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Qualifications

Employment

Honorary Senior Lecturer
Science and Engineering Office
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16 Oct 2019 → present

Research output

CFD-FEA Based Model to Predict Leak-Points in a 90-Degree Pipe Elbow

Abuhatira, A. A. (Lead / Corresponding author), Salim, S. M. & Vorstius, J., Dec 2023, In: *Engineering with Computers*. 39, 6, p. 3941-3954 14 p.

Vibration-Based Leak Detection Approach in a 90-Degree Pipe Elbow: A Computational Study

Abuhatira, A., Salim, S. M. & Vorstius, J., Apr 2022, *Proceedings of the 2022 Annual Conference of the UK Association for Computational Mechanics (UKACM)*. Nottingham University Press, 4 p.

Numerical Simulation of Turbulent Pipe Flow With 90-Degree Elbow Using Wall Y+ Approach

Abuhatira, A. A., Salim, S. M. & Vorstius, J. B., 25 Jan 2022, (E-pub ahead of print) *ASME 2021 International Mechanical Engineering Congress & Exposition conference proceedings*. American Society of Mechanical Engineers (ASME), p. 1-7 7 p. V010T10A048. (Fluids Engineering: Symposium on CFD Applications for Optimization and Controls; vol. 10).

Computational Study of Vibration-Based Leak Detection Approach in a 90-Degree Pipe Elbow

Abuhatira, A., Salim, S. M. & Vorstius, J., Sept 2021, *UK Fluids Conference*. University of Southampton: The Interdisciplinary Teaching and Learning Group, University of Southampton, p. 122 1 p. 07B-5

Effects of curvature radius ratio of 90-degree pipe elbow on FIV signal

Abuhatira, A. A. (Lead / Corresponding author), Salim, S. M., Hussein, H. A. & Vorstius, J. B., 28 May 2020. 1 p.

Numerical simulation of turbulent pipe flow with elbow bend: comparison between RANS and LES

Abuhatira, A., Salim, S. M. (Lead / Corresponding author) & Vorstius, J. B., 30 May 2019, *32nd Scottish Fluid Mechanics Meeting (SFMM): Book of Abstracts*. Dundee: University of Dundee, p. 25-25 1 p.

Analysis of thermal mixing in T-junctions using fluid-structure interaction

Gow, A. R. & Salim, S. M., 14 Mar 2018, *Proceedings of the International MultiConference of Engineers and Computer Scientists 2018, IMECS 2018*. Castillo, O., Feng, D. D., Korsunsky, A. M., Douglas, C. & Ao, S. I. (eds.). Newswood Limited, (Lecture Notes in Engineering and Computer Science; vol. 2).

Wall y^+ strategy for modelling rotating annular flow using CFD

Davidson, A. A. & Salim, S. M., 1 Jan 2018, *Proceedings of the International MultiConference of Engineers and Computer Scientists 2018, IMECS 2018*. Castillo, O., Feng, D. D., Korsunsky, A. M., Douglas, C. & Ao, S. I. (eds.). Newswood Limited, (Lecture Notes in Engineering and Computer Science; vol. 2).

Numerical simulation of dispersion in an urban street canyon: Comparison between steady and fluctuating boundary conditions

Kwa, S. M. & Salim, S. M., 2015, In: *Engineering Letters*. 23, 1, p. 55-64 10 p.

A review on the flow structure and pollutant dispersion in urban street canyons for urban planning strategies

Yazid, A. W. M., Sidik, N. A. C., Salim, S. M. & Saqr, K. M., 25 Apr 2014, In: *Simulation*. 90, 8, p. 892-916 25 p.

Fluctuating inlet flow conditions for use in urban air quality CFD studies

Kwa, S. M. & Salim, S. M., 2014, *Lecture Notes in Engineering and Computer Science*. Newswood Limited, Vol. 2. p. 1519-1524 6 p.

Numerical analysis of fluid-structure interaction between wind flow and trees

Gan, C. J. & Salim, S. M., 2014, *Lecture Notes in Engineering and Computer Science*. Newswood Limited, Vol. 2. p. 1218-1223 6 p.

Numerical simulation of wind flow structures and pollutant dispersion within street canyon under thermally unstable atmospheric conditions

Yazid, A. W. M., Che Sidik, N. A. & Mohamed Salim, S., 2014, *Applied Mechanics and Materials*. Trans Tech Publications LTD, Vol. 554. p. 655-659 5 p. (Applied Mechanics and Materials; vol. 554).

Numerical prediction of air flow within street canyons based on different two-equation k- ϵ models

Yazid, A. W. M., Sidik, N. A. C. (Lead / Corresponding author), Salim, S. M. & Yusoff, N. H. M., 2013, *IOP Conference Series: Materials Science and Engineering*. 1 ed. Vol. 50. 012012

Performance of RANS, URANS and LES in the prediction of airflow and pollutant dispersion

Salim, S. M. (Lead / Corresponding author) & Ong, K. C., 2013, *Lecture Notes in Electrical Engineering*. Vol. 170 LNEE. p. 263-274 12 p. (Lecture Notes in Electrical Engineering; vol. 170 LNEE).

Numerical simulation of dispersion in urban street canyons with avenue-like tree plantings: Comparison between RANS and LES

Salim, S. M. (Lead / Corresponding author), Cheah, S. C. & Chan, A., Sept 2011, In: *Building and Environment*. 46, 9, p. 1735-1746 12 p.

Analysis of local scale tree-atmosphere interaction on pollutant concentration in idealized street canyons and application to a real urban junction

Buccolieri, R. (Lead / Corresponding author), Salim, S. M., Leo, L. S., Di Sabatino, S., Chan, A., Ielpo, P., de Gennaro, G. & Gromke, C., Mar 2011, In: *Atmospheric Environment*. 45, 9, p. 1702-1713 12 p.

Numerical simulation of atmospheric pollutant dispersion in an urban street canyon: Comparison between RANS and LES

Salim, S. M. (Lead / Corresponding author), Buccolieri, R., Chan, A. & Di Sabatino, S., Feb 2011, In: *Journal of Wind Engineering and Industrial Aerodynamics*. 99, 2-3, p. 103-113 11 p.

Large Eddy Simulation of the aerodynamic effects of trees on pollutant concentrations in street canyons

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Wall y^+ approach for dealing with turbulent flows over a wall mounted cube

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CFD study of flow over parallel ridges with varying height and spacing

Yik, L. C., Salim, M. S., Chan, A. & Cheong, C. S. (Lead / Corresponding author), 2010, *WCE 2010 - World Congress on Engineering 2010*. Vol. 2. p. 1206-1211 6 p.

Study of tree-atmosphere interaction and assessment of air quality in real city neighbourhoods

Buccolieri, R., Salim, S. M., Di Sabatino, S., Chan, A., Ielpo, P., De Gennaro, G., Placentino, C. M., Caselli, M. & Gromke, C., 2010, *HARMO 2010 - Proceedings of the 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes*. HARMO, p. 673-677 5 p.

Large-eddy simulations of particle sedimentation in a longitudinal sedimentation basin of a water treatment plant. Part I: Particle settling performance

Al-Sammarraee, M., Chan, A. (Lead / Corresponding author), Salim, S. M. & Mahabaleswar, U. S., 15 Oct 2009, In: *Chemical Engineering Journal*. 152, 2-3, p. 307-314 8 p.

