David Torvi, Ph.D., P.Eng.
List of Publications
June, 2025

Refereed Journal Articles:

J34. **Ugo-Okeke, O.**, Torvi, D., "Effects of Incident Heat Flux on Heat Release Rates and Temperatures in Cone Calorimeter Tests of Polyurethane Foam", Fire and Materials, Vol 48, pp. 699-714.

J33. **Asawo, T.**, Torvi, D., Sumner, D., 2023, "Measuring Convection Heat Transfer Coefficients and Thermal Resistance for Protective Fabrics Using a Heated Cylinder in a Wind Tunnel", Journal of the Textile Institute, Vol. 114, pp. 1909-1917

J32. **Ohalele, H.U., Fulton, M.,** Torvi, D.A.**,** Noble, S.D. & Batcheller, J.C., 2022, "Comparison of Techniques for Prediction of Mechanical Strength of Firefighters' Protective Clothing Using Near-Infrared Spectral Data", Fire Technology, Vol. 58, pp. 591-613.

J31. **Ohalele, H.U., Fulton, M.,** Torvi, D.A., Noble, S.D. & Batcheller, J.C., 2022, "Effects of High Heat Flux Exposures on Tensile Strength of Firefighters' Protective Clothing", Fire and Materials, Vol. 46, pp. 719-731.

J30. **Rezazadeh, M.**, **Bespflug, C.J.**, Torvi, D. A., Noble, S.D. and **Fulton, M.,** 2018, "Predicting Mechanical Strength of In-Use Firefighter Protective Clothing using Near-Infrared Spectroscopy", Fire Technology, Vol. 54, pp. 1759-1781.

J29. **Robson, L.D.,** Torvi, D.A., **Obach, M.R.** and Weckman, E.J., 2016, "Effects of Variations in Incident Heat Flux When Using Cone Calorimeter Test Data for Prediction of Full-Scale Heat Release Rates of Polyurethane Foam", Fire and Materials, Vol 40, pp. 89-113.

J28. Torvi, D.A. and Weckman, E.J., 2014, "Guest Editorial: Special Section on Polyurethane Foam Combustion", Fire Technology, Vol. 50, pp. 633-634.

J27. **Ezinwa, J.U., Robson, L.D., Obach, M.R.**, Torvi, D.A. and Weckman, E.J., 2014, "Evaluating Models for Predicting Full-Scale Fire Behaviour of Polyurethane Foam Using Cone Calorimeter Data", Fire Technology, Vol. 50, pp. 693-719.

J26. **Rezazadeh, M.** and Torvi, D.A., 2011, "Assessment of Factors Affecting the Continuing Performance of Firefighters' Protective Clothing: A Literature Review", Fire Technology, Vol. 47, pp. 565-599.

J25. von Baeyer, C.L., Torvi, D., **Hemingson, H., Beriault, D.**, 2011, "Water Circulation and Turbulence in the Cold Pressor Task: Unexplored Sources of Variance Among Experimental Pain Laboratories", Pediatric Pain Letter, Vol. 13, pp. 13-16.

J24. **Fauchoux, M.**, **Bansal, M.**, **Talukdar, P.**, Simonson, C.J. and Torvi, D.A., 2010, "Testing and Modelling of a Novel Ceiling Panel for Maintaining Space Relative Humidity by Moisture Transfer", International Journal of Heat and Mass Transfer, Vol. 53, 3961-3968.

J23. **Mettananda, C.V.R.**, Torvi, D.A. and Crown, E.M., 2010, "Characterization of the Combustion Process of Flame Resistant Thermal Protective Textiles in the Presence of Oily Contaminants", Textile Research Journal, Vol. 80, pp. 917-934.

J22. **Talukdar, P.**, Torvi, D.A., Simonson, C.J. and **Sawcyn, C.M.J.**, 2010, "Coupled CFD and Radiation Simulation of Air Gaps in Bench Top Protective Fabric Tests", International Journal of Heat and Mass Transfer, Vol. 53, pp. 526-539.

