Curriculum Vitae - **Jon A. Arnot, Ph.D.**
288 Queensdale Avenue • Toronto, ON, Canada • M4C 2B4
Phone: 1-647-225-3771 • jon@arnotresearch.com

CURRENT POSITIONS

President — 2010 – present
ARC Arnot Research & Consulting (www.arnotresearch.com)
Adjunct Professor, Department of Physical & Environmental Sciences — 2012 – present
University of Toronto Scarborough
Adjunct Professor, Department of Pharmacology and Toxicology — 2014 – present
University of Toronto

POSTDOCTORAL EXPERIENCE

University of Toronto Scarborough — Toronto, ON
Postdoctoral Research Scientist — 2011 - 2012
NSERC Postdoctoral Fellow — 2009 - 2010
Supervisor: Dr. Frank Wania

EDUCATION

Trent University — Peterborough, ON
Doctor of Philosophy in Environmental and Life Sciences — 2008
Thesis: Assessing the Exposure, Hazard and Risk of Organic Chemicals
Supervisor: Dr. Don Mackay

Simon Fraser University — Burnaby, BC
Master of Environmental Toxicology — 2003
Thesis: Modelling the Bioaccumulation of Organic Chemicals in Aquatic Ecosystems
Supervisor: Dr. Frank Gobas

University of Alberta — Edmonton, AB
Bachelor of Science Specializing in Cell Biotechnology — 1991

RELEVANT PROFESSIONAL EXPERIENCE

More than 20 years of research experience in the development, application and evaluation of methods and models to assess the exposure, hazard, and risk of chemicals to humans and the environment. More than 100 co-authored peer-reviewed publications and more than 90 technical reports for government agencies and the chemical industry.

Coordinator or participant in various workshops and training sessions with competent authorities: Bioaccumulation Assessment (Society of Environmental Toxicology and Chemistry Short Course; European Chemicals Bureau, Joint Research Commission; European Food Safety Authority; European Chemical Industry Council, European Chemicals Agency), Long-Range Chemical Transport Assessment (Pesticide Management Regulatory Agency, Health Canada), Bioaccumulation and Human Exposure Assessment Models, Physical-Chemical Properties (Health Canada and Environment Canada), Exposure and Risk Assessment (NATO Advanced Study Institute, Sofia, Bulgaria).

Committee member on Incorporating 21st Century Science into Risk-Based Evaluations: A Report for the United States National Academies of Sciences, Engineering, and Medicine (2015-2016) and Canada's Chemicals Management Plan Scientific Committee (2017-2021)

REFEREED PUBLICATIONS (106)

Brown TN, Armitage JM, Sangion A, **Arnot JA**. **2024**. Improved prediction of PFAS partitioning with PPLFERs and QSPRs. *Environ Sci: Processes Impacts* Accepted DOI

Brown TN, Sangion A, **Arnot JA**. **2024**. Identifying uncertainty in physical–chemical property estimation with IFSQSAR. *J Cheminf*, 16:65. DOI

Zhang Z, Wang S, Brown TN, Sangion A, **Arnot JA**, Li L. **2024**. Modeling sorption of environmental organic chemicals from water to soils. *Water Res X* 22:100219. DOI

Zhang Z, Sangion A, Wang S, Gouin T, Brown T, **Arnot JA**, Li L. **2024**. Chemical space covered by applicability domains of quantitative structure-property relationships and semiempirical relationships in chemical assessments. *Environ Sci Technol* 58(7): 3386-3398 DOI

Zaleski RT, Ahrens A, **Arnot JA**, Becker RA, Bonnell M, Collins S, DeLeo P, Egeghy P, Embry M, Gouin T, Isaacs K, Jensen E. **2023**. Quantitative structure use relationships: Highlights from a technical summit meeting. *Regul Toxicol Pharmacol*, 105516. DOI

Zhang Z, Sangion A, Wang S, Gouin T, Brown T, **Arnot JA**, Li L. **2023**. Hazard vs. exposure: Does it make a difference in identifying chemicals with persistence and mobility concerns? *Water Res*, 120610. DOI

McLachlan MS, Ebert A, Armitage JM, **Arnot JA**, Droge STJ. **2023**. A framework for understanding the bioconcentration of surfactants in fish. *Environ Sci: Processes Impacts* 25(7): 1238-1251 DOI

Arnot JA, Toose L, Armitage JM, Embry M, Sangion A, Hughes L. **2023**. A weight of evidence approach for bioaccumulation assessment. *Integr Environ Assess Manag*. 19(5): 1235-1253 DOI

Saunders LJ, Nichols JW, **Arnot JA**, Armitage JM, Wania, F. **2023**. An amended in vitro–in vivo extrapolation model that accounts for first pass clearance effects on chemical bioaccumulation in fish. *Environ Sci: Processes Impacts* 25(4): 741-754 DOI

Arnot JA, Toose L, Armitage JM, Sangion A, Looky A, Brown TN, Li L, Becker RA. **2022**. Developing an internal threshold of toxicological concern (iTTC). *J Expo Sci Environ Epidemiol* 32: 877–884 DOI

Bischof I, **Arnot JA**, Jürling H, Knipschild G, Schlechtriem C, Schauerte A, Segner H. **2022**. In vitro biotransformation assays using fish liver cells: Comparing rainbow trout and carp hepatocytes. *Front Toxicol* 4: 1021880 DOI

Zare Jeddi M, Hopf NB, Louro H, Viegas S, Galea KS, Pasanen-Kase R, Santonen T, Mustieles V, Fernandez MF, Verhagen H, Bopp SK, Philippe Antignac J, David A, Mol H, Barouki R, Audouze K, Duca R-C, Fantke P, Scheepers P, Ghosh M, Van Nieuwenhuyse A, Lobo Vicente J, Trier X, Rambaud L, Fillol C, Denys S, Conrad A, Kolossa-Gehring M, Paini A, **Arnot, J**, Schulze F, Jones K, Sepai O, Ali I, Brennan L, Benfenati E, Cubadda F, Mantovani A, Bartonova A, Connolly A, Slobodnik J, Bruinen de Bruin Y, van Klaveren J, Palmen N, Dirven H, Husøy T, Thomsen C, Virgolino A, Röösli M, Gant T, von Goetz N, Bessems J. **2022**. Developing human biomonitoring as a 21st Century toolbox within the European exposure science strategy 2022−2030. *Environ Int* 168:107476. DOI

Bloch S, **Arnot JA**, Kramer NI, Armitage JM, Verner M-A. **2022**. Dynamic mass balance modeling for chemical distribution over time in in vitro systems with repeated dosing. *Front Toxicol* 4: 911128 DOI

Li L, Zhang Z, Men Y, Baskaran S, Sangion A, Wang S, **Arnot JA**, Wania F. **2022**. Retrieval, selection, and evaluation of chemical property data for assessments of chemical emissions, fate, hazard, exposure, and risks. *ACS Environmental Au* 2(5): 376-395 DOI

Ribbenstedt A, Armitage JM, Günther F, **Arnot JA**, Droge STJ, McLachlan MS. **2022**. In vivo bioconcentration of 10 anionic surfactants in rainbow trout explained by in vitro data on partitioning and S9 clearance. *Environ Sci Technol* 56(10): 6305-6314. DOI

Berthiaume A, **Arnot JA**, Toose L. **2022.** Risk-based prioritization of organic substances in the Canadian National Pollutant Release Inventory using an evaluative regional-scale multimedia mass balance model. *Integr Environ Assess Manag*. 18(6): 1722-1732 DOI

