brian


Clus, O., Ouazzani, J., Muselli, M., Nikolayev, V.S., Sharan, G., Beysens, D.
Comparison of various radiation-cooled dew condensers using computational fluid dynamics

Anu Dutta, B Gera, Pevan K. Sharma, RK Singh, AK Ghosh & H.S Kushwasha
Application of CFD Code PHOENICS for Simulating CYCLONE SEPARATORS
20th International Conference on Structural Mechanics in Reactor Technology (SMiRT 20), Espoo Finland
August 9-14 2009 SMiRT 20 Division3, Paper 2459

Xenidou, T.C., Prud’homme, N., Vahlas, C., Markatos, N.C., Boudouvis, A.G.
A comprehensive insight in the MOCVD of aluminum through interaction between reactive transport modeling and targeted growth experiments

Sweitzer, G.
Building ventilation simulation: Analog or digital tools?

Machado, R.B.P., Do Nascimento, J.T., Do Fundo, F.S., De Souza, V.C.
CFD modeling of fire spread in an offshore platform

Dogan, A., Baysal, S., Baskaya, S.
Numerical analysis of natural convection heat transfer from partially open cavities heated at one wall

Liu, H., Xin, N., Cao, Q., Sha, L., Sun, D., Wu, S.
Numerical simulation of the influence of over fire air position on the combustion in a single furnace boiler with dual circle firing

Duarte, F.E.S., Delgado, C.V.P., David, F.N., Waltz, F., Souza, V.C.
Steps for a multidisciplinary engineering competition

Shu, C., Wei, X.
The numerical simulation of air helical flow outside of upright tube
Oliveira, M.C.A., Labaki, L.C., Vatavuk, P.
The use of CFD applied to studies of ventilation in urban areas in Campinas, Brazil

Roedig, M.-K., Klose, W.
Modelling of coal pyrolysis using a twin screw reactor

Aryafar, A., Ardejani, F.D.
The study of oxygen diffusion process in metallic waste dump: Analytical and Numerical Modeling

Güldaş, A., Uluer, O., Özdemir, A.
The numerical analysis of a mold cavity filling using the finite control volume method and comparison to the experimental results

Truchot, B., Boehm, M., Waymel, F.
Numerical analysis of smoke layer stability

Hafsia, Z., Hadj, M.B., Lamloumi, H., Maalel, K.
Internal inlet for wave generation and absorption treatment

Sha, L., Liu, H., Jiao, F., Cao, Q., Xin, N., Wu, S.
The research of the influence of primary air ratio on the combustion in a lignite-fired Ultra Supercritical boiler

Zujus, R., Makarevičius, R., Poškas, P.
Numerical simulation of turbulent mixed convection heat transfer variation along a vertical flat channel for aiding flows

Xie, Z., Zhou, Y.
Optimization research on guide plate installed in quadrat 90° curved duct

Liu, H., Xin, N., Cao, Q., Sha, L., Sun, D., Wu, S.
Numerical simulation of the influence of over fire air position on the combustion in a single furnace boiler with dual circle firing

Wang, C., Chen, W., Tian, D., Jia, X., Zhao, H.
A CFD simulation of the flow field of a power law fluid in an eccentric annulus

Zhang, J., Lü, J., Tu, Y., Kong, C., Ge, W.
Numerical analysis of high-speed train induced impulsive pressure on railway bridge's noise barrier and its flange plate with collision-preventing wall

Li, H.-F., Zhang, Y.-N., Wang, D., Yan, N.-M.
Simulation for thermal current field in powertrain cabin of armored vehicle with electric transmission system
Betancourt-Quiroga, F.O., Palacio-Pérez, A., Rodríguez-Valdés, A., Silva-Casarín, R.
Numerical determination of oil spill areas in water bodies [Determinación numérica del área de derrames de petróleo en cuerpos de agua]

Lee, C.-H., Tseng, C.-H., Lin, H.-I., Yeh, H.-F.
Assessment of fracture empirical models for estimating apertures

Migoya, E., Crespo, A., García, J., Hernández, J.
A simplified model of fires in road tunnels. Comparison with three-dimensional models and full-scale measurements

Analysis of arc process in high voltage circuit breakers using PHOENICS

Nishimura, S., Nishi, Y., Ueda, N.
Development of 4S and related technologies (7) - Analytical evaluation of RVACS performance under loss of stacks condition

Kaiser, A.S., Zamora, B., Viedma, A.
Numerical correlation for natural convective flows in isothermal heated, inclined and convergent channels, for high Rayleigh numbers

Zamora, B Kaiser, AS
Optimum wall-to-wall spacing in solar chimney shaped channels in natural convection by numerical investigation.

