

PUBLICATIONS

DONALD J. CLELAND

Refereed Journal Articles:

- (1) Cleland, A.C., Earle, R.L., Cleland, D.J. (1982) The effect of freezing rate on the accuracy of numerical freezing time calculations. *International Journal of Refrigeration* **5** 294-301.
- (2) Cleland, D.J., Cleland, A.C., Earle, R.L., Byrne, S.J. (1984) Prediction of rates of freezing, thawing and cooling in solids of arbitrary shape using the finite element method. *International Journal of Refrigeration* **7** 6-13.
- (3) Cleland, D.J., Cleland, A.C., Earle, R.L. (1986) Prediction of freezing and thawing times for foods - a review. *International Journal of Refrigeration* **9** 182.
- (4) Cleland, D.J., Cleland, A.C., Earle, R.L., Byrne, S.J. (1986) Prediction of thawing times for foods of simple shape. *International Journal of Refrigeration* **9** 220-228.
- (5) Cleland, D.J., Cleland, A.C., Earle, R.L., Byrne, S.J. (1987) Experimental data for freezing and thawing of multi-dimensional objects. *International Journal of Refrigeration* **10** 22-31.
- (6) Cleland, D.J., Cleland, A.C., Earle, R.L., Byrne, S.J. (1987) Prediction of freezing and thawing times for multi-dimensional shapes by numerical methods. *International Journal of Refrigeration* **10** 32-39.
- (7) Cleland, D.J., Cleland, A.C., Earle, R.L. (1987) Prediction of freezing and thawing times for multi-dimensional shapes by simple formulae I - regular shapes. *International Journal of Refrigeration* **10** 156-164.
- (8) Cleland, D.J., Cleland, A.C., Earle, R.L. (1987) Prediction of freezing and thawing times for multi-dimensional shapes by simple formulae II - irregular shapes. *International Journal of Refrigeration* **10** 234-240.
- (9) Rajapakse, N.C., Banks, N.H., Hewett, E.W., Cleland, D.J. (1990) Development of oxygen concentration gradients in flesh tissues of bulky plant organs. *Journal of American Society of Horticultural Science* **115**(5) 793-797.
- (10) Jeffery, P.B., Banks, N.H., Cameron, A.C., Cleland, D.J., Hewett, E.W. (1991) A model for predicting ethylene concentration gradients within kiwifruit packages. *Acta Horticulturae* **297** 635-643.
- (11) Rajapakse, N.C., Hewett, E.W., Banks, N.H., Cleland, D.J. (1992) Vacuum infiltration with calcium chloride influences oxygen distribution in apple fruit flesh. *Postharvest Biology and Technology* **1** 221-229.
- (12) Hossain, M.M., Cleland, D.J., Cleland, A.C. (1992) Prediction of freezing and thawing times of foods of regular multi-dimensional shape using an analytically derived geometric factor. *International Journal of Refrigeration* **15** 227-234.
- (13) Hossain, M.M., Cleland, D.J., Cleland, A.C. (1992) Prediction of freezing and thawing times of foods of two-dimensional irregular shape using a semi-analytical geometric factor. *International Journal of Refrigeration* **15** 235-240.
- (14) Hossain, M.M., Cleland, D.J., Cleland, A.C. (1992) Prediction of freezing and thawing times of foods of three-dimensional irregular shape using a semi-analytical geometric factor. *International Journal of Refrigeration* **15** 241-246.
- (15) Banks, N.H., Dadzie, B.K., Cleland, D.J. (1993) Reducing gas exchange of fruits with surface coatings. *Postharvest Biology and Technology* **3** 269-284.
- (16) Dadzie, B.K., Banks, N.H., Cleland, D.J. (1993) Role of skin resistance to gas diffusion in the response of fruits to modified atmospheres. *Acta Horticulturae* **343** 129-134.
- (17) Cleland, D.J., Cleland, A.C., Jones, R.S. (1994) Collection of accurate experimental data for testing the performance of simple methods for food freezing time prediction. *Journal of Food Process Engineering* **17** 93-119.
- (18) Banks, N.H., Cleland, D.J., Cameron, A.C., Beaudry, R.M., Kader, A.A. (1995) Proposal for a rationalised system of units for postharvest research in gas exchange. *Journal of American Society of Horticultural Science* **30**(6) 1129-1131.
- (19) Dadzie, B.K., Banks, N.H., Hewett, E.W., Cleland, D.J. (1995) Reduced greasiness of Granny Smith apples washed in Tween 20 solution. *NZ Journal of Crop and Horticultural Science* **23** 219-222.
- (20) Cleland, D.J., Tate, F.K. (1996) Evaluation of ice banks for on-farm milk cooling. *AIRAH Journal* **50** (7) 19-24.