Li L, Sangion A, Wania F, Armitage JM, Toose L, Hughes L, **Arnot JA**. **2021**. Development and evaluation of a holistic and mechanistic modeling framework for chemical emissions, fate, exposure, and risk. *Environ Health Persp* 129(12): 127006 DOI

Armitage JM, Sangion A, Parmar R, Looky A, **Arnot JA**. **2021**. Update and evaluation of a high-throughput in vitro mass balance distribution model: IV-MBM EQP v2.0. *Toxics Special Issue "Computational Toxicology: Expanding Frontiers in Risk Assessment"* 9(11): 315 DOI

Droge STJ, Scherpenisse P, **Arnot JA**, Armitage JM, McLachlan MS, von der Ohe PC, Hodges G. **2021**. Screening the baseline fish bioconcentration factor of various types of surfactants using phospholipid binding data. *Environ Sci: Processes Impacts* 23(12): 1930-1948 DOI

Droge STJ, Armitage JM, **Arnot JA**, Fitzsimmons PN, Nichols JW. **2021**. Biotransformation potential of cationic surfactants in fish assessed with Rainbow trout liver S9 fractions. *Environ Toxicol Chem* 40(11): 3123-3136. DOI

Kierkegaard A, Sundbom M, Yuan B, Armitage JM, **Arnot JA**, Droge STJ, McLachlan MS. **2021**. Bioconcentration of several series of cationic surfactants in rainbow trout. *Environ Sci Technol* 55(13): 8888-8897. DOI

Armitage JM, Hughes L, Sangion A, **Arnot JA**. **2021**. Development and intercomparison of single and multicompartment physiologically-based toxicokinetic models: Implications for model selection and tiered modeling frameworks. *Environ Int* 154:106557. DOI

Gobas FAPC, Lee Y-S, **Arnot JA**. **2021**. Normalizing the biomagnification factor. *Environ Toxicol Chem* 14(4): 1204-1211. DOI

Armitage JM, Toose L, Camenzuli L, Redman A, Parkerton TF, Saunders D, Wheeler J, Martin A, **Arnot JA**, Vaiopoulou E. **2021**. A critical review and weight of evidence approach for assessing the bioaccumulation of phenanthrene in aquatic environments. *Integr Environ Assess Manag.* 17(5): 911-925. DOI

Li L, Hughes L, **Arnot JA**. **2021**. Addressing uncertainty in mouthing-mediated ingestion of chemicals on indoor surfaces, objects, and dust. *Environ Int* 146: 106266. DOI

Laue H, Hostettler L, Badertscher RP, Jenner KJ, Sanders G, **Arnot JA**, Natsch A. **2020**. Examining uncertainty in in vitro–in vivo extrapolation applied in fish bioconcentration models. *Environ Sci Technol* 54(15): 9483–9494. DOI

Kierkegaard A, Chen CE, Armitage JM, **Arnot JA**, Droge STJ, McLachlan MS. **2020**. Tissue distribution of several series of cationic surfactants in rainbow trout (*Oncorhynchus mykiss*) following exposure via water. *Environ Sci Technol* 54(7): 4190-4199. DOI

Mackay D, Celsie AKD, Parnis JM, **Arnot JA**. **2020**. A perspective on the role of fugacity and activity for evaluating the PBT properties of organic chemicals and providing a multi-media synoptic indicator of environmental contamination. *Environ Sci: Processes Impacts* 22: 518-527. DOI

Li L, Hoang C, **Arnot JA**, Wania F. **2020**. Clarifying temporal trend variability in human biomonitoring of polybrominated diphenyl ethers through mechanistic modeling. *Environ Sci Technol* 54(1): 166-175. DOI

Aylward L, Vilone G, Cowan-Ellsberry C, **Arnot JA**, Westgate JN, O'Mahony C, Hays SM. **2020**. Exposure to selected preservatives in personal care products: Case study comparison of exposure models and observational biomonitoring data. *J Expo Sci Environ Epidemiol* 30(1): 28-41. DOI

Li L, **Arnot JA**, Wania F. **2019**. How are humans exposed to organic chemicals released to indoor air? *Environ Sci Technol* 53(19): 11276-11284. DOI

Brown TN, Armitage JM, **Arnot JA**. **2019**. Application of an iterative fragment selection (IFS) method to estimate entropies of fusion and melting points of organic chemicals. *Mol Inform* 38(8-9). DOI

Quinn C, Armitage JM, Wania F, **Arnot JA**. **2019**. Development and evaluation of a combined bioenergetics and organic chemical mass-balance bioaccumulation model for fish. *Environ Sci Technol* 53(2): 752-759. DOI

Ring CL, **Arnot JA**, Bennett DH, Egeghy PP, Fantke P, Huang L, Isaacs KK, Jolliet O, Phillips KA, Price PS, Shin, H-M, Westgate JN, Setzer RW, Wambaugh JF. **2019**. Consensus modeling of median chemical intake based on predictions of exposure pathways. *Environ Sci Technol* 53(2): 719-732. DOI

Nguyen VK, Colacino JA, **Arnot JA**, Kvasnicka J, Jolliet O. **2019**. Characterization of age-based trends to identify chemical biomarkers of higher levels in children. *Environ Int* 122: 117-129. DOI

Li L, Westgate JN, Hughes L, Zhang X, Givehchi B, Toose L, Armitage JM, Wania F, Egeghy P, **Arnot JA**. **2018**. A model for risk-based screening and prioritization of near-field human exposure to chemicals. *Environ Sci Technol* 52(24): 14235-14244. DOI

Schmidt SN, Armitage JM, **Arnot JA**, Mackay D, Mayer P. **2018**. Linking algal growth inhibition to chemical activity: Excess toxicity below 0.1% of saturation. *Chemosphere* 208: 880-886. DOI

Li L, **Arnot JA**, Wania F. **2018**. Towards a systematic understanding of the dynamic fate of polychlorinated biphenyls in indoor, urban and rural environments. *Environ Int* 117: 57-68. DOI

Li L, **Arnot JA**, Wania F. **2018**. Revisiting the contributions of far- and near-field routes to aggregate human exposure to polychlorinated biphenyls (PCBs). *Environ Sci Technol* 52(12): 6974-6984. DOI

Arnot JA, Pawlowski S, Champ S. **2018**. A weight-of-evidence approach for the bioaccumulation assessment of triclosan in aquatic species. *Sci. Total Environ*. 618: 1506-1518. DOI

Papa E, Sangion A, **Arnot JA**, Gramatica P. **2018**. Development of human biotransformation QSARs and application for PBT assessment refinement. *Food Chem Toxicol* 112: 535-543. DOI

Arnot JA, Mackay D. **2018**. The influence of chemical degradation during dietary exposures to fish on biomagnification factors and bioaccumulation factors. *Environ Sci: Processes Impacts* 20(1): 86 - 97. DOI

Doucette WJ, Shunthirasingham C, Dettenmaier EM, Zaleski RT, Fantke P, **Arnot JA**. **2018**. A review of measured bioaccumulation data in terrestrial plants for organic chemicals: metrics, variability and the need for standardized measurement protocols. *Environ Toxicol Chem* 37(1): 21-33. DOI

Mackay D, Celsie AKD, Parnis JM, McCarty LSM, **Arnot JA**, Powell DE. **2017**. The chemical exposure toxicity space (CETS) model: Relating exposure, concentration, activity, and toxicity onset time. *Environ Toxicol Chem* 36(5): 1389–1396. DOI