Yi Jiang, Bin Zhao, Xiaofeng Li, Xudong Yang, Zhiqin Zhang, Yufeng Zhang
Investigating a safe ventilation rate for the prevention of indoor SARS transmission: An attempt based on a simulation approach.

2008

V.V Tyagi & D.Buddhi
Thermal cycle testing of calcium chloride hexahydrate as a possible PCM for latent heat storage.
2008 Solar Energy Material and Solar Cells 92 891-899

Andreas Matzarakis & Bas Amelung
Physiological Equivalent Temperature as Indicator for Impacts of Climate Change on Thermal Comfort of Humans. Chapter 9

Spalding , D Brian
Extending the Frontiers of Computational Heat Transfer.
May 11-16, Marrakech, Morocco

Spalding, D Brian

Enlarging the Frontiers of CFD.


Effect of inlet configuration on moderator velocity and temperature distribution inside the calandria of a heavy water reactor


Heat transfer studies on lead-bismuth eutectic flows in circular tubes


Zhao, Y., Zhao, H., Shi, Y.

Microstructure simulation in welding 1Cr18Ni9Ti steel


Mitianiec, W.

Theoretical and experimental investigations of CNG ignition and combustion with controlled gas motion


Gas entrainment in scaled model of pool type LMFBR


Doulati Ardejani, F., Jodieri Shokri, B., Moradzadeh, A., Soleimani, E., Ansari Jafari, M.

A combined mathematical geophysical model for prediction of pyrite oxidation and pollutant leaching associated with a coal washing waste dump


Stathopoulou, O.I., Assimakopoulos, V.D.

Numerical study of the indoor environmental conditions of a large athletic hall using the CFD code PHOENICS


Zamora, B., Kaiser, A.S., Viedma, A.

On the effects of Rayleigh number and inlet turbulence intensity upon the buoyancy-induced mass flow rate in sloping and convergent channels


Ren, M.-L., Chen, C., Guo, Q., Yang, Y.-X., Kang, G.-Q., Luo, H.-L.

Numerical analysis and effectively using of piston-effect in subway


Li, R., Yu, Z., Qi, K.

Numerical simulation and analysis of flow field in TIG arc brazed filler metal droplet


Gajapathy, R., Velusamy, K., Selvaraj, P., Chellapandi, P., Chetal, S.C., Sundararajan, T.

Thermal hydraulic investigations of intermediate heat exchanger in a pool-type fast breeder reactor

Huang, Y., Yang, Y., Wei, G., Shi, W., Li, Y.  
**Boundary coupled dual-equation numerical simulation on mass transfer in the process of laser cladding**  

Zhang, R., Yin, Y., Fan, D., Katayama, S.J.  
**Numerical simulation of the mechanism for penetration increasing of A-TIG welding**  

Freitas, G.C.S., Peixoto, F.C., Vianna Jr., A.S.  
**Simulation of a thermal battery using Phoenics®**  

Baltrenas, P., Morkuniene, J., Vaitiekunas, P.  
**Mathematical simulation of solid particle dispersion in the air of Vilnius city**  

Qi, X.-N., Liu, Z.-Y.  
**Investigation on drag reduction of trucks**  

Vaidya, A.M., Maheshwari, N.K., Vijayan, P.K., Saha, D.  
**Computational study of moderator flow and temperature fields in the calandria vessel of a heavy water reactor using the PHOENICS code**  

Assimakopoulos, V.D., Stathopoulou, O.I., Halios, C., Helmis, C.G.  
**Numerical investigation of indoor environmental conditions in an office**  

Lei, B.  
**Numerical simulation of smoke flow during highway tunnel fire**  

**The technical research and application development of groove surface in turbulent drag reduction**  

Gacem, H., Jemmali, M., Bessrour, J.  
**Flow modelling and numerical simulation of post combustion room**  

Kassomenos, P., Karayannis, A., Panagopoulos, I., Karakitsios, S., Petrakis, M.  
**Modelling the dispersion of a toxic substance at a workplace**  

Mrenes, M.  
**Simulation of gas flow in a private burner mixing pipe**  

**Modeling and managing thermal profiles of rack-mounted servers with ThermoStat**

Choi, Kim Y, Sivasubramaniam A, Srebric J, Wang Q, Lee J  
**A CFD-based tool for studying temperature in rack-mounted servers**
(2008) IEEE Transactions on Computers

2007

Spalding, D Brian  
CFD: Past, Present and Future.  