J21. **Fauchoux, M.T.**, Simonson, C.J. and Torvi, D.A., 2009, "The Effect of Energy Recovery on Indoor Relative Humidity, Energy Consumption and Economics of a School", ASHRAE Transactions, Vol. 115, No. 2, pp. 519-530.

J20. **Fauchoux, M.**, Simonson, C.J. and Torvi, D.A., 2009, "Tests of a Novel Ceiling Panel for Maintaining Space Relative Humidity by Moisture Transfer from an Aqueous Salt Solution", Journal of the ASTM International, Vol. 6, No. 4, Paper JAI102034 (10 pages).

J19. **Sawcyn, C.M.J.** and Torvi, D.A., 2009, "Improving Heat Transfer Models of Air Gaps in Bench Top Tests of Thermal Protective Fabrics", Textile Research Journal, Vol. 79, pp. 632-644.

J18. **Sawcyn, C.M.J.** and Torvi, D.A., 2009, "Experimental Study of the Heat Transfer in Air Spaces Between Protective Fabrics and Sensors in Protective Clothing Tests", International Journal of

Transport Phenomena, Vol. 11, pp. 115-125.

J17. **Enninful, E.K.** and Torvi, D.A., 2008, "A Variable Property Heat Transfer Model for Predicting Soil Temperature Profiles During Simulated Wildland Fire Conditions", International Journal of Wildland Fire, Vol. 17, pp. 205-213.

J16. **Fauchoux, M.**, Simonson, C.J. and Torvi, D.A., 2007, "The Effect of Energy Recovery of Perceived Air Quality, Energy Consumption and Economics of an Office Building", ASHRAE Transactions, Vol. 113, No. 2, pp. 437-449.

J15. **Cavanagh, J.M.**, Torvi, D.A., Gabriel, K.S. and Ruff, G.A., 2006, "Test Method for Evaluating Fabric Flammability and Predicted Skin Burn Injury in Microgravity", Microgravity – Science and Technology, Vol. 18, Issue 2, pp. 14-26.

J14. Torvi, D.A. and **Threlfall, T.G.**, 2006, "Heat Transfer Model of Flame Resistant Fabrics During Cooling After Exposure to Fire", Fire Technology, Vol. 42, pp. 27-48.

J13. Benichou, N., Kashef, A.H., Reid, I., Hadjisophocleous, G.V., Torvi, D.A. and Morinville, G., 2005, "FIERAsystem: A Fire Risk Assessment Tool to Evaluate Fire Safety in Industrial Buildings and Large Spaces**",** Journal of Fire Protection Engineering, Vol. 15, pp. 145-172.

J12. Torvi, D.A., 2005, "Effects of Thermal Properties on Skin Burn Predictions in Longer Duration Protective Clothing Tests", Journal of the American Society for Testing and Materials (ASTM) International, Vol. 2, No. 1, January, Paper Number JAI12115 (13 pages).

J11.**Wan, J.W.**, Zhang, W.J., Torvi, D., Wu, F.X. and Li, H.X., 2004, "An Analysis of Two-Heater Active Thermal Control Technology for Device Class Testing", IEEE Transactions on Components and Packaging Technologies, Vol. 27, pp. 577-584.

J10. **Thorpe, P.A.** and Torvi, D.A., 2004, "Development of Non-Destructive Test Methods for Assessing Effects of Thermal Exposures on Fire Fighters' Turnout Gear", Journal of the American Society for Testing and Materials (ASTM) International, Vol. 1, No. 6, June, Paper Number JAI12119 (14 pages).

J9. Torvi, D.A., 2003, "Fire Protection in Agricultural Facilities: A Review of Research, Resources and Practices", Journal of Fire Protection Engineering, Vol. 13, pp. 185-215.