Armitage JM, Erickson RJ, Luckenbach T, Ng CA, Prosser RS, **Arnot JA**, Schirmer K, Nichols JW. **2017**. Assessing the bioaccumulation potential of ionizable organic compounds: Current knowledge and research priorities. *Environ Toxicol Chem* 36(4): 882-897. DOI

Chen Y, Hermens JLM, Jonker MTO, **Arnot JA**, Armitage JM, Brown TN, Nichols JW, Fay KA, Droge STJ. **2016**. Which molecular features affect the intrinsic hepatic clearance rate of ionized ionizable organic chemicals in fish? *Environ Sci Technol* 50(23): 12722-12731. DOI

Fantke P, **Arnot JA**, Doucette W. **2016**. Improving plant bioaccumulation science through consistent reporting of experimental data. *J Environ Manage.* 181: 374-384. DOI

Brown TN, Armitage JM, Egeghy PP, Kircanski I, **Arnot JA**. **2016**. Dermal permeation data and models for the prioritization and screening-level exposure assessment of organic chemicals. *Environ Int* 94: 424-435. DOI

Binnington MJ, Curren MS, Quinn CL, Armitage JM, **Arnot JA,** Chan HM, Wania, F. **2016**. Mechanistic polychlorinated biphenyl exposure modeling of mothers in the Canadian Arctic: the challenge of reliably establishing dietary composition. *Environ Int* 92–93: 256-268. DOI

Mackay D, Celsie AKD, **Arnot JA**, Powell DE. **2016**. Processes influencing chemical biomagnification and trophic magnification factors in aquatic ecosystems: Implications for chemical hazard and risk assessment. *Chemosphere* 154: 99-108. DOI

Thomas P, Mackay D, Mayer P, **Arnot J**, Galay Burgos M. **2016**. Response to Comment on "Application of the Activity Framework for Assessing Aquatic Ecotoxicology Data for Organic Chemicals". *Environ Sci Technol* 50(7): 4141-4142. DOI

Kim J, Gobas FAPC, **Arnot JA**, Powell DE, Seston RM, Woodburn KB. **2016**. Evaluating the roles of biotransformation, spatial concentration differences, organism home range, and field sampling design on trophic magnification factors. *Sci Total Environ* 551-552: 438-451. DOI

Celsie A, Mackay D, Parnis JM, **Arnot JA**. **2016**. A fugacity-based toxicokinetic model for narcotic organic chemicals in fish. *Environ Toxicol Chem* 35(5): 1257-1267. DOI

Gobas FAPC, Burkhard L, Doucette W, Sappington K, Verbruggen E, Hope B, Bonnell M, **Arnot JA**, Tarazona J. **2016**. Review of existing terrestrial bioaccumulation models and terrestrial bioaccumulation modeling needs for organic chemicals. *Integr Environ Assess Manag* 12(11): 123-134. DOI

Xiao R, **Arnot JA**, MacLeod M. **2015**. Towards an improved understanding of processes controlling absorption efficiency and biomagnification of organic chemicals by fish. *Chemosphere* 138: 89–95. DOI

Thomas PC, Dawick J, Lampi MA, Lemaire P, Presow S, van Egmond R, **Arnot JA**, Mackay D, Mayer P, Galay Burgos M. **2015**. Application of the activity framework for assessing aquatic ecotoxicology data for organic chemicals. *Environ Sci Technol* 49(20): 12289-12296. DOI

Shin H-M, Ernstoff A, **Arnot JA**, Wetmore B, Csiszar S, Fantke P, Zhang X, McKone T, Jolliet O, Bennett D. **2015**. Risk-based high-throughput chemical screening and prioritization using exposure models and in vitro bioactivity assays. *Environ Sci Technol* 49(11): 6760-71. DOI

Arnot JA, Quinn CL. **2015.** Development and evaluation of a database of dietary bioaccumulation test data for organic chemicals in fish. *Environ Sci Technol* 49(8): 4783-4796. DOI

McLeod AM, **Arnot JA**, Borgå K, Selck H, Kashian D, Krause A, Paterson G, Haffner GD, Drouillard KG. **2015**. Quantifying uncertainty in the trophic magnification factor related to spatial movements of organisms in a food web. *Integr Environ Assess Manag* 11(2): 306-318. DOI

Zhang X, **Arnot JA**, Wania F. **2014**. Model for screening-level assessment of near-field human exposure to neutral organic chemicals released indoors. *Environ Sci Technol* 48(20): 12312–12319. DOI

Armitage JM, Wania F, **Arnot JA**. **2014**. Application of mass balance models and the chemical activity concept to facilitate the use of in vitro toxicity data for risk assessment. *Environ Sci Technol* 48(16): 9770-9779. DOI

Mackay D, McCarty LS, **Arnot JA**. **2014**. Relationships between exposure and dose in aquatic toxicity tests for organic chemicals. *Environ Toxicol Chem* 33(9): 2038-2046. DOI

McLachlan MS, Kierkegaard A, Radke M, Sobek A, Malmvärn A, Alsberg T, **Arnot JA,** Brown TN, Wania F, Breivik K, Xu S. **2014**. Using model-based screening to help discover unknown environmental contaminants. *Environ Sci Technol* 48(13): 7264-7271. DOI

Mackay D, **Arnot JA**, Celsie A, Orazietti A, Parnis JM. **2014**. QSARs for aquatic toxicity: Celebrating, extending and displaying the pioneering contributions of Ferguson, Konemann and Veith. *SAR QSAR Environ Res* 25(5):343-55. DOI

Arnot JA, Brown TN, Wania F. **2014**. Estimating screening-level organic chemical half-lives in humans. *Environ Sci Technol* 48(1): 723–730. DOI

Papa E, van der Wal L, **Arnot JA**, Gramatica P. **2014**. Metabolic biotransformation half-lives in fish: QSAR modelling and consensus analysis. *Sci Total Environ* 470–471: 1040–1046. DOI

Krogseth IS, Breivik K, **Arnot JA**, Wania F, Borgen AR, Schlabach M. **2013**. Evaluating the environmental fate of short-chain chlorinated paraffins (SCCPs) in the Nordic environment using a dynamic multimedia model. *Environ Sci: Processes Impacts* 12(15): 2240-2251. DOI

McCarty LS, **Arnot JA**, Mackay D. **2013**. Evaluation of critical body residue data for acute narcosis in aquatic organisms. *Environ Toxicol Chem* 32(10): 2301-14. DOI

Wambaugh JF, Setzer RW, Reif DM, Gangwal S, Mitchell-Blackwood J, **Arnot JA**, Joliet O, Frame A, Rabinowitz J, Knudsen TB, Judson RS, Egeghy P, Vallero D, Cohen Hubal EA. **2013**. High-throughput models for exposure-based chemical prioritization in the ExpoCast project. *Environ Sci Technol* 47 (15): 8479–8488. DOI

Mitchell J, **Arnot JA**, Jolliet O, Georgopoulos PG, Isukapalli S, Dasgupta S, Pandian M, Wambaugh J, Egeghy P, Cohen Hubal EA, Vallero DA. **2013**. Comparison of modeling approaches to prioritize chemicals based on estimates of exposure and exposure potential. *Sci Total Environ*, 458–460: 555-567. DOI

Mackay D, **Arnot JA**, Gobas FAPC, Powell D. **2013**. Mathematical relationships between metrics of bioaccumulation. *Environ Toxicol Chem* 32(7): 1459-1466. DOI

Nichols JW, Huggett DB, **Arnot JA**, Fitzsimmons PN, Cowan-Ellsberry CE. **2013**. Towards improved models for predicting bioconcentration of well-metabolized compounds by rainbow trout using measured rates of in vitro intrinsic clearance. *Environ Toxicol Chem* 32(7): 1611-1622. DOI