- (21) Dadzie, B.K., Banks, N.H., Cleland, D.J., Hewett, E.W. (1996) Changes in respiration and ethylene production of apples in response to internal and external oxygen partial pressures. *Postharvest Biology and Technology* **9** 297-309.
- (22) Lin, Z., Cleland, A.C., Cleland, D.J., Serrallach, G.F. (1996) A simple method for prediction of chilling times for objects of two-dimensional irregular shape. *International Journal of Refrigeration* **19** 95-106.
- (23) Lin, Z., Cleland, A.C., Cleland, D.J., Serrallach, G.F. (1996) A simple method for prediction of chilling times: extension to three-dimensional irregular shape. *International Journal of Refrigeration* **19** 107-114.
- (24) Yearsley, C.W., Banks, N.H., Ganesh, S., Cleland, D.J. (1996) Determination of lower oxygen limits for apple fruit. *Postharvest Biology and Technology* **8** 95-109.
- (25) White, S.D., Cleland, D.J., Cotter, S.D., Stephenson, R.A., Kallu, R.D.S., Fleming, A.K. (1997) A heat pump for simultaneous refrigeration and water heating. *IPENZ Transactions* **24** (1) 36-43.
- (26) Cleland, D.J., Keedwell, R.W. (1998) Use of hydrocarbon refrigerants in on-farm milk cooling equipment. *AIRAH Journal* **52** (7) 19-23.
- (27) Ferreira, L., Kaminski, M., Mawson, A.J., Cleland, D.J., White, S.D. (2001) Development of a new tool for the selection of pervaporation membranes for the separation of fusel oils from ethanol/water mixtures. *Journal of Membrane Science* **182** 215-226.
- (28) Estrada-Flores, S., Cleland, A.C., Cleland, D.J. (2001) Prediction of the dynamic thermal behaviour of walls for refrigerated rooms using lumped and distributed parameter models. *International Journal of Refrigeration* **24** 272-284.
- (29) White, S.D., Yarrall, M.G., Cleland, D.J., Hedley, R.A. (2002) Modeling the performance of a transcritical CO₂ heat pump for high temperature heating. *International Journal of Refrigeration* **25** 479-486.
- (30) Chen, P., Cleland, D.J., Lovatt, S.J., Bassett, M.R. (2002) An empirical model for predicting air infiltration into refrigerated stores through doors. *International Journal of Refrigeration* **25** 799-812.
- (31) Smale, N.J., Tanner, D.J., Amos, N.D., Cleland, D.J. (2003) Airflow properties of packaging for horticultural produce - a practical study. *Acta Horticulturae* **599** 443-450 (presented at Postharvest Unlimited Conference, Leuven, Belgium, 2002).
- (32) Estrada-Flores, S., Cleland, D.J., Cleland, A.C., James, R.W. (2003) Simulation of transient behaviour in refrigeration plant pressure vessels: mathematical models and experimental validation. *International Journal of Refrigeration* **26** 170-179.
- (33) Cleland, D.J. (2004) Unfavourable Frost – What Is It, When Does It Occur and How Can It Be Avoided? *EcoLibrium*, Volume 3, No. 7, p16-20, August 2004, AIRAH.
- (34) Tarnawski, V.R., Cleland, D.J., Corasaniti, S., Gori, F., Mascheroni, R. H. (2005) Extension of soil thermal conductivity models to frozen meat with low and high fat contents. *International Journal of Refrigeration* **28** 840-850.
- (35) Love, R.J., Cleland, D.J., Merts, I., Eaton, B. (2005) What is the optimum compressor discharge pressure setpoint for condensers? *EcoLibrium*, Volume 4, No. 7, p24-29, August 2005, AIRAH.
- (36) Sujau, M., Merts, I., Cleland, D.J. (2005) Relative humidity control in refrigerated facilities. *Acta Horticulturae* **687** 313-320 (presented at Postharvest Unlimited DownUnder 2004 Conference, 10-12 November 2004, Sydney, Australia)
- (37) Wang J., Carson, J.K., North, M.F., Cleland, D.J. (2006) A new approach to modelling the effective thermal conductivity of heterogeneous materials. *International Journal of Heat and Mass Transfer* **49** 3075-3083.