J8. Torvi, D.A., Hadjisophocleous, G.V., **Guenther, M.** and Thomas, G., 2001, "Estimating Water Requirements for Firefighting Operations Using FIERAsystem" Fire Technology, Vol. 37, pp. 235-262.

J7. Torvi, D.A. and Dale, J.D., 2000, "Numerical Models for Use in the Design of Protective Clothing for Firefighters", Journal of Industrial Textiles, Vol. 29, pp. 273-286 (previously published in Proceedings, 3rd International Conference on Fire Research and Engineering, October 4-7, 1999, Chicago, IL, pp. 325-336, Society of Fire Protection Engineers).

J6. Torvi, D.A. and Dale, J.D., 1999, "Heat Transfer in Thin Fibrous Materials Under High Heat Flux", Fire Technology, Vol. 35, pp. 210-231.

J5. Torvi, D.A., Dale, J.D. and Faulkner, B., 1999, "Influence of Air Gaps on Bench Top Test Results of Flame Resistant Fabrics", Journal of Fire Protection Engineering, Vol. 10, pp. 1-12.

J4. Torvi, D.A. and Hadjisophocleous, G.V., 1999, "Research in Protective Clothing for Fire Fighters – State of the Art and Future Directions", Fire Technology, Vol. 35, pp. 111-130.

J3. Torvi, D.A. and Dale, J.D., 1998, "Effects of Variations in Thermal Properties on the Performance of Flame Resistant Fabrics for Flash Fires", Textile Research Journal, Vol. 68, pp. 787-796.

J2. Torvi, D.A. and Dale, J.D., 1994, "A Finite Element Model of Skin Subjected to a Flash Fire", ASME Journal of Biomechanical Engineering, Vol. 116, pp. 250-255.

J1. Torvi, D.A., 1994, "Engineering Graduate Teaching Assistant Instructional Programs: Training Tomorrow's Faculty Members", American Society for Engineering Education (ASEE) Journal of Engineering Education, Vol. 83, pp. 376-381.

Book Chapters:

BC3. Torvi, D.A. (in press), "Effects of Thermal Radiation on People: Predicting First and Second Degree Skin Burns", Chapter 3-25 in SFPE Handbook of Fire Protection Engineering, 6th edition, Springer.
BC2. **Fulton, M.**, **Rezazadeh, M.** and Torvi, D., 2018, "Tests for Evaluating Textile Aging", in P. Dolez, O. Vermeersch, V. Izquierdo (eds.), Advanced Characterization and Testing of Textiles, Elsevier, Duxford, UK, pp. 93-125.
BC1. **Fauchoux, M.T.**, Simonson, C.J., Torvi, D.A., **Eldeeb, R.M.** and **Ojanen, T.**, 2014, "Cost Effective and Energy Efficient Control of Indoor Humidity in Buildings with Hygroscopic Building Materials and Desiccants in the HVAC System: in JMPQ Delgado (Ed.), Drying and Wetting of Building Materials and Components Building Pathology and Rehabilitation, Vol. 4, Springer, New York, NY, pp.175-196.

Refereed Conference Proceedings (review of complete paper):