Spalding D Brian  
CFD: Progress and Prospects.  
(2007) ASCHT : The Asian Symposium on Computational Heat Transfer and Fluid Flow'October 18-21, Xi’an, China

Cândido, C., Bittencourt, L., Sacramento, A.  
Building regulation and thermal comfort: The opening typology influence on natural cooling inside office buildings in maceió  

Spencer, J., Zhai, Z.  
Fast evaluation of sustainable heating and cooling strategies for solar homes with integrated energy and cfd modeling  

Llombart, A., Mallet, A., Burillo, N., Alvarez, O., Talayero, A.  
Influence of orography on wind resource assessment programs  

Fico Jr., N., De Souza, V.C.  
Numeric simulation of radiation chamber in furnaces #610 - Transport processes in energy systems II (07A03)  

Yu, J., Xia, W., Feng, X.  
Numerical simulation and experimental validation of flow and heat transfer in flat-tube heat exchangers  

Ramírez-Argáez, M., Contreras-Bustos, F., González-Rivera, C.  
On the fluid flow and mixing phenomena in ladles equipped with impeller and gas purging for degassing of Al-based alloys  

Meng, Q., Chen, Z.  
Simulation and research on indoor environment control mode basing on thermal comfort: A case study in the aviation building in sanya airport  

Natesan, K., Velusamy, K., Selvaraj, P., Chellapandi, P., Chetal, S.C.  
Thermal hydraulic study on detection of random failure of fuel by delayed neutron detection system  

Sheaffer, P.M., Zittel, P.F.  
Carbon oxidation in low pressure laminar H2 + O2 flames II: The lifted-flame testbed  
Megri, A.C.
Building load and energy simulation programs and the design process

Hemanath, M.G., Meikandamurthy, C., Ramakrishnan, V., Rajan, K.K., Rajan, M., Vaidyanathan, G.
Cellular convection in vertical annuli of fast breeder reactors

PHOENICS simulation for the effect of shut-down to contamination in batch transportation

Tchouvelev, A.V., Cheng, Z., Agranat, V.M., Zhubrin, S.V.
Effectiveness of small barriers as means to reduce clearance distances

Abdul Ghani, A.G., Farid, M.M.
Numerical simulation of solid-liquid food mixture in a high pressure processing unit using computational fluid dynamics

Indoor air quality in a dentistry clinic

Jiang, L., Fu, Q., Zhang, Q.
Numerical study for unsteady heat transfer of underground pipelines

Wu, H., Wang, S., Zhu, D.
Modelling and evaluation of cooling capacity of earth-air-pipe systems

Wan, F., Zhang, Q., Jiang, G.
Numerical simulation of contamination concentration in erect batch pipeline

Lee, J.-Ch., Hwang, J.-H., Kim, Y.-J.
Feasibility study on the vacuum arc modelling with an axial magnetic field

Zhang, R.H., Fan, D.
Numerical simulation of effects of activating flux on flow patterns and weld penetration in ATIG welding

Gomez A, Fueyo N, Ignacio Diez L
Modelling & simulation of fluid flow and heat transfer in the convective zone of a power-generation boiler

J.Zhao H.B Manbeck & D.J Murphy
Computational Fluid Dynamics Simulation and Validation of H2S Removal from Fan-Ventilated Confined-Space Manure Storages
(2007) American Society of Agricultural and Biological Engineers ISSN 0001-2351
2006

Manwoong Kim, Seon-Oh, Hho-Jung Kim
Analyses on fluid flow and heat transfer inside Calandria vessel of CANDU-6 using CFD

Spalding D Brian
SFT Analysis of Heat Transfer Equipment

Utkin, A.B., Lavrov, A., Vilar, R.
Application of rangefinder for small forest fire detection

Zhao, Y., Shi, Y., Lei, Y.
The study of surface-active element oxygen on flow patterns and penetration in A-TIG welding

Wróblewska, A., Bartoszewicz, J., Bogusławski, L.
Intensification of heat transfer on a deformed surface of a short smoke tube

Kawabata, O., Kajimoto, M.
Analyses of high pressure molten debris dispersion for a typical PWR plant