Books and Book Chapters:

- (38) Cleland, D.J., Valentas, K.J. (1997) Prediction of freezing time and design of food freezers. In *Handbook of Food Engineering Practice*, eds. E. Rotstein, R.P. Singh, K.J. Valentas, p.71-124, CRC Press, Boca Raton, Florida.
- (39) Cleland, A.C., Cleland, D.J., White, S.D. (2002) *Cost-Effective Refrigeration*, Massey University, Palmerston North (earlier editions in 1987, 1992, 1998 and 2000).
- (40) International Institute of Refrigeration (1999) *Proceedings of 20th International Congress of Refrigeration - Refrigeration into the Third Millennium*, Sydney, September 1999, Supervising Editors D.J. Cleland, C. Dixon, 3709 pp., ISBN 2-913149-06-5 (CD Rom)
- (41) Cleland, D.J. (2003) Freezing time calculations. In *Encyclopaedia of Agricultural, Food and Biological Engineering*, ed. D.R.Heldman, Marcel Dekker, New York, ISBN: 0-8247-0938-1 (paper) 0-8247-0937-3 (electronic), <http://www.dekker.com/sdek/abstract~db=enc~content=a713499297>, DOI:

10.1081/E-EAFE-120007027; pp 396-401.

- (42) Cleland, D.J. (2005) Moisture and humidity control in refrigerated facilities. In *Encyclopaedia of Agricultural, Food and Biological Engineering*, ed. D.R.Heldman, Taylor, Francis, New York, ISBN: 0-8247-0938-1 (paper) 0-8247-0937-3 (electronic), <http://www.dekker.com/sdek/abstract~db=enc~content=a713608657>, DOI: 10.1081/E-EAFE-120040360; pp 1-4.

Refereed International Conference Proceedings:

- (43) Cleland, D.J., Boyd, N.S., Cleland, A.C. (1982) A model for fish freezing and storage on-board small New Zealand fishing vessels. *Refrigeration Science and Technology Series* **1982-1** 147-155.
- (44) Cleland, D.J. (1988) Prediction of freezing and thawing times for foods to different final product centre temperatures. *Refrigeration Science and Technology Series* **1988-3** 33-40.
- (45) Cleland, D.J. (1988) The effect of floor construction in Kiwifruit coolstores on system energy use, relative humidity and temperature control. *Refrigeration Science and Technology Series* **1988-3** 223-230.
- (46) Cleland, A.C., Cleland, D.J. (1989) Development of generalised software for simulation of refrigeration system performance. *Refrigeration Science and Technology Series* **1989-1** 253-259.
- (47) Cleland, D.J., Cleland, A.C. (1989) Appropriate level of model complexity in dynamic simulation of refrigeration systems. *Refrigeration Science and Technology Series* **1989-1** 261-268.
- (48) Rajapakse, N.C., Banks, N.H., Hewett, E.W., Cleland, D.J., Austin, P.C. (1989) Oxygen concentration differences in apple fruit flesh. *Proceedings 4th Australasian Conference on Heat and Mass Transfer*, Christchurch, 367-374.
- (49) Hossain, M.M., Cleland, A.C., Cleland, D.J., Wake, G.C. (1989) A geometric factor for prediction of freezing or thawing times of elliptical two-dimensional objects. *Proceedings 4th Australasian Conference on Heat and Mass Transfer*, Christchurch, 651-658.
- (50) Rajapakse, N.C., Banks, N.H., Hewett, E.W., Cleland, D.J., Austin, P.C. (1989) Oxygen diffusion in apple fruit flesh. *Proceedings 5th International Controlled Atmosphere Research Conference*, Wenatchee, Washington, U.S.A., 13-21.
- (51) Banks, N.H., Hewett, E.W., Rajapakse, N.C., Cleland, D.J., Austin, P.C., Stewart, T.M. (1989) Modelling fruit response to modified atmospheres. *Proceedings 5th International Controlled Atmosphere Research Conference*, Wenatchee, Washington, U.S.A., 359-366.
- (52) Dadzie, B.K., Banks, N.H., Hewett, E.W., Cleland, D.J. (1990) Variation in internal atmosphere composition within single apples. *Proceedings 23rd International Horticultural Congress*, Firenze, Italy.
- (53) Cleland, D.J., Cleland, A.C. (1991) An alternating direction, implicit finite difference scheme for heat conduction with phase change in finite cylinders. *Proceedings 18th International Congress of Refrigeration*, Montreal, **4** 1855-1858.
- (54) Cleland, D.J. (1991) A generally applicable simple method for prediction of food freezing and thawing times. *Proceedings 18th International Congress of Refrigeration*, Montreal, **4** 1873-1877.
- (55) Banks, N.H., Cleland, D.J. (1993) Proposal for a rationalised system of units for research in gas exchange. *Proceedings 6th International Controlled Atmosphere Research Conference*, Cornell University, 15-17 July, 1993, 158-170.
- (56) Amos, N.D., Cleland, D.J., Cleland, A.C., Banks, N.H. (1993) The effect of coolstore design and operation on air relative humidity. *Proceedings International Conference on Agricultural Machinery and Process Engineering*, Seoul, Oct. 1993, 433-442.
- (57) Amos, N.D., Cleland, D.J., Banks, N.H. (1993) Effects of pallet stacking arrangement on fruit cooling rates within forced draught pre-coolers. *Refrigeration Science and Technology Series* **1993-3** 232-241.
- (58) Amos, N.D., Cleland, D.J., Banks, N.H., Cleland, A.C. (1993) A survey of air flow, temperature and relative humidity patterns in a large horticultural coolstore. *Refrigeration Science and Technology Series* **1993-3** 414-422.
- (59) Lin, Z., Cleland, A.C., Serrallach, G.F., Cleland, D.J. (1993) Prediction of chilling times for objects of regular multi-dimensional shape using a general geometric factor. *Refrigeration Science and Technology Series* **1993-3** 259-267.
- (60) Jamieson, D.J., Cleland, D.J., Falconer, R.M. (1993) Modelling of bulk-stacked cheese cooling in coolstores. *Refrigeration Science and Technology Series* **1993-3** 268-276.
- (61) Merts, I., Cleland, D.J., Banks, N.H., Cleland, A.C. (1993) Mathematical model of a modified atmosphere packaging system for horticultural produce. *Refrigeration Science and Technology Series* **1993-3** 443-452.
- (62) OHagan, A., Cleland, D.J., Cleland, A.C. (1993) Air cooling coil performance under frosting conditions -

Part 1: Performance measurement and results. *Refrigeration Science and Technology Series* **1993-3** 345-354.