P23. Torvi, D., 2021, "Non-Medical Masks: Opportunities for Standards Education and Online Design Projects", 2021 Canadian Engineering Education Association (CEEA-ACEG21) Conference, Online, June 20-23, paper 24 (7 pages).
P22. Torvi, D., Noble, S., Bitner, D., Fauchoux, M., Peace, R., Retzlaff, R., Oguocha, I. & Reitenbach, H., 2021, "A Lab Task Group for Review and Continuous Improvement of Third and Fourth-Year Laboratory Courses", 2021 Canadian Engineering Education Association (CEEA-ACEG21) Conference, Online, June 20-23, paper 17 (8 pages).
P21. **Bespflug, C.J.**, Torvi, D.A., Noble, S.D., **Fulton, M.**, **Vanderschaaf, C.J.**, and Batcheller, J., 2020, "The Impact of Soiling, Moisture, Abrasion and UV Exposure on NIR Evaluation of In-use Firefighter Protective Clothing", Performance of Protective Clothing: 11th Volume, ASTM STP 1624, Denver, CO, June 6-7, 2019, pp. 40-63.
P20. Torvi, D., **Rezazadeh, M.** and **Bespflug, C.**, 2016, "Effects of Convective and Radiative Heat Sources on Thermal Response of Single and Multiple-Layer Protective Fabrics", Performance of Protective Clothing: 10th Volume, ASTM STP 1593. San Antonio, TX, January 28-29, pp. 131-158.
P19. **Fauchoux, M.**, Simonson, C.J. and Torvi, D.A., 2014, "Performance Results of a Prototype Ceiling Panel with Simultaneous Heat and Moisture Transfer", 10th Nordic Symposium on Building Physics, Lund, Sweden, June 15-19, pp. 386-393.
P18. Retzlaff, R., Burton, R. and Torvi, D., 2014, "Teaching Engineering Accountability through Physical Prototyping", Canadian Engineering Education Association Annual Conference, Canmore, AB, June 9-11, paper 92.
P17. Torvi, D. and Weckman, E., 2014, "Delivery of a Graduate Course in Fire Performance Testing Using Videoconference Technology", Canadian Engineering Education Association Annual Conference, Canmore, AB, June 9-11, paper 16.
P16. **Robson, L.D.**, Torvi, D.A., **Obach, M.R.** and Weckman, E.J., 2014, "Effects of Thickness and Ignition Location on Flame Spread Rates in Furniture Calorimeter Tests of Polyurethane Foam", 11th International Symposium on Fire Safety Science, Canterbury, New Zealand, February 10-14, 2014, paper 31.
P15. **Aire, C.T.,** Torvi, D. A. and Weckman, E.J., 2013, "Heat Transfer in Cone Calorimeter Tests of Generic Wall Assemblies", ASME International Mechanical Engineering Conference and Exposition, San Diego, CA, November 18-21, paper IMECE2013-63981.
P14. **Aire, C.T.** and Torvi, D. A., 2013, "Effects of Cone Calorimeter Specimen Orientation on Heat Release Rate Measurements", Canadian Congress of Applied Mechanics (CANCAM), Saskatoon, SK, June 2-6, pp. HT1-4.
P13. **Fauchoux, M.T.**, Simonson, C.J. and Torvi, D.A., "Total Heat and Mass Fluxes From a Novel Ceiling Panel With Simultaneous Heat And Moisture Transfer", Canadian Congress of Applied Mechanics (CANCAM), Saskatoon, SK, June 2-6, pp. HV31-34.

P12. **Rezazadeh, M.** and Torvi, D.A., "The Effect of Thermal Exposure on Moisture Barrier Performance", Canadian Congress of Applied Mechanics (CANCAM), Saskatoon, SK, June 2-6, pp. HT9-12.

P11. **Rezazadeh, M.** and Torvi, D., 2011, "Non-Destructive Test Methods to Assess the Level of Damage to Firefighters' Protective Clothing", Performance of Protective Clothing: 9th Volume, ASTM STP 1544, Anaheim, CA, June 16-17, pp. 202-226.

P10. **Fauchoux, M.**, Simonson, C., Torvi, D. and **Talukhar, P.**, 2011, "CFD Modelling with Buoyancy Effects for a Heat and Moisture Transfer Ceiling Panel", ASME/JSME 8th Thermal Engineering Joint Conference (AJTEC2011), Honolulu, HI, March 13-17, paper AJTEC2011-44121.

P9. **Fauchoux, M.**, Simonson, C.J. and Torvi, D.A., 2010, "Flow Visualization of Airflow Through a Rectangular Duct with Combined Heat and Mass Transfer", 14th International Heat Transfer Conference, Washington, DC, August 8-13, paper number IHTC14-22881.