Clus, O., Muselli, M., Beysens, D., Nikolayev, V., Ouazzani, J.
Computational fluid dynamic (CFD) applied to radiative cooled dew condensers

Bharj, J.S., Sahaya, R.R., Datta, D., Dharne, S.P.
Effect of flow configuration on velocity and temperature distribution of moderator inside 540 MWe PHWR calandria using CFD techniques

Experience of using a CFD code for estimating the noise generated by gusts along the sunroof of a car

Gunabushanam, N., Venkata Suresh, J.
Experimental and CFD analysis of hydrogenerator ventilation components

Stathopoulou, O.I., Assimakopoulos, V.D.
Indoor environmental conditions of athletic halls: Experimental and numerical investigation

Mumovic, D., Crowther, J.M., Stevanovic, Z.
Integrated air quality modelling for a designated air quality management area in Glasgow
Tan, F.L.

Calbó, J., Pozo, M., Moreno, J., Gravdahl, A.

Zhao, H.-J., Zhang, Q.-S., Zhang, G.-Z., Zhou, S.-D.

Zhao, H.-J., Zhang, Q.-S., Zhang, G.-Z., Wang, S.-L.

Qingqing, P., Wei, L.


Liau, V.K., Lee, B.Y., Song, K.D., Park, K.Y.

Zhong, J.-Y., Lin, X., He, R.-T.

Shen, C.-M., Sun, R., Wu, S.-H.

Sun, R., Li, Z., Sun, S., Wu, S.

Young, N.C., Dong, S.Y.

Paliulis, D.
Wei, W.-S., Yang, Y.-W., Xu, J., Fan, Y., Bao, X.-J.  
Exit structure of the mist swirl separators in acrylonitrile production units  

Li, L., Li, X., Lin, B., Zhu, Y.  
Simulation of canopy flows using k-e two-equation turbulence model with source/sink terms  

Simulation of smoke flow and longitudinal ventilation in tunnel fire  

Abdul Ghani, A.G., Farid, M.M.  
Using the computational fluid dynamics to analyze the thermal sterilization of solid-liquid food mixture in cans  

Liau, V.K., Lee, B.Y., Song, K.D., Park, K.Y.  
The influence of contacts erosion on the SF6 arc  

Ramírez-Argáez, M.A., Contreras, F., González, C.  
Mathematical modeling of mixing phenomena in ladles of aluminum equipped with impeller and gas purging for degassing [Modelación matemática del mezclado en ollas (cucharas) de aluminio equipadas con la técnica de desgasificación rotor-inyector]  

Ou, J.-P., Ma, A.-C., Lai, C.-B., Deng, R.-H.  
Numerical simulation in the flow and heat transfer in a gas-fired boiler with a built-in stable-combustion heat island  

Baltrenas, P., Zagorskis, A.  
Simulating aerodynamics processes in a biofilter  

Hillert, W.  
The Bonn electron stretcher accelerator ELSA: Past and future  

Comparison of arc plasma numerical simulation between potential approach and magnetic approach in DC electric arc furnace  

He, C., Marsalek, J., Rochfort, Q., Krishnappan, B.G.  
Case study: Refinement of hydraulic operation of a complex CSO storage/ treatment facility by numerical and physical modeling  

Liang, L., Xiaofeng, L., Borong, L., Yingxin, Z.  
Improved k-e two-equation turbulence model for canopy flow  

Shen, C.-M., Sun, R., Wu, S.-H.  
Numerical simulation of combustion processes in an ultra supercritical boiler  
Wang, F., Jin, Z., Zhu, Z.
Numerical study of dc arc plasma and molten bath in dc electric arc furnace

Xu, Y.-L., Wei, Y.-H., Dong, Z.-B., Zhang, Y.-L.
Comparison of GTAW temperature field of stainless steel simulated by different software packages

Chow, W.K.
Fire safety concern for green or sustainable buildings with natural ventilation provision

Prat, O.P., Ducoste, J.J.
Modeling spatial distribution of floc size in turbulent processes using the quadrature method of moment and computational fluid dynamics

Tchouvelev, AV Cheng, Z Agranat, VM Zhurbrin SV
Effectiveness of small barriers as means to reduce clearance distances.

2005

Spalding D Brian

Spalding D Brian
Unifying Two Fields of Computational Mechanics: Solid and Fluid.