Armitage JM, **Arnot JA**, Wania F, Mackay D. **2013**. Development and evaluation of a mechanistic bioconcentration model for ionogenic organic chemicals in fish. *Environ Toxicol Chem* 32(1): 115-128. DOI

Armitage JM, **Arnot JA**, Wania F. **2012**. Potential role of phospholipids in determining the internal tissue distribution of perfluoroalkyl acids in biota. *Environ Sci Technol* 46(22): 12285−12286. DOI

Arnot JA, Brown TN, Wania F, Breivik K, McLachlan MS. **2012**. Prioritizing chemicals and data requirements for screening-level exposure and risk assessment. *Environ Health Persp* 120(11): 1565-1570. DOI

Costanza J, Boethling RS, Lynch DG, **Arnot JA**. **2012**. Use of the bioaccumulation factor to screen chemicals for bioaccumulation potential. *Environ Toxicol Chem* 31(10): 2261-2268. DOI

Brown TN, **Arnot JA**, Wania F. **2012**. Iterative fragment selection: A group contribution approach to predicting fish biotransformation half-lives. *Environ Sci Technol* 46(15): 8253-8260. DOI

Breivik K, **Arnot JA**, Brown TN, McLachlan MS, Wania F. **2012**. Screening organic chemicals in commerce for emissions in the context of environmental and human exposure. *J Environ Monit* 14: 2028-2037. DOI

Gama SR, Mackay D, **Arnot JA**. **2012**. Selecting and designing chemicals: application of a mass balance model of chemical fate, exposure and effects in the environment. *Green Chem* 14:1094-1102. DOI

Burkhard L, **Arnot JA**, Embry M, Farley K, Hoke R, Kitano M, Leslie HA, Lotufo GR, Parkerton TF, Sappington KG, Tomy GT, Woodburn K. **2012.** Comparing laboratory and field measured biota-sediment accumulation factors. *Integr Environ Assess Manag* 8(1): 32-41. DOI

Burkhard L, **Arnot JA**, Embry M, Farley K, Hoke R, Kitano M, Leslie HA, Lotufo GR, Parkerton TF, Sappington KG, Tomy GT, Woodburn K. **2012.** Comparing laboratory and field measured bioaccumulation endpoints. *Integr Environ Assess Manag* 8(1): 17-31. DOI

Marvin CH, Tomy GT, Armitage JM, **Arnot JA**, McCarty LS, Covaci A, Palace V. **2011**. Hexabromocyclododecane: current understanding of chemistry, environmental fate and toxicology and implications for global management. *Environ Sci Technol* 45(20): 8613-8623. DOI

Sverko E, Tomy GT, Reiner EJ, Li Y-F, McCarry BE, **Arnot JA**, Law RJ, Hites RA. **2011**. Dechlorane Plus and related compounds in the environment: a review. *Environ Sci Technol* 45(12): 5088-5098. DOI

Mackay D, **Arnot JA**. **2011**. The application of fugacity and activity to simulating the environmental fate of organic contaminants. *J Chem Eng Data* 56(4): 1348-1355. DOI

Mackay D, **Arnot JA**, Wania F, Bailey RE. **2011**. Chemical activity as an integrating concept in environmental assessment and management of contaminants. *Integr Environ Assess Manag* 7(2): 248-255. DOI

Arnot JA, Armitage JM, McCarty LS, Wania F, Cousins I, Toose-Reid L. **2011**. Toward a consistent evaluative framework for POP risk characterization. *Environ Sci Technol* 45(1): 97-103 Special Issue on Environmental Policy: Past, Present and Future – **Invited.** DOI

McLachlan MS, Czub G, MacLeod M, **Arnot JA**. **2011**. Bioaccumulation of organic contaminants in humans: A multimedia perspective and the importance of biotransformation. *Environ Sci Technol* 45(1): 197-202 Special Issue on Environmental Policy: Past, Present and Future DOI

Arnot JA, Mackay D, Sutcliffe R, Lo B. **2010**. Estimating farfield organic chemical exposures, intake rates and intake fractions to human age classes. *Environ Modell Softw* 25:1166-1175. DOI

Gobas FAPC, **Arnot JA**. **2010**. Food web bioaccumulation model for polychlorinated biphenyls in San Francisco Bay, California, USA. *Environ Toxicol Chem* 29:1385-1395. DOI

Arnot JA, Arnot MI, Mackay D, Couillard Y, MacDonald D, Bonnell M, Doyle P. **2010**. Molecular size cut-off criteria for assessing bioaccumulation potential: Fact or fiction? *Integr Environ Assess Manag* 6(2): 210-224. DOI

Arnot JA, Mackay D, Parkerton TF, Zaleski RT, Warren CS. **2010**. Multimedia modelling of human exposure to chemical substances: the roles of biomagnification and biotransformation. *Environ Toxicol Chem* 29(1): 45-55. DOI

Cowan-Ellsberry C, McLachlan M, **Arnot JA**, MacLeod MJ, McKone TE, Wania F. **2009**. Modeling exposure to persistent chemicals in hazard and risk assessment. *Integr Environ Assess Manag* 5(4): 662-679. DOI

Mackay D, **Arnot JA**, Petkova EP, Wallace KB, Call DJ, Brooke LT, Veith GD. **2009**. The physicochemical basis of QSARs for baseline toxicity. *SAR and QSAR in Environmental Research* 20: 393-414. DOI

Warren CS, Mackay D, Webster E, **Arnot JA**. **2009**. A cautionary note on implications of the well-mixed compartment assumption as applied to mass balance models of chemical fate in flowing systems. *Environ Toxicol Chem* 28(9): 1858-1865. DOI

Arnot JA, Meylan W, Tunkel J, Howard PH, Mackay D, Bonnell M, Boethling RS. **2009**. A quantitative structure-activity relationship for predicting metabolic biotransformation rates for organic chemicals in fish. *Environ Toxicol Chem* 28(6): 1168-1177 **SETAC Best Student Paper Award** DOI

Powell A, Mackay D, Webster E, **Arnot JA**. **2009**. Modelling bioaccumulation using characteristic times. *Environ Toxicol Chem* 28(2): 272-278. DOI

Arnot JA, Mackay D, Parkerton TF, Bonnell M. **2008**. A database of fish biotransformation rates for organic chemicals. *Environ Toxicol Chem* 27(11): 2263-2270. DOI

Arnot JA, Mackay D. **2008**. Policies for chemical hazard and risk priority setting: can persistence, bioaccumulation, toxicity and quantity information be combined? *Environ Sci Technol* 42: 4648-4654 DOI

Arnot JA, Mackay D, Bonnell M. **2008**. Estimating metabolic biotransformation rates in fish from laboratory data. *Environ Toxicol Chem* 27(2): 341-351. DOI

Parkerton TF, **Arnot JA**, Weisbrod AV, Russom C, Hoke RA, Woodburn K, Traas T, Bonnell M, Burkhard LP and Lampi, MA. **2008**. Guidance for evaluating in-vivo fish bioaccumulation data. *Integr Environ Assess Manag* 4(2): 139-155. DOI

Weisbrod AV, Burkhard LP, **Arnot JA**, Mekenyan O, Howard PH, Russom C, Boethling R, Sakuratani Y, Traas T, Bridges T, Lutz C, Bonnell M, Woodburn K. **2007**. Workgroup report: review of fish bioaccumulation databases used to identify persistent, bioaccumulative, toxic substances. *Environ Health Persp* 115(2): 255-261. DOI