P8. **Fauchoux, M.**, Simonson, C.J. and Torvi, D.A., 2008, "Investigation of a Novel Ceiling Panel for Heat and Moisture Control in Buildings", 8th Nordic Symposium on Building Physics, Copenhagen, Denmark, June 16-18, pp. 1269-1276.

P7. **Sawcyn, C.M.J.** and Torvi, D.A., 2002, "Flow Visualization in Air Spaces Between Protective Fabrics and Sensors in Protective Clothing Tests", 13th International Symposium on Transport Phenomena, Victoria, BC, July 14-18, pp. 197-202.

P6. Torvi, D.A., 2002, "Teaching Fire Protection Engineering Within the Mechanical Engineering Curriculum", American Society for Engineering Education Annual Conference, Montreal, QC, June 17-19, paper 2002-70 (11 pages).

P5. Torvi, D.A., Hadjisophocleous, G.V., and Hum, J., 2000, "A New Method for Estimating the Effects of Thermal Radiation from Fires on Building Occupants", American Society of Mechanical Engineers (ASME) 2000 International Mechanical Engineering Congress and Exposition, Orlando, FL, November 5-10, HTD-Vol. 366-5, pp. 65-72.

P4. Hadjisophocleous, G.V., Torvi, D.A., Fu, Z. and Yager, B., 1999, "FIERAsystem: A Computer Model for Fire Evaluation and Risk Assessment", American Society of Mechanical Engineers (ASME) Offshore Mechanics and Arctic Engineering (OMAE) 18th International Conference, St. John's, NF, July 11-16, Paper Number OMAE99-6016.

P3. Torvi, D.A. and Hadjisophocleous, G.V., 1999, "Development of Methods to Evaluate the Useful Lifetime of Firefighters' Protective Clothing", Performance of Protective Clothing: Issues and Priorities for the 21st Century, ASTM STP 1386, Seattle, WA, June 29-30, pp. 117-129.

P2. Sultan, M.A., Denham, M. and Torvi, D.A., 1997, "Fire Exposure in Standard Fire Resistance Test Furnaces", National Heat Transfer Conference, Baltimore, MD, August 10-12, Vol. 3, HTD-Vol. 341, pp. 37-49.

P1. Torvi, D.A., Dale, J.D., Ackerman, M.Y. and Crown, E.M., 1996, "A Study of New and Existing Bench Top Tests for Evaluating Fabrics for Flash Fire Protective Clothing", Performance of Protective Clothing: 6th Volume, ASTM STP 1273, Orlando, FL, June 18-19, pp. 108-125.

Theses:

T2. Torvi, David Andrew, 1997, Heat Transfer in Thin Fibrous Materials Under High Heat Flux Conditions, Ph.D. Thesis, University of Alberta.

T1. Torvi, David Andrew, 1992, A Finite Element Model of Heat Transfer in Skin Subjected to a Flash Fire, M.Sc. Thesis, University of Alberta.

Non-Refereed Conference Proceedings (review of abstract only):

C67. Torvi, D., **Epp, D.**, Noble, S., Batcheller, J., 2025, "Development of Models of Thermal Response and Degradation of Protective Fabrics", Combustion Institute Canadian Section (CICS) Spring Technical Meeting, Calgary, AB, May 13-15 (6 pages).

C66. **Epp, A.,** Torvi, D., Noble, S., Batcheller, J., 2023, "Correlating the Impact of Radiative Exposures on the Mechanical Properties of Fire-Resistant Fabrics", Combustion Institute Canadian Section Spring Technical Meeting, Edmonton, AB, May 15-18 (6 pages).

C65. **Ohalele, H.,** Torvi, D. and Noble, S., 2019, "Use of NIR Transmission Measurements to Evaluate In-Use Performance of Firefighters' Protective Clothing", Combustion Institute Canadian Section Spring Technical Meeting, Kelowna, BC, May 13-16 (5 pages).