Ambjörn, C., Liungman, O., Törling, G.
A high-resolution oil drift model on the Swedish coast

Shevchuk, I.V., Delas, N.I.
Aerodynamics and turbulent flow heat exchange in the rotary disk air cleaner

Experimental and numerical study of the dispersion of motor vehicle pollutants under idle condition

Chun, Y.N., Berezin, A.A., Brocilo, D., Mizeraczyk, J., Chang, J.-S.
Modelling of near corona wire electrohydrodynamic flow in a wire-plate electrostatic precipitator

Li, X., Chen, D., Wang, Q., Li, Z.
Simulation of the effects of several factors on arc plasma behavior in low voltage circuit breaker

Chen, C.-W.
Numerical analysis for the multi-phase flow of pulverized coal injection inside blast furnace tuyere
Numerical simulation of plasma in DC electric arc furnace  

Li, G., Nie, W., Yu, Y.  
Motion trace of particles in classifying flow field  

Zhang, Z., Yang, L., Ni, F.  
Numerical simulation on the solidification of ZA27 alloy by a two-phase flow model  

Ye, X., Lian, Z.  
Air distribution numerical simulating of isothermal jet with interference parameters in large space  

Simulation and analysis of the indoors thermal environment in the high elevated waiting hall of Kunming railway station  

Yang, W.-J., Sun, F.-Z., Huang, X.-Y., Shi, Y.-T., Wang, N.-H., Cui, H.  
Three-dimensional numerical simulation and analysis of the steam flow field and heat exchange performance of a 300 MW steam turbine's condenser  

Lee, J.-C., Kim, Y.J.  
Numerical modeling of SF6 thermal plasma generated during the switching process  

3-D computation of sediment transport at water intakes  

Graovac, M., Dawson, F.P., Fila, M., Cormack, D.E.  
Fluorescent lamp cold starting improvement  

Yuan, X.Q., Zhao, T.Z., Guo, W.K., Xu, P.  
Plasma flow characteristics inside the supersonic D.C. plasma torch  

Poser, K., Rohde, M., Schneider, J., Zum Gahr, K.-H.  
TiN-Particle reinforced alumina for unlubricated tribological applications mated with metallic counterbodies  

Jifei, G., Guowei, G., Zilong, Z., Yalei, Z.  
CFD numerical simulation applied in the design of the jet aerator  

Kim, K.H., Hwang, K.M., Jin, T.E.  
Fluid mixing analysis for predicting shell wall thinning of a feedwater heater  
Mass transfer phenomena during coal char gasification reaction in thermobalance setup

Numerical simulation of heat transfer in a desktop computer with heat-generating components

Guo Z, and Tang H
Numerical simulation for a process analysis of a coke oven

2004

Bolot, R., Li, J., Coddet, C.
Modeling of thermal plasma jets: A comparison between Phoenics and Fluent

Hwang, K.M., Jin, T.E., Kim, K.H.
A study on fluid mixing analysis for predicting shell wall thinning of a feedwater heater

Sinha, A.K., Zhao, Y.
Athematical modeling of the United States Steel Corporation Gary Works No. 13 Blast Furnace bustle pipe and tuyere gas flow - An investigation of the effect of tuyere diameter on tuyere velocity

Yuan, X.Q., Li, H., Zhao, T.Z., Wang, F., Guo, W.K., Xu, P.
Comparative study of flow characteristics inside plasma torch with different nozzle configurations

Zhang, R., Feng, C., Chen, L.
Cook-off test and its numerical simulation of detonator based on RDX

Wang, H., Liu, R., Chen, S.
Experimental simulation and application research of plane jet isolating dust theory

Baltrenas, P., Vaiškunaite, R., Špakauskas, V.
Experimental study and mathematical modelling of biofilter aerodynamic resistance

Yapici, H., Yalıçın, Ş.
Transient temperature and thermally induced stress distributions in a partly-circumferentially heated cylindrical workpiece

Koptsev, V.V.
Modeling the aerodynamics of the burners in kilns
Yuan, X.Q., Li, H., Zhao, T.Z., Guo, W.K., Xu, P.
Effects of nozzle configuration on flow characteristics inside DC plasma torch

Meng, Y., Lian, Z., Tang, B., Xu, T.
Research on the bottomhole flow field of reverse circulation bit and its product development

Shih, C.J., Liu, G.C.
Optimal design methodology of plate-fin heat sinks for electronic cooling using entropy generation strategy

Xie, H., Gao, Z., Zhou, Z.
Three-dimensional numerical simulation of nuclear heating reactor under asymmetric operation condition