- (63) OHagan, A., Cleland, D.J., Cleland, A.C. (1993) Air cooling coil performance under frosting conditions - Part 2: Modelling. *Refrigeration Science and Technology Series* **1993-3** 355-362.
- (64) Cleland, D.J., Tate, F.K. (1995) Evaluation of ice banks for on-farm milk cooling. *AIRAH Conference Proceedings*, World Congress Centre, Melbourne, May 1995.
- (65) Cleland, D.J., Davey, L.M. (1995) Prediction of food chilling rates with time-variable cooling medium temperature. *Proceedings 19th International Congress of Refrigeration*, The Hague, **2** 392-399.
- (66) Cleland, A.C., Cleland, D.J., Davey, L.M. (1995) Accuracy of a simplified approach for finding the geometric factor of regular geometric shapes during freezing and thawing time prediction. *Proceedings 19th International Congress of Refrigeration*, The Hague, **2** 57-64.
- (67) Estrada-Flores, S., Cleland, A.C., Cleland, D.J. (1995) Modelling of thermal behaviour of walls for low temperature applications: sandwich panel type. *Proceedings 19th International Congress of Refrigeration*, The Hague, **2** 73-80.
- (68) Merts, I., Cleland, D.J., Banks, N.H. (1995) Effect of temperature on a modified atmosphere packaging system for apples. *Proceedings 19th International Congress of Refrigeration*, The Hague, **2** 287-294.
- (69) Tanner, D.J., Amos, N.D., Wells, C.M., Cleland, D.J. (1995) Performance of an apple coolstore under strict fruit quarantine requirements: measured data and model predictions. *Proceedings 19th International Congress of Refrigeration*, The Hague, **1** 307-314.
- (70) Tanner, D.J., Cleland, D.J., Wake, G.C. (1995) Prediction of food chilling rates with time-variable surface heat transfer coefficient. *Proceedings 19th International Congress of Refrigeration*, The Hague, **2** 455-462.
- (71) Serrallach, G.F., Cleland, A.C., Cleland, D.J. (1996) Extension of an empirical method for estimating refrigeration system energy usage to new refrigerants. *Refrigeration Science and Technology Series* **1996-1** 214-221.
- (72) White, S.D., Cleland, D.J., Cotter, S.D., Stephenson, R.A., Kallu, R.D.S., Fleming, A.K. (1997) A heat pump for simultaneous refrigeration and water heating. *Proceedings IPENZ Annual Conference 1997*, Wellington, **2**: 117-122.
- (73) Lin, Z., Cleland, A.C., Cleland, D.J., Serrallach, G.F. (1997). Models of the thermal conductivity of a food (cheese) with voids during chilling. In *Engineering and Food at ICEF 7 (Proceedings 7th International Congress on Engineering and Food)*, Jowitt R. (ed.), Sheffield Academic Press, U.K., Section F, 13-16.
- (74) Ferreira, L.B., Mawson, A.J., Cleland, D.J. (1997) A study of pervaporation of aqueous mixtures of alcohols and esters using organophilic membranes, *Proceedings 9th North American Membrane Society Conference*, Baltimore, June 1997.
- (75) Ferreira, L.B., Mawson, A.J., Cleland, D.J. (1997) The role of sorption in the pervaporation of aqueous mixtures of alcohols and esters using poly-ether-block-amide membranes. *Proceedings 25th Australian and New Zealand Chemical Engineers' Conference*, CHEMECA '97, Rotorua, NZ, paper PD3c (CD-ROM).
- (76) Cleland, D.J., Keedwell, R.W. (1998) Use of hydrocarbon refrigerants in on-farm milk cooling equipment. *Proceedings AIRAH Conference*, Sydney, April 1998, p. 22.1-22.9.
- (77) Yarrall, M.G., White, S.D., Cleland, D.J., Kallu, R.D.S., Hedley, R. (1998) Performance of a transcritical CO₂ heat pump for the food processing industries. *Refrigeration Science and Technology Series* **1998-4** 203-211.
- (78) Brooks, R.W., Green, R.H., Cleland, D.J., Senior, P. (1999) The potential of refrigerated stores for electricity load management, *Proceedings 20th International Congress of Refrigeration*, Sydney, September 1999, Vol. IV, p. 1289-1296 (paper 231).
- (79) Chen, P., Cleland, D.J., Lovatt, S.J., Bassett, M.R. (1999) Air infiltration into refrigerated stores through rapid-roll doors. *Proceedings 20th International Congress of Refrigeration*, Sydney, September 1999, Vol. IV, p. 925-932 (paper 162).
- (80) Cleland, D.J. (1999) Prediction of on-farm milk cooling system performance. *Proceedings 20th International Congress of Refrigeration*, Sydney, September 1999, Vol. III, p. 1305-1311 (paper 233).
- (81) Cleland, D.J., Adams, S.R., Keedwell, R.W. (1999) Use of hydrocarbons as drop-in replacements for fluorocarbon refrigerants in on-farm milk cooling equipment. *Proceedings 20th International Congress of Refrigeration*, Sydney, September 1999, Vol. II, p. 3134-3142 (paper 653).
- (82) Ng, C.K., Cleland, D.J., Cleland, A.C. (1999) Effect of suction-line heat exchangers on the performance of direct expansion evaporators. *Proceedings 20th International Congress of Refrigeration*, Sydney, September 1999, Vol. III, p. 3125-3133 (paper 652).