C64. **Ugo-Okeke, O.** and Torvi, D., 2018, "Comparison of Predicted and Measured Temperatures in Public Fire Demonstrations", Combustion Institute Canadian Section Spring Technical Meeting, Toronto, ON, May 15-17 (6 pages).

C63. **Fulton, M.,** Fauchoux, M., Torvi, D. and **Beitel, A.,** 2017, "Heat Flux Measurements During a Full-Scale House Fire", Combustion Institute Canadian Section Spring Technical Meeting, Montreal, QC, May 16-18 (6 pages).

C62. **Fulton, M.,** Fauchoux, M., Torvi, D. and **Beitel, A.**, 2017, "Comparison of Temperatures Measured During Sprinklered and Unsprinklered Public Fire Demonstrations", Combustion Institute Canadian Section Spring Technical Meeting, Montreal, QC, May 16-18, (6 pages).

C61. **Fulton, M.** and Torvi, D.**,** 2016, "Evaluation of Ceiling Temperatures Predicted Using Furniture Calorimeter Fire Test Data". Combustion Institute Canadian Section Spring Technical Meeting, Waterloo, ON, May 10-12, pp. ID-23:1-6.

C60. **Aire, C.**, DiDomizio, M., Torvi, D.**,** Weckman, E. and Roos, R., 2015, "Heat Transfer in Small-Scale Models of Exterior Wall Designs", 14th International Fire and Materials Conference, San Francisco, CA, February 2-4, pp. 652-666.

C59. **Vanderschaaf, C.**, Batcheller, J. and Torvi, D., 2015, Combined Effects of Laundering and Abrasion on the Protective Performance of Flame Resistant Fabrics, Combustion Institute Canadian Section Spring Technical Meeting, Saskatoon, SK, May 12-14, pp. FS6-FS11.

C58. Torvi, D.A., 2014, "Evaluating Fire Performance of Protective Clothing: From Initial Design Tools to Non-destructive Tests of In-Use Garments", Combustion Institute Canadian Section (CICS) Spring Technical Meeting, Windsor, ON, May 13-15, pp. 1-6 (invited).

C57. **Aire, C.T.**, Torvi, D.A. and Weckman, E.J., "Heat Transfer Models for Evaluating Scale Models of Generic Wall Assemblies", Combustion Institute Canadian Section (CICS) Spring Technical Meeting, Windsor, ON, May 13-15, pp. 322-327.

C56. **Rezazadeh, M.** and Torvi, D.A., 2013, "Predicting Mechanical Strength of In-Use Firefighters' Protective Clothing Using Infrared Spectroscopy", Combustion Institute Canadian Section Spring Technical Meeting, Quebec, QC, May 14-16, pp. 250-255.

C55. **Rezazadeh, M.** and Torvi, D.A., 2012, "Discolouration as an Indicator of Mechanical Strength of Firefighters' Protective Clothing", Combustion Institute Canadian Section Spring Technical Meeting, Toronto, ON, May 14-16, pp. 160-165.

C54. **Rezazadeh, M.** and Torvi, D.A., 2011, "Effect of Heat Transfer Mode on the Thermal Performance of Firefighters' Protective Clothing", Combustion Institute Canadian Section Spring Technical Meeting, Winnipeg, MB, May 9-11, pp. 390-395.

C53. **Robson, L.D.**, **Obach, M.R.**, Torvi, D.A. and Weckman, E.J., 2011, "Effects of Incident Heat Flux on Cone Calorimeter Test Results of Polyurethane Foam", Combustion Institute Canadian Section Spring Technical Meeting, Winnipeg, MB, May 9-11, pp. 384-389.

C52. **Robson, L.D., Obach, M.R., Ezinwa, J.U.**, Torvi, D.A. and Weckman, E.J., 2011, "Effects of Polyurethane Foam Thickness on Flame Spread and Heat Release Rates Measured in Cone and Furniture Calorimeter Tests", 12th International Fire and Materials Conference, San Francisco, CA, January 31 - February 2, pp. 309-320.