Zhang, P., Liu, C., Yuan, X., Yu, G.
CFD simulations of liquid phase flow in structured packed column

Kaiser, A.S., Zamora, B., Viedma, A.
Correlation for Nusselt number in natural convection in vertical convergent channels at uniform wall temperature by a numerical investigation

Yuan, X.-Q., Li, H., Zhao, T.-Z., Yu, G.-Y., Guo, W.-K., Xu, P.
Numerical modeling of supersonic plasma jet

Lian, Z.-W., Zhang, G.-R., Ye, X.-J.
Evaluation of air distribution in an air conditioned railway carriage

Chun, L.-J., Chiang, Y.-C., Ting, C.-C., Ma, R.-H., Chen, S.-L.
Pressure analysis of platform screen door subjected to a moving train in mass rapid transport underground station

Parsons, D.R., Walker, I.J., Wiggs, G.F.S.
Numerical modelling of flow structures over idealized transverse aeolian dunes of varying geometry

Huang, Y., Liang, G., Su, J.
3-D transient numerical simulation on the process of laser cladding by powder feeding

Huang, Y.L., Liang, G.Y., Su, J.Y.
Comprehensive model of laser cladding by powder feeding

Zou, D.N., Yang, J., Huang, Y.L., Su, J.Y.
Numerical analysis of heat transfer during laser cladding to synthesize TiCP/Al composite
2003

Spalding D Brian, Wu J, Ouazzani J, Martin-Lauzer F R, Jourdin F
Computer Simulation of the Escape of Oil from the Wreck of the Prestige.

Song, K.-D., Lee, B.-Y., Park, K.-Y.
Calculation of Post-Arc Current in a Laval Nozzle

Zakhia, N.Z.
Computational analysis of flow dynamics of slush hydrogen in transfer ducts

Zakhia, N.Z.
Innovative compututational simulation of SLUSH hydrogen in vacuum jacketed ducts

Baltrenas, P., Vasaryavichus, S., Petrajtis, E.
Numerical modeling of propagation of solid particles in atmosphere

Yu, L., Jiang, P., Ren, Z.
Numerical simulation for turbulent transpiration cooling processes

Aynsley, R., Ali, M.
Optimizing ceiling fan locations with CFD

Schmidtke, O., Sutiono, A., Herr, M., Hapke, J.
Simulation of two-phase flow of hydrogen at cryogenic conditions

Zakhia, N.Z.
The mixing phenomena of SLUSH hydrogen in ducts

Zakhia, N.Z.
The phase change effect of slush hydrogen in transfer lines

Validation of CFD calculations of full scale medium sized fires in a two lane road tunnel

Su, J.-Y., Zou, D.-N.
Numerical simulation of the process of laser cladding in-situ synthesis TiCp/Al composite on the surface of aluminum alloy
Song, K.D., Lee, B.Y., Park, K.Y.
Analysis of Thermal Recovery for SF6 Gas-Blast ARC within Laval Nozzle

Papakonstantinou, K., Chaloulakou, A., Duc, A., Vlachakis, N., Markatos, N.
Air quality in an underground garage: Computational and experimental investigation of ventilation effectiveness

Lin, X., Zhong, J.-Y.
Approach to the computation of gas flow field in the arc-quenching chamber of self-blasting circuit breaker

Chen, C.-W., Chen, C.-W., Liu, S.-H.
A mathematical model of fluid flow phenomena for the liquid bath in smelting reduction processes

MHD simulation of the liquid metal/helium gas dual-cooled waste transmutation blanket for FDS

Modelling airflow at stadium
(2003) Engineers Australia, 75 (9), p. 44.

Hwang, K.M., Jin, T.E., Kim, K.H.
Thermal-mixing analyses for safety injection at partial loop stagnation of a nuclear power plant

Experimental and numerical study on swirling combustion process in a 200 MW pulverized coal fired boiler

Zou, D., Huang, Y., Liang, G., Su, J.
Numerical simulation and experimental verification of laser cladding and reaction TiCp/Al composite material

Hao, J., Han, W., Hu, G., Gao, S., Deng, X.
Distribution and improvement of flow field in microwave extractor

Numerical investigations into the friction reduction by microbubbles for flat plates

Huang, Y., Zou, D., Liang, G., Su, J.
Numerical simulation on cladding track, fluid flow field and temperature field in laser cladding process with powder feeding

Ghani, A.G.A., Farid, M.M., Chen, X.D.
A computational and experimental study of heating and cooling cycles during thermal sterilization of liquid foods in pouches using CFD
Xu, C.-J., Chen, H.-Y.
Design optimization of ADS target based on numerical simulations of flow field.