- (83) Witt, J.J., Cleland, D.J., Cleland, A.C. (1999) A simple model for the temperature buffering effect of palletised product in refrigerated stores. *Proceedings 20th International Congress of Refrigeration*, Sydney, September 1999, Vol. IV, p. 1297-1304 (paper 232).
- (84) Yarrall, M.G., White, S.D., Cleland, D.J., Kallu, R.D.S, Hedley, R.A. (1999) Performance of a transcritical CO₂ heat pump for simultaneous refrigeration and water heating. *Proceedings 20th International Congress of Refrigeration*, Sydney, September 1999, Vol. III, p. 3117-3124 (paper 651).
- (85) Spranz, J.M., McCarthy, O.J., Cleland, A.C., Cleland, D.J. (2000) Finite element modelling of the effects of an in-container temperature-time data logger (real and conceptually modified) on calculated thermal process lethality. *Proceedings 3rd International Conference on Predictive Modelling in Foods*, Leuven, September 2000, p. 277-279.
- (86) Spranz, J., McCarthy, O.J., Cleland, A.C., Cleland, D.J. (2001) Finite element modelling of the effects of an in-container temperature-time data logger (real, and conceptually modified) on calculated thermal process lethality. Paper presented at the NZIFST Conference 2001 - A Food Odyssey, 27-31 August 2001, University of Otago, Dunedin.
- (87) Ferreira, L., Kaminski, M., Mawson, A.J., Cleland, D.J. (2002) Pervaporation with organophilic membranes: selectivity towards alcohols and integration with a distillation unit. *Proceedings 9th APCCChE Congress and CHEMECA 2002 Conference*, Christchurch, October 2002 (CD-Rom).
- (88) White, S.D., Cleland, D.J., Fraser, R. (2002) Demand side response from HVAC&R. *Proceedings AIRAH Energy Efficient Design Conference*, Sydney, 29 November 2002.
- (89) Cleland, D.J., O'Hagan, A.N. (2003) Performance of an air-cooling coil under frosting conditions. *ASHRAE Transactions*, Vol. **109** (1) 243-250. (paper 4623, ASHRAE Winter Meeting, Chicago, January 2003).
- (90) Merts, I., Cleland, D.J., Banks, N.H., Cleland, A.C. (2003) Development of a mathematical model of modified atmosphere packaging systems for apples. *Proceedings 21th International Congress of Refrigeration*, Washington DC, August 2003 (paper 382).
- (91) Merts, I., Cleland, D.J., Banks, N.H. (2003) Validation of a mathematical model of modified atmosphere packaging systems for apples. *Proceedings 21th International Congress of Refrigeration*, Washington DC, August 2003 (paper 383).
- (92) East, A.R., Jeffery, P.B., Cleland, D.J. (2003) Air infiltration through loading dock truck-trailer doors. *Proceedings 21th International Congress of Refrigeration*, Washington DC, August 2003 (paper 384).
- (93) East, A.R., Sabarez, H.T., Tanner, D.J., Cleland, D.J. (2003) Validation of a packaging design tool: case study for apple packaging. *Proceedings 21th International Congress of Refrigeration*, Washington DC, August 2003 (paper 249).
- (94) Smale, N., Amos, H.T., Tanner, D.J., Cleland, D.J. (2003) Airflow characteristics of vented horticultural packaging. *Proceedings 21th International Congress of Refrigeration*, Washington DC, August 2003 (paper 244).
- (95) Cleland, D.J., Chen, P., Lovatt, S.J., Bassett, M.R. (2004) A modified model to predict air infiltration into refrigerated facilities through doorways. *ASHRAE Transactions*, Vol. **110** (1) 58-66 (paper 4672, ASHRAE Winter Meeting, Anaheim, January 2004).
- (96) Sujau, M., Merts, I., Cleland, D.J., Bronlund, J.E. (2004) Moisture transport and humidity control in refrigerated facilities. *Proceedings ICEF9*, paper 138, 7-11 March 2004, Montpellier, France
- (97) Love, R.J., Cleland, D.J. (2004) Modelling and optimisation of solid door refrigerated display cabinets for chilled liquid foods, *Proceedings ICEF9*, paper 511, 7-11 March 2004, Montpellier, France
- (98) Nahid, A., Bronlund, J.E., Cleland, D.J., Oldfield, D.J., Philpott, B. (2004) Prediction of thawing and freezing of bulk palletised butter. *Proceedings ICEF9*, paper 668, 7-11 March 2004, Montpellier, France
- (99) Cleland, D.J. (2005) Implications of coil frosting on systems design for low temperature applications. *ASHRAE Transactions*, Vol. **111** (1) 336-345 (paper 4772, ASHRAE Winter Meeting, Orlando, February 2005).
- (100) Phimolsiripol, Y., Siripatrawan, U., Tulyathan, V., Cleland, D.J. (2006) The effect of temperature fluctuations on the quality of frozen bread dough. *Refrigeration Science and Technology Series 2006-1* 559-565 (Proceedings IIR-IRHACE 2006 Conference, Auckland, NZ, 16-18 February, 2006; CD-Rom).
- (101) Sujau, M., Bronlund, J.E., Merts, I., Cleland, D.J. (2006) Effect of defrost frequency on defrost efficiency, defrost heat load and coolstore performance. *Refrigeration Science and Technology Series 2006-1* 525-532 (Proceedings IIR-IRHACE 2006 Conference, Auckland, NZ, 16-18 February, 2006; CD-Rom).
- (102) Kern, R., Hargreaves, J.B., Wang, J.F., Cleland, D.J. (2006) Mathematical model of a stratified hot water storage cylinder for use with a heat pump hot water heater. *Refrigeration Science and Technology Series 2006-1* 483-490 (Proceedings IIR-IRHACE 2006 Conference, Auckland, NZ, 16-18 February, 2006; CD-