C51. **Obach, M.**, Torvi, D.A., Sumner, D. and Bergstrom, D.J., 2010, "Salt Water Modeling of a Wildland Fire's Convection Column", Combustion Institute Canadian Section Spring Technical Meeting, Ottawa, ON, May 9-12, pp. 190 - 195.

C50. **Rezazadeh, M.** and Torvi, D.A., 2010, "Effect of Multi-Stage Thermal Ageing on the Thermal Response of Thermal Protective Fabrics", Combustion Institute Canadian Section Spring Technical Meeting, Ottawa, ON, May 9-12, pp. 208 - 213.

C49. **Robson, L.D., Obach, M.R., Ezinwa, J.U.**, Torvi, D.A. and Weckman, E.J., 2010, "Fire Modeling of Polyurethane Foams Using Convolution Integral Formulation", Combustion Institute Canadian Section Spring Technical Meeting, Ottawa, ON, May 9-12, pp. 196 - 201.

C48. **Ezinwa, J.U.**, Torvi, D.A. and Weckman, E.J., 2009, "Full-Scale Fire Modeling of Polyurethane Foams Using Cone Calorimeter Data", Combustion Institute Canadian Section Spring Technical Meeting, Montreal, QC, May 11-13, pp. 43-48.

C47. **Olabode, D.**, Weckman, E., Epling, B. and Torvi, D., 2009, "Observations of Burning Characteristics of Laminated Polyurethane Foams", Combustion Institute Canadian Section Spring Technical Meeting, Montreal, QC, May 11-13, pp. 37-42.

C46. **Ghazy, A.**, Torvi, D.A. and Bergstrom, D.J., 2009, "Numerical Simulation of Transient Heat Transfer in Firefighters' Protective Clothing", CFD Society of Canada Annual Conference, Ottawa, ON, May 3-5 (8 pages)**.**

C45. **Ezinwa, J.U., Rigg, J.**, Torvi, D.A. and Weckman, E.J., 2009, "Effects of Ignition Location on Flame Spread and Heat Release Rates in Furniture Calorimeter Tests of Polyurethane Foams", 11th International Fire and Materials Conference, San Francisco, CA, January 26-28, pp. 645-656.

C44. **Olabode, D., Rigg, J.**, Weckman, E.J., Epling, B. and Torvi, D.A., 2009, "Preliminary Furniture Calorimeter Tests of Laminated Polyurethane Foams", 11th International Fire and Materials Conference, San Francisco, CA, January 26-28 (14 pages).

C43. **Mettananda, C.V.R.**, Crown, E.M. and Torvi, D.A., 2008, "Characterization of the Combustion Process of Flame Resistant Thermal Protective Textiles in the Presence of Oily Contaminants: Calorimetery", Annual Conference of the International Textile and Apparel Association, Schaumburg, IL, November 5-8 (4 pages).

C42. **Fauchoux, M.**, Simonson, C.J. and Torvi, D.A., 2008, "Application of Hygroscopic Materials in HVAC Systems", Proceedings of the IEA (International Energy Agency) ECBCS Annex 41 Closing Seminar, Lyngby, Denmark, June 19, pp. 129-140 (invited).

C41. Weckman, E.J. and Torvi, D.A., 2008, "The Emerging Field of Fire Safety Engineering: Partnerships in Research and Education", Combustion Institute Canadian Section Spring Technical Meeting, Toronto, ON, May 12-14, pg. 4 (invited).

C40. **Ghazy, A.**, Torvi, D.A. and Bergstrom, D.J., 2008, "Protective Fabric Temperatures During Radiant Exposures in Cone Calorimeter", Combustion Institute Canadian Section Spring Technical Meeting, Toronto, ON, May 12-14, pp. 255-260.