Chuang, S.-H., Chiang, J.-S., Kuo, Y.-M.
Numerical simulation of heat transfer in a three-dimensional enclosure with three chips in various position arrangements

Wang, Z.-M., Duan, X.-L., Qiu, X.-Q.
Numerical simulation study on the turbulent diffusion flame of a gas burner

Abdul Ghani, A.G., Farid, M.M., Zarrour, S.J.
The effect of can rotation on sterilization of liquid food using computational fluid dynamics

Xie, H., Gao, Z.-Y.
Numerical analysis of the effect of coolant containers on the 5 MW nuclear heating reactor

Hien W N, Istiadiji A D,
Effects of external shading devices on daylighting and natural ventilation

Wang Q, Ma K, Lundqvist M
CFD applications of PHOENICS on building environment and fire safety design
(2003) Ove Arup Pty Ltd

Wang, S., Zhu, D.
Application of CFD in retrofitting air-conditioning systems in industrial buildings

Ramachandran K., Sato, T., Nishiyama, H.
3D modelling of evaporation of water injected into a plasma jet

Davis, MP, Dry, J & Schwarz, MP
Flow Simulation of the Hismelt Process

2002

Spalding D Brian
Simultaneous Prediction of Solid stress, Heat transfer and Fluid flow by a Single Algorithm.

Dale J J, Holdo A E, Spalding D Brian, Armstrong J G
Fluid Structure Interaction Through Simultaneous Calculation of Velocity and Displacement
(2002) Proceedings: ASME Pressure Vessels and Piping Conference, Emerging Technologies in Fluids,
Zinov'ev, A.V., Ivanov, A.V., Mastryukov, B.S.  
Concentration of toxicant inside production room  

De Queiroz Guimarães, F.M., De Almeida Barbabela, B., Rubião, L.E.G., Zhubrin, S.  
Predicting contaminants and oil dispersion with a simulation tool  

Wu, X.Z., Hwang, W.S., Chen, C.W., Liu, S.H.  
The application of two phase flow simulation to the development of direct iron ore smelting reduction process  

Song, K.D., Lee, B.Y., Park, K.Y., Park, J.H.  
Analysis of dielectric recovery for SF6 gas-blast arc  

Yagi, Y., Murase, M., Nakamura, A., Fujii, Y.  
Two phase flow analysis for secondary side in steam generator  

Yoon, C., Rhee, B.W., Min, B.-J.  
Validation of a CFD analysis model for predicting CANDU-6 moderator temperature against SPEL experiments  

Aldas, K., Mat, M.D., Kaplan, Y.  
A three-dimensional mathematical model for absorption in a metal hydride bed  

Hudson, N., Bhavnani, S.H., Overfelt, R.A.  
Computational fluid-dynamics modeling of the hydrodynamics of fluidization in the sand surrounding a lost-foam casting pattern  

Dong, H.-G., Gao, H.-M., Wu, L.  
Numerical simulation of heat transfer based on PHOENICS during stationary plasma arc welding process  

Ma, X., Su, J., Jin, S., Yu, G., Hou, J., Zhao, L.  
Numerical simulation of turbulent flow during mold filling  

Moureh, J., Laguerre, O., Flick, D., Commere, B.  
Analysis of use of insulating pallet covers for shipping heat-sensitive foodstuffs in ambient conditions  

Ghani, A.G.A., Farid, M.M., Chen, X.D.  
Theoretical and experimental investigation of the thermal destruction of Vitamin C in food pouches  

Xie, H., Zhou, Z.  
Numerical analysis on performance of passive heat removal from high temperature gas-cooled reactor using PHOENICS  
Temperature fields in automotive catalytic converters

Heng, X., Zuying, G., Zhiwei, Z.
A numerical investigation of natural convection heat transfer in horizontal spent-fuel storage cask

Mäki, A.M., Österman, P.J., Luomala, M.J.
Numerical study of the pusher-type slab reheating furnace

Phillips, D.G., Richards, P.J., Flay, R.G.J.
CFD modelling and the development of the diffuser augmented wind turbine

Richards, P.J., Mallinson, G.D., McMillan, D., Li, Y.F.
Pedestrian level wind speeds in downtown Auckland