Arnot JA, Mackay D, Webster E, Southwood J. **2006**. Screening level risk assessment model for chemical fate and effects in the environment. *Environ Sci Technol* 40: 2316-2323. DOI

Arnot JA, Gobas FAPC. **2006**. A review of bioconcentration factor (BCF) and bioaccumulation factor (BAF) assessments for organic chemicals in aquatic organisms. *Environ Rev* 14: 257-297. DOI

Arnot JA, Gobas FAPC. **2004**. A food web bioaccumulation model for organic chemicals in aquatic ecosystems. *Environ Toxicol Chem* 23(10): 2343–2355. DOI

Arnot JA, Gobas FAPC. **2003**. A generic QSAR for assessing the bioaccumulation potential of organic chemicals in aquatic food webs. *QSAR Comb Sci* 22(3): 337-345. DOI

Gobas FAPC, Kelly BC, **Arnot JA**. **2003**. Quantitative structure-activity relationships for predicting the bioaccumulation of POPs in terrestrial food webs. *QSAR Comb Sci* 22(3): 329-336. DOI

MANUSCRIPTS IN REVIEW (0)

MANUSCRIPTS IN PREPARATION (SELECTED)

Toose L, Gouin T, Sangion A, Armitage JM, Li L, **Arnot JA**. Tiered methods for emission rates for applications in screening-level ecological exposure and risk assessment: Case study for cyclic volatile methyl siloxanes.

Cops J, Hughes, L, Lieve G, De Brouwere K, Li L, **Arnot JA**. Merging measurements and mass balance models to estimate human exposures from SVOCs released indoors.

Sangion A, Toose L, Armitage JM, Papa E, **Arnot JA**. A tiered approach for screening chemical biomagnification in humans.

Arnot JA, Sangion A, Toose L, Armitage JM, Brown T, Mackay D. Development, implementation and evaluation of the Bioaccumulation Estimation Tool (BET).

Sangion A, Foster K, Looky A, Armitage JM, Toose L, Embry M, Nichols JW, Wetmore B, Papa E, **Arnot JA**. Development of a critically evaluated in vitro biotransformation rate database for humans.

Sangion A, Looky A, Armitage JM, Foster K, Toose L, Embry M, **Arnot JA**. Development of a critically evaluated in vitro biotransformation rate database for rodents.

Sangion A, Looky A, Armitage JM, Toose L, **Arnot JA**. Development of a critically evaluated in vivo toxicokinetics database for rodents.

Arnot JA, Armitage JM, Sangion A, Toose L, Li L, Embry M, Bonnell M. A critical evaluation of ecological hazard and risk methods for chemical screening and prioritization.

Papa E, Bertato L, Casartelli I, Sangion A, Chirico N, **Arnot JA**. QSAR approaches for the prediction of the in vitro intrinsic hepatic clearance in humans.

Toose L, Falls A, Armitage JM, Gouin T, Bonnell M, **Arnot JA**. Merging monitoring data and models to address uncertainty in exposure assessment.

CHAPTERS IN BOOKS (9)

Nichols JW, **Arnot JA**, Barron MG. **2024.** Toxicokinetics in Fishes. Toxicology of Fishes, Second Edition. K. L. Willett and N. Aluru. Boca Raton, CRC Press.

Arnot JA, Mackay D. **2020**, Fugacity and Bioaccumulation Vignette *in* Fundamentals of Ecotoxicology, Fourth Edition, Newman MC, Taylor and Francis

Papa E, **Arnot JA**, Sangion A, Gramatica P. **2017**. In silico approaches for the prediction of in vivo biotransformation rates *in* Advances in QSAR modeling: Applications in Pharmaceutical, Chemical, Food, Agricultural and Environmental Sciences, Roy K, Ed Springer International Publishing p 640

Arnot JA, Mackay D. **2015**, Fugacity and Bioaccumulation Vignette *in* Fundamentals of Ecotoxicology, Fourth Edition, Newman MC, CRC Press pp 119-126

Gama S, **Arnot JA**, Mackay D. **2012.** Toxic organic chemicals *in* Transport and Fate of Chemicals in the Environment: Selected Entries from the Encyclopedia of Sustainability Science and Technology, Gulliver JS, Ed Springer pp 41-63

Arnot JA, Mackay D. **2010**. Fugacity and Bioaccumulation Vignette *in* Fundamentals of Ecotoxicology, Third Edition, Newman MC, CRC Press pp 101-106

Mackay D, **Arnot JA**, Webster E, Reid L. **2009**. The evolution and future of environmental fugacity models Chapter *in* Ecotoxicology Modeling Devillers J, Ed Springer pp 355-375

Arnot JA. **2009**. Mass balance models for chemical fate, bioaccumulation, exposure and risk assessment *in* Exposure and Risk Assessment of Chemical Pollution – Contemporary

Methodology NATO Science for Peace and Security Series C: Environmental Security Simeonov L and Hassanien M, Eds Springer pp 69-91

Arnot JA. **2009**. Exposure and risk assessment modelling to screen and prioritize commercial chemical inventories *in* Exposure and Risk Assessment of Chemical Pollution – Contemporary Methodology NATO Science for Peace and Security Series C: Environmental Security Simeonov L and Hassanien M, Eds Springer pp 93-109

TECHNICAL REPORTS & NON-REFEREED PUBLICATIONS (95)

Arnot J, Toose L, Sangion A. **2024**. Improving organic chemical assessment capacity within the Government of Canada using EAS-E Suite. Technical Report prepared for Health Canada.

Sangion A, Toose L, Li L, **Arnot J. 2024.** Functionality Updates to EAS-E Suite Modules: CiP-CAFE and RAIDAR. Technical Report for Environment and Climate Change Canada.

Armitage J, Sangion A, **Arnot J**. **2024**. Data and tools to aid the experimental design for cannabinoids and related organic chemicals for in vitro testing. Technical Report prepared for Health Canada.

Arnot J, Brown T, Toose L, Armitage J, Sangion A. **2024**. Scoping the uncertainty in screening for bioaccumulation potential of substances including an assessment of alternative surrogates and toxicokinetic methods. Technical Report prepared for Chemical Assessment Unit, United Kingdom Environment Agency.

Arnot J, Brown TN, Li L, Sangion A. **2023**. Improving chemical use and emission rate information to address uncertainty in chemical safety assessments. Next steps to incorporate higher tiered use data into EAS-E Suite and status of PV and use databases in EAS-E Suite. Technical Report prepared for American Chemistry Council Long-Range Research Initiative (ACC-LRI).

Sangion A, Armitage J, **Arnot J**. **2023**. Addressing uncertainty in toxicokinetics data and applications to advance chemical exposure and risk assessment. Phase 2 – Theme 1: Analysis of toxicokinetic data. Technical Report prepared for ExxonMobil Biomedical Sciences.

Armitage J, Sangion A, **Arnot J**. **2023**. Developing a confidence framework to characterize uncertainty in the application of NAMs in a risk assessment context. Technical Report prepared for Health Canada.

Armitage J, Sangion A, **Arnot J**. **2023**. Advancing high-throughput toxicokinetics, exposure models and new approach methods (NAMs) for risk assessment activities. Technical Report prepared for Health Canada.

Sangion A, Brown TN, Toose L, Hughes L, Li L, Armitage J, **Arnot J**. **2023**. Expanding new chemical assessment capacity. Technical Report prepared for Health Canada.

Hughes L, **Arnot J**. **2023**. Expand near-field human exposure and safety estimation capacity in EAS-E Suite including occupational, consumer and general population exposure scenarios. Technical Report prepared for ACC-LRI.