C39. Simonson, C.J.*, **Fauchoux, M.T.**, Torvi, D.A. and **Ojanen, T.**, 2008, "Cost Effective and Energy Efficient Control of Indoor Humidity in Buildings with Hygroscopic Materials in the Building Envelope and HVAC Systems", 6th International Engineering Conference, Sharm El-Sheikh, Egypt March 20-23 (10 pages).

C38. **Fauchoux, M.**, Simonson, C.J. and Torvi, D.A., 2007, "Simulation of Hygroscopic Materials in the HVAC system of an Office Building", 8th Nordic Symposium on Building Physics, Porto, Portugal, October 22-24, Annex 41, paper A41-T4-C-07-4 (10 pages).

C37. Torvi, D.A., 2007, "Using Pine Wood Derby Cars to Introduce Mechanical Engineering to Students in a First Year General Engineering Design Course", 4th Canadian Design Engineering Network (CDEN)/Canadian Congress on Engineering Education (C^2E^2) Conference, Winnipeg, MB July 22-24, (6 pages).

C36. **Hurd. M.**, Torvi, D.A., Weckman, E. and **Enninful, E.**, 2007, "Small and Full-Scale Fire Testing of Polyurethane Foams for Mattresses", Combustion Institute Canadian Section Spring Technical Meeting, Banff, AB, May 14-16 (Paper No. F1, 6 pages).

C35. **Hurd, M.**, Torvi, D., Weckman, E. and **Enninful, E.,** 2007, "Effects of Polyurethane Mattress Foam Properties and Geometry on Small and Large-Scale Fire Test Results", 10th International Fire and Materials Conference, San Francisco, CA, January 29-31 (13 pages).

C34. Torvi, D., 2006, "Development of Engineering Tools for Evaluating the Performance of Firefighters' Protective Clothing", Society of Fire Protection Engineers Symposia: Partners for

Protection: Fire Protection Engineers and the Fire Service, Ellicott City, MD, October 17-18, pp. 27-32.

C33. Torvi, D., 2006, "Developing Partnerships with the Fire Service to Enhance Fire Protection Engineering Education Opportunities", 3rd Canadian Design Engineering Network (CDEN) International Design Conference on Education, Innovation and Practice in Engineering Design, Toronto, ON, July 24-26, pp. 214-219.

C32. **Enninful, E.K.** and Torvi, D., 2006, "Heat Transfer in Forest Floor Soil Under Simulated Wildland Fire Conditions", Combustion Institute Canadian Section Spring Technical Meeting, Waterloo, ON, May 14-17, (Paper No. A3, 6 pages).

C31. **Threlfall, T.G.** and Torvi, D. 2006, "Comparison of Predicted and Measured Temperatures in Fire Tests of Mattresses", Combustion Institute Canadian Section Spring Technical Meeting, Waterloo, ON, May 14-17 (Paper No. A2, 6 pages).

C30. **Cavanagh, J.M.**, Torvi, D.A. and Gabriel, K.S., 2005, "Effects of Inclination on Fabric Flammability and Expected Skin Burn", Combustion Institute Canadian Section Spring Technical Meeting, Halifax, NS, May 15-18, pp. 54-59.

C29. **Enninful, E.K.** and Torvi, D.A., 2005, "Effects of Moisture on Smoke Production and Heat Release Rates of Vegetation", Combustion Institute Canadian Section Spring Technical Meeting, Halifax, NS, May 15-18, pp. 273-278.

C28. **Threlfall, T.G.** and Torvi, D.A., 2005, "Temperature Measurements in Full-Scale Fire Tests of Mattresses", Combustion Institute Canadian Section Spring Technical Meeting, Halifax, NS, May 15-18, pp. 66-71.

C27. **Cavanagh, J.M.**, Torvi, D.A., Gabriel, K.S. and Ruff, G.A., 2004, "Tests of Flammability of Cotton Fabrics and Expected Skin Burns in Microgravity", NASA Workshop on Strategic Research to Enable NASA's Exploration Missions, Cleveland, OH, June 22-23, NASA/CP-2004-213205/ VOL2, pp. 39-51.

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