Kopaç, M.
Effect of plate spacing of impingement air jet on flow and heat transfer characteristics

Abdul Ghani, A.G., Farid, M.M., Chen, X.D.
Numerical simulation of transient temperature and velocity profiles in a horizontal can during sterilization using computational fluid dynamics

Fabian Omar Betancourt Quiroga, Arturo Palacio Perez & Alejandro Rodriguez Valdes
A Numerical Method for the Calculation of an Oil Spill Spreading.
June 23-28 Oslo, Norway

2001

Abdul Ghani, A.G., Farid, M.M., Chen, X.D.
A CFD study on thermal sterilization of food in pouches

Bolot, R., Bonnet, R., Jandin, G., Coddet, C.
Application of CAD to CFD for the Wire Arc Spray Process

Phan, B.D., Roberts, E.P.L., Hayes, P.J., Wright, N.P.
Atmospheric pressure plasma surface treatment of ceramic filter materials

Hudson, N., Bhavnani, S.H., Overfelt, R.A.
CFD modeling of the hydrodynamics of fluidization in the sand surrounding a lost foam casting pattern
Potočnik, V., Laroc, F.
Comparison of measured and calculated metal pad velocities for different prebake cell designs

Xie, H., Gao, Z.-Y.
Computational study of NHR-200 on asymmetric operation conditions

Bolot, R., Monin, V., Coddet, C.
Correlation Between Simulations and Plasma Sprayed Coatings Properties

Zakhia, N.Z.
Flow characterization of slush hydrogen in transfer lines

Narayanan, V., Kishore Kumar, S., Venkatakrishnaiah, T., Kaushal, S.C.
Flow prediction in the intermediate casing of compressors
(2001) 37th Joint Propulsion Conference and Exhibit,

Influence of monolith catalyst configuration on gas flow uniformity in automotive catalytic converter
(ICECA’2001), pp. 909-913.

Travkin, V.S., Sergievsky, E.D., Krinitsky, E.V., Catton, I.
Integrated Heterogeneous Design of Semiconductor Heat Sink via Scaled Direct Micro-Modeling, Upper Scale VAT Simulation and Experiment. Comparison and Verification of Properties

Bolot, R., Planche, M.P., Coddet, C.
Modeling of the Natural Gas HVOF Process

An, M., Thompson, W., Wright, M., Agranat, V., Kawaji, M., Chan, A.M.C.
PHOENICS simulations of gas-liquid flows in large piping components related to nuclear safety assessment

Abdul Ghani, A.G., Farid, M.M., Chen, X.D., Richards, P.
A computational fluid dynamics study on the effect of sterilization temperatures on bacteria deactivation and vitamin destruction

Von Klose, W., Schinkel, A.-P.
Modelling of the carbonization of renewable raw materials in a baffless rotary klin [Modellierung der karbonisierung nachwachsender rohstoffe im einbatenlosen Drehrohrreaktor]

Tzeng, P.Y., Liu, C.H., Hsu, K.W.
Numerical simulation on flow in pressure atomizers for gas turbine engines
Abdul Ghani, A.G., Farid, M.M., Chen, X.D., Richards, P.
The thermal sterilization of canned food in a 3-D pouch using computational fluid dynamics

Theiler, T., Sacher, N., Froeschle, B.
TiN barriers for high-k capacitors: Simulations and experimental results

Bolot, R., Imbert, M., Coddet, C.
On the use of a low-Reynolds extensions to the Chen-Kim (k-ε) model to predict thermal exchanges in the case of an impinging plasma jet

Analysis of the temperature variation and the safety of ammunition stored in a stack of cases

Pinto, J.C.
Prediction of the spatial distribution of the average molecular weights in living polymerisation reactors using CFD methods

Xie, H., Gao, Z.Y.
Numerical analysis of three-dimensional convective heat transfer in the core bypass of the nuclear heating reactor NHR-200

Mehedinteanu, S.
Application of the new way to prevent core melting in pressure tube reactors (CANDU type)

Zou, D.N., Lei, Y.P., Su, J.Y.
Numerical simulation on heat transfer and fluid flow phenomena in laser surface remelting process

Helsen, L.M.L., Van Den Bulck, E.V.M.
Study of a new macro-particle model for the low-temperature pyrolysis of dried wood chips

Zamora, B Hernandez, J
Influence of upstream conduction on the thermally optimum spacing of isothermal, natural convection-cooled vertical plate arrays.