Brown TN, Li L, Sangion A, **Arnot J**, **2022**. Development of production volume databases for integration into EAS-E Suite. Technical Report prepared for ACC-LRI.

Sangion A, **Arnot J**. **2022**. Addressing uncertainty in toxicokinetics data and applications to advance chemical exposure and risk assessment. Phase 1: Exploratory analysis of toxicokinetics data. Technical Report prepared for ExxonMobil Biomedical Sciences.

Toose L, Sangion A, Armitage J, Li L, **Arnot J**. **2022**. Case study and workshop for guiding the selection of appropriate exposure models for risk assessment using the EAS-E Suite platform. Technical Report prepared for Health Canada.

Sangion A, Armitage J, **Arnot J**. **2022**. Application of mass balance modeling and in vitro and in vivo extrapolation to higher-throughput genetic toxicology assays for risk assessment applications. Technical Report prepared for Health Canada.

Armitage J, Sangion A, Looky A, **Arnot JA**. **2022**. Application of mass balance modeling and in vitro and in vivo extrapolation to support scoping and risk assessment applications for per- and poly-fluorinated alkyl substances (PFAS). Technical Report prepared for Health Canada.

Arnot J, Li L, Toose L, Brown T, Wyatt J. **2022**. Fate, exposure, and risk estimation modelling of 4,4'-dichlorodiphenyl sulfone (DCDPS or BCPS; CAS 80-07-9). Technical Report prepared for BASF SE.

Arnot J, Li L, Toose L, Brown T, Wyatt J. **2022**. Addressing uncertainty in the bioaccumulation assessment of 4,4'-dichlorodiphenyl sulfone (DCDPS or BCPS; CAS 80-07-9). Technical Report prepared for BASF SE.

Brown TN, Li L, Zhang X, Sangion A, Toose L, Wania F, **Arnot JA**, **2021**. Developing guidance and recommendations for using overall fate and monitoring data in a weight-of-evidence for assessing petroleum hydrocarbon persistence under REACH. Technical Report prepared for Concawe.

Arnot JA, Brown TN, Toose L Sangion A, Armitage J. **2021**. Modernize Health Canada's consumer and industrial/aquaculture release models and incorporate them into the EAS-E Suite Platform. Technical Report prepared for Health Canada.

Sangion A, Armitage J, Toose L, **Arnot JA**. **2021**. In vitro and in silico toxicokinetics for high throughput data interpretation: addressing model domain of applicability and uncertainty for in vitro-in vivo extrapolation. Technical Report prepared for Health Canada.

Armitage J, Sangion A, **Arnot JA**. **2021**. Applying in vitro mass balance models to interpret chemical distribution when using in vitro toxicity data for prioritization and assessment activities. Technical Report prepared for Health Canada.

Toose L, Armitage J, Li L, **Arnot JA**. **2021**. Analysis of far-field dietary exposures with food web considerations in human health assessment. Technical Report prepared for Health Canada.

Armitage JM, Hughes L, Li L, Sangion A, **Arnot JA. 2020**. Comparing a suite of PBTK models to provide preliminary guidance for model selection and application for different possible use-contexts. Technical Report prepared for ACC-LRI.

Toose L, Armitage J, **Arnot JA**. **2020**. Advancing scientific decision making for bioaccumulation and toxicity assessment. progress on revisions to the Bioaccumulation Assessment Tool (BAT). Technical Report prepared for ACC-LRI.

Li L, **Arnot JA**, Wania F. **2019**. Modeling human exposure to chemicals from intermittent applications of consumer products using a steady-state modeling framework. Technical Report prepared for ACC-LRI.

Li L, **Arnot JA**, Wania F. **2018.** Integration of a substance flow model into the RAIDAR framework. Technical Report prepared for ACC-LRI.

Arnot J, Toose L, Armitage J. **2018**. Generation of physical-chemical property data and the application of models for estimating fate and transport and exposure and risk potential for organic substances on the Canadian DSL. Technical Report prepared for Environment and Climate Change Canada.

Parmar R, Gouin T, **Arnot J**. **2018**. Compilation of monitoring data from publicly available sources and from data provided by Health Canada. Technical Report prepared for Health Canada.

Givehchi B, **Arnot J**. **2018**. Qualitative and quantitative comparisons of the RAIDAR-ICE model with other exposure models and exposure estimates for select chemicals. Technical Report prepared for Health Canada.

Gouin T, Parmar R, **Arnot J**. **2018**. Recent developments of non-target chemical analysis: Literature review and recommendations for application in human health risk assessment. Technical Report prepared for Health Canada.

Arnot J, Looky A, Foster K, Armitage J. **2018**. Development of an in vitro and in vivo biotransformation and toxicokinetic database for fish and rodents. Technical Report for European Commission - Joint Research Centre (JRC).

Armitage JM, **Arnot JA**. **2017**. Application of mass balance modeling to facilitate the interpretation and evaluation of in vitro toxicity data. Technical Report for ACC-LRI.

Arnot J, Armitage J, Escher B, Fischer F, Scholz S, Klüver N, Schmidt S, Mayer P. **2017**. Expanding the applicability domain of the chemical activity approach for hazard and risk assessment: Final report for Cefic-LRI ECO.30 project.

National Academies of Sciences Engineering and Medicine. **2017**. Using 21st Century Science to Improve Risk-Related Evaluations. Washington, DC: The National Academies Press. DOI

Armitage JM, **Arnot JA**. **2016**. Progress report on a refined Generic PBPK model. Technical Report for ACC-LRI.

Armitage JM, **Arnot JA**. **2016**. TBBPA degradation: Scoping assessment of available data. Technical Report prepared for ICL – Industrial Chemicals.

Westgate JN, Armitage JM, **Arnot JA**. **2016**. Multimedia modeling of decamethyltetrasiloxane (L4) and dodecamethylpentasiloxane (L5). Technical Report prepared for American Chemistry Council, Silicones Environmental, Health, and Safety Center (SEHSC).

Arnot J, Armitage J, Brown T, Hermens J, Droge S, Jonker M, Chen Y, Mackay D. **2016**. Improving the performance and expanding the applicability of a mechanistic bioconcentration model for ionogenic organic compounds (IOCs) in fish (BIONIC): Final Report for Cefic-LRI ECO.21 Project.

Arnot J. **2016**. Estimating bioconcentration factors for triclosan using in vitro biotransformation rate data from catfish liver. Technical Report prepared for BASF SE.

Armitage JM, **Arnot JA**. **2015**. Model development to support monitoring data for assessing the bioaccumulation and biomagnification potential of bifenthrin in terrestrial environments. Technical Report prepared for FMC Chemical.

Arnot J. **2015**. A review of the bioaccumulation of triclosan in fish and other species. Technical Report prepared for BASF SE.

Falls A, **Arnot JA**. **2015**. Applying RAIDAR to address data gaps for assessing the exposure and potential risk of select organic flame retardants to the environment. Technical Report for Environment Canada.

Nichols J, Gobas F, MacLeod M, Borgå K, Leonards P, Papa E, Laue H, **Arnot J**. **2015**. Summary of Cefic-LRI Sponsored Workshop: Recent Scientific Developments in Bioaccumulation Research. Workshop Report prepared for Cefic-LRI.

Arnot JA. **2014**. Bioaccumulation assessment of medium chain chlorinated paraffins (MCCPs). Summary Report prepared for The Regulatory Network Inc.

Armitage JM, Wania F, **Arnot JA**. **2014**. Evaluation of long-range transport (LRT) screening tools and models for pre-market assessment of new pesticides. Technical Report prepared for The Environmental Assessment Directorate, Pest Management Regulatory Agency, Health Canada.

Arnot JA. **2014**. Parameterize and apply the Risk Assessment IDentification And Ranking (RAIDAR) model to screen approximately 1370 substances. Technical Report for Environment Canada.

Arnot JA. **2014**. Preliminary bioaccumulation assessment of Additiv 104. Technical Draft Report prepared for BP.

Arnot J, Zhang X, Hughes L, Kircanski I. **2014**. Develop Sub-Module for Direct Human Exposures to Consumer Products. Technical Report for United States Environmental Protection Agency.

MacLeod M, McLachlan MS, Adolfsson-Erici M, **Arnot JA**, Borgå K, Mayer P, Nichols J. **2013**. Tiered methods for fish trophic magnification factor (TMF^2): Final Report for Cefic-LRI ECO.15 Project.

Hermens J, Jonker MTO, van der Heijden S, Mayer P, Gilbert D, **Arnot JA**, McCarty LS, Mackay D. **2013**. Critical body residue validation for aquatic organisms exposed to chemicals causing toxicity by baseline narcosis: Final report for Cefic-LRI ECO.16 project.

Arnot JA. **2013**. Comments on preliminary bioaccumulation assessment of medium chain chlorinated paraffins (MCCPs). Technical Report prepared for The Regulatory Network Inc.

Arnot JA, Armitage JM. **2013**. Parameterization and application of the RAIDAR model to aid in the prioritization and assessment of chemical substances. Technical Report for Health Canada.

Arnot JA, Brown, TN. **2013**. Developing databases and models for mammalian biotransformation rate and dietary assimilation efficiency for improved bioaccumulation assessment. Technical Report for Environment Canada.

McLachlan MS, Wania F, Breivik K**, Arnot JA**, Brown TN. **2012.** Development, application, and evaluation of model-based screening procedures for PBT chemicals and POPs: Final report for Cefic-LRI ECO.13 project.

Arnot JA. 2012. A bioaccumulation hazard assessment of three flame retardant alternatives for DecaBDE. Technical Report prepared for ICL Industrial Products Bromine Compounds Ltd.

Arnot JA, Armitage J, Gilbert N, Wang J. **2012**. Developing databases and methods to address uncertainty in microbial chemical biodegradation estimates for ecological and human health assessment. Technical Report for Health Canada.

Arnot JA, Hughes L, Mackay D. **2012**. Development of a new Health Canada Far-field Human Exposure (FHX-CAN) model including selected regional Canadian environments. Technical Report for Health Canada.

Arnot JA. **2012**. Bioaccumulation test method validation: comparative analysis of trout and carp results from an OECD ring test. Technical Report prepared for United Kingdom Environment Agency and included in OECD Series on Testing and Assessment No. 175 [ENV/JM/MONO(2012)20] "Validation Report of a Ring Test for the OECD 305 Dietary Exposure Bioaccumulation Fish Test (Part 1) with Additional Report including Comparative Analysis of Trout and Carp Results (Part II)".

Arnot JA. **2012**. Exploring the fate, bioaccumulation and exposure potential of ionogenic chemicals released to the environment using the RAIDAR model. Technical Report for Unilever.

Arnot JA. **2011**. Parameterization and application of the RAIDAR model to support prioritization and assessment of substances. Technical Report for Environment Canada.

Arnot JA. **2011**. Updating the RAIDAR and FHX models to aid in the prioritization and assessments of chemicals including ionisable substances. Technical Report for Health Canada.

Arnot JA, Armitage JM. **2011**. Modelling the bioaccumulation of long chain amines (cationic surfactants) in fish. Technical Report for the APAG Companies.

Arnot JA, Armitage JM. **2011**. Modelling the bioconcentration of long chain amines (cationic surfactants) in fish. Technical Report for the APAG Companies.

Arnot JA. **2011**. Exploring uncertainty in biotransformation half-lives when modelling the bioaccumulation of bifenthrin in aquatic systems. Technical Report for FMC Corporation.

Arnot JA. **2010**. The application of the RAIDAR and FHX models for the rapid exposure-based prioritization of selected organic chemicals. Technical Report for United States Environmental Protection Agency.

Arnot JA. **2010**. Estimating chemical absorption efficiency from dietary exposures and degradation rate constants in the gastro-intestinal tract. Technical Report for Environment Canada.

Arnot J, Armitage J. **2009**. Bioaccumulation and exposure modelling of bifenthrin in aquatic ecosystems. Technical Report for FMC Corporation.

Arnot J, Armitage J. **2009**. Application of mass balance models to interpret bifenthrin bioaccumulation data from an Alabama pond field study. Technical Report for FMC Corporation.

Armitage J, **Arnot J**. **2009**. Evaluative assessment of the bioaccumulation potential of bifenthrin (CAS RN 82657-04-3) in a simplified terrestrial food-chain. Technical Report for FMC Corporation.

Arnot JA, McCarty LS, Armitage J, Toose-Reid L, Wania F, Cousins I. **2009**. An evaluation of hexabromocyclododecane (HBCD) for persistent organic pollutant (POP) properties and the potential for adverse effects in the environment. Technical Report for European Brominated Flame Retardant Industry Panel (EBFRIP).

McCarty LS, **Arnot JA**. **2008**. Ecological risk assessment for pyridalyl. Technical Report for Valent USA Corporation.

Arnot JA. **2008**. Aquatic exposure estimates for bifenthrin based on four application scenarios. Technical Report for FMC Corporation.

Arnot JA, Mackay D. **2008**. Estimation of human intake fractions and total body burdens for selected persistent organic pollutants and petrochemicals. Technical Report for ExxonMobil Biomedical Sciences Inc.

Arnot JA. **2007**. A critical review of proposals for molecular size restrictions in bioaccumulation assessments. Technical Report for Environment Canada.

Arnot JA, Mackay D. **2007**. Risk prioritization for a subset of Domestic Substances List chemicals using the RAIDAR model. CEMC Report No. 200703. Technical Report for Environment Canada.

Mackay D, **Arnot JA**, Hickie B, Wania F, Webster E. **2007**. Towards a strategy for reviewing substance profiles prepared under Environment Canada's "Challenge" program. Technical Report for Environment Canada.

Gobas FAPC, Moore MM, Hermens JLM, **Arnot JA. 2006**. Bioaccumulation reality check. SETAC Globe, Learned Discourse 7(5): 40-41.

Arnot JA, Mackay D, Webster E. **2006**. Health Canada Farfield Model. Technical Report for Health Canada.

Mackay D, **Arnot JA**. **2006**. The toxicity of organic chemicals: does a fugacity perspective help? SETAC Globe, Learned Discourse 7(3): 23-24.

Arnot JA. **2006**. Bioconcentration factor and bioaccumulation factor assessments for organic chemicals on the Canadian Domestic Substances List: Database update. Technical Report for Environment Canada.

Arnot JA. **2006**. Estimates of metabolic transformation rates in fish. Technical Report for Environment Canada.

Arnot JA, Gouin T, Mackay D. **2005**. Practical methods for estimating environmental biodegradation rates. CEMN Report No. 200503. Technical Report for Environment Canada.

Webster E, Mackay D, Wania F, **Arnot JA**, Gobas F, Gouin T, Hubbarde J, Bonnell, M. **2005**. Development and application of models of chemical fate in Canada: modelling guidance document. CEMN Report No. 200501. Technical Report for Environment Canada.

Arnot JA, Mackay D. **2004**. Proceedings of a workshop on the environmental fate of fluorotelomer-based polymers. Canadian Environmental Modelling Network Report No 200401.

Arnot JA. **2004**. Recommendations on the bioaccumulation categorization of 502 DSL chemicals. Technical Report for Environment Canada.

Arnot JA. **2004**. Compilation and quality assessment of bioconcentration and bioaccumulation factors for 502 chemicals for the DSL categorization. Technical Report for Environment Canada.

Arnot JA. **2004**. Recommendations on the bioaccumulation categorization of 502 DSL chemicals. Technical Report for Environment Canada.

Gobas FAPC, **Arnot JA**. **2004**. San Francisco Bay PCB food web model. Technical Report for San Francisco Bay Regional Monitoring Program.

Arnot JA. **2004**. Recommendations on the bioaccumulation categorization of 648 DSL chemicals. Technical Report for Environment Canada.

Gobas FAPC, **Arnot JA**. **2003**. The categorization of organic chemicals on the Domestic Substances List for bioaccumulation potential. Technical Report for Environment Canada.

Gobas FAPC, **Arnot JA**. **2003**. Identification of Bioconcentration and Bioaccumulation Factors for 8,000 DSL Substances. Technical Report for Environment Canada.

Gobas FAPC, **Arnot JA**. **2002**. Variability of bioconcentration and bioaccumulation factors with experimental conditions. Technical Report for Environment Canada.

Gobas FAPC, **Arnot JA**. **2001**. Bioaccumulation categorization of organic chemical substances on the DSL. Technical Report for Environment Canada.

Gobas FAPC, **Arnot JA**. **2000**. The application of bioaccumulation models for the categorization and screening of chemical substances on the DSL. Technical Report for Environment Canada.

Gobas FAPC, **Arnot JA**. **2000**. Identification of bioconcentration and bioaccumulation factors for DSL substances. Technical Report for Environment Canada.

INVITED PRESENTATIONS OR LECTURES AT NATIONAL AND INTERNATIONAL ORGANIZATION MEETINGS AND WORKSHOPS (57)

Arnot JA. 2024. Use of Systematic Data Quality Evaluation and Weight-of-Evidence (WoE) Methodology for Assessment of Bioaccumulation in the Stockholm Convention "Weight of Evidence Analysis and Problem Formulation for Chemical Risk Assessment", SETAC Sponsored Side Event at Stockholm Convention on Persistent Organic Chemicals Review Committee (POPRC-20) September 25, Rome, Italy.

Arnot JA. 2024. Merging Measurements and Models in a Weight of Evidence Approach for Exposure Estimation. Society of Toxicology (SOT) Continuing Education Course "Weight of Evidence Analysis and Problem Formulation for Chemical Risk Assessment", March 10, Salt Lake City, UT.

Arnot JA, Sangion A, Toose L, Brown TN, Hughes L, Armitage JM, Li L. **2024**. Chemical exposure estimation through EAS-E Suite. Health Canada Science Forum, February 5, Ottawa, ON.

Arnot JA. **2024**. Future of chemical exposure estimation. Health Canada Science Forum, February 5, Ottawa, ON.

Arnot JA, Sangion A, Armitage JM. **2024**. Calculating administered equivalent doses (AEDs) and bioactivity exposure ratios (BERs) from cellular (in vitro) bioassays. The Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) Communities of Practice Webinar Series, January 29. On-Line.

Arnot JA. **2023**. Developing an OECD Integrated Approach to Testing and Assessment (IATA) for Bioaccumulation Assessment. Workshop on Bioaccumulation, The Society of Silicon Chemistry Japan, November 1. On-Line.

Sangion A, Armitage JM, Li L, **Arnot JA, 2023**. Guidance for the application of New Approach Methods (NAMs) for hazard and risk-based estimates using the Exposure And Safety Estimation (EAS-E) Suite platform. American Society of Cellular and Computational Toxicology (ASCCT) Continuing Education Course "Spotlight on NAMs: Elevating New Approaches in Risk Assessment. October 25, Silver Spring, MD.

Arnot JA. 2023. The development of models for applying in vitro bioassay data for organic chemical hazard and risk estimation. Toxicology Seminar Series, Interdisciplinary Faculty of Toxicology (IFT), Texas A&M University, October 2, College Station, TX.

Arnot JA. 2023. An Introduction to Chemical Exposure Estimation. SOT Webinar Series, May 25.

Sangion A, Li L, Toose L, Brwon T, Armitage JM, **Arnot JA. 2023.** Estimating steady-state blood concentrations (C_{SS}) and Administered Equivalent Doses (AEDs) from cellular (in vitro) bioassays using toxicokinetic models. 55th Annual Symposium of the Society of Toxicology of Canada, Montreal, QC.

Arnot J, Toose L, Armitage JM. **2021**. Integrating Bioaccumulation Assessment Tools for Mammals (iBAT-Mam). HESI Webinars: Advances in toxicokinetics and bioaccumulation science in mammals to aid human and ecological assessments, April 8. On-Line.

Sangion A, Looky A, Toose L, Foster K, Armitage J, Embry M, **Arnot J. 2021**. In vitro and in vivo TK databases for mammals and a new on-line platform. HESI Webinars: Advances in toxicokinetics and bioaccumulation science in mammals to aid human and ecological assessments, May 13. On-Line.

Papa E, Chirico N, Bertato L, Sangion A, **Arnot J. 2021**. New QSARs for key TK parameters in mammals. HESI Webinars: Advances in toxicokinetics and bioaccumulation science in mammals to aid human and ecological assessments, June 24. On-Line.

Arnot JA. 2018. Developing, evaluating, and applying evaluative models for human health and ecological risk assessment. Special International Symposium "Fate and Transport of Pollutants in the Environment in Honour of Don Mackay", 29th Inter-American Congress of Chemical

Engineering and the 68th Canadian Chemical Engineering Conference. October 28-21, Toronto, ON.

Arnot JA. 2018. Integrating in vitro, in vivo and in silico toxicokinetics data for bioaccumulation and exposure assessment. International Council of Chemical Association's Long-Range Research Initiative, Health Canada and US Environmental Protection Agency Workshop "Demonstrating 21st Century Methods and Critical Tools for Risk-Based Decisions", June 20-21, Ottawa, ON.

Arnot JA. 2017. Methods, tools and data for 21st century risk-based evaluations. Canadian Consumer Specialty Products Association (CCSPA) Annual Conference, September 19-20, Toronto, ON.

Arnot JA. 2017. Framing the technical challenges and opportunities. International Council of Chemical Association's Long-Range Research Initiative (ICCA-LRI) and Joint Research Centre (JRC) Workshop "Fit-For-Purpose Exposure Assessment into Risk-Based Decision-Making", June 21-22, Como, Italy.

Arnot JA. 2017. Recognizing the important role of exposure models in characterizing risk in the 21st century. ECETOC Workshop "Advances in Exposure Modelling: Bridging the Gap between Research and Application" May 4-5, Brussels, Belgium.

Armitage JM, **Arnot JA**. **2016**. Assessing the fate and transport of ionogenic organic chemicals (IOCs) in aquatic and terrestrial environments. Workshop for Health Canada, March 21, Ottawa, ON.

Arnot JA, Armitage JM, Embry M, Gouin T, Mackay D. **2015**. Applying models to quantitatively link in vitro bioassay results with chemical exposures to aquatic organisms, SETAC Conference, November 1-5, Salt Lake City, UT.

Arnot JA. 2015. Overview of Framework for Environmental Risk Assessment at the SETAC International Programs Committee Application of Weight-of-Evidence (WoE) in Risk-based Ecological Assessment Frameworks Symposium, May 3