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- (103) Nahid, A., Bronlund, J.E., Cleland, D.J., Philpott, B. (2006) Freezing of blocks of butter. *Refrigeration Science and Technology Series 2006-1* 125-132 (Proceedings IIR-IRHACE 2006 Conference, Auckland, NZ, 16-18 February, 2006; CD-Rom).
 - (104) Werner, S.R.L., Vaino, F., Merts, I., Cleland, D.J. (2006) Energy use by the New Zealand cold storage industry. *Refrigeration Science and Technology Series 2006-1* 313-320 (Proceedings IIR-IRHACE 2006 Conference, Auckland, NZ, 16-18 February, 2006; CD-Rom).
 - (105) Wang, J.F., Carson, J.K., North, M.F., Cleland, D.J. (2006) Alternative models to predict the thermal conductivity of frozen foods. *Refrigeration Science and Technology Series 2006-1* 336-343 (Proceedings IIR-IRHACE 2006 Conference, Auckland, NZ, 16-18 February, 2006; CD-Rom).
 - (106) Love, R.J., Cleland, D.J. (2006) Modelling the performance of industrial chilled water systems. *Refrigeration Science and Technology Series 2006-1* 580-587 (Proceedings IIR-IRHACE 2006 Conference, Auckland, NZ, 16-18 February, 2006; CD-Rom).
 - (107) Phimolsiripol, Y., Siripatrawan, U., Tulyathan, V., Cleland, D.J. (2006) Effect of holding time on CO₂ production and rheological properties in yeasted frozen dough. Proceedings 34th International Symposium on Agricultural Engineering "Actual Tasks on Agricultural Engineering", Opatija, Croatia, 21-24 February, 2006, p.587-592 (ISSN 1333-2651).
 - (108) Boulic, M., Phipps, R.A., Cunningham, M., Cleland, D.J., Fjällström, P. (2006) Too dry and too cold for mould germination in New Zealand dwellings? In *Environmental Research Event 2006*. Sydney, New South Wales, Australia, pp. 34-39 (10-13 December, 2006).
 - (109) Love, R.J., Cleland, D.J. (2007) A Model for Self Contained Solid Door Refrigerated Display Cabinets. *ASHRAE Transactions*, Vol. **113** (1) xxx-yyy (paper 0078, ASHRAE Winter Meeting, Dallas, January 2007).
 - (110) Love, R.J., Cleland, D.J. (2007) Tools for energy efficiency in industrial processes, *Proceedings 2nd International Conference on Sustainability Engineering and Science*, NZ Society for Sustainability Engineering and Science, Auckland, 20-23 February, 2007 (CD-Rom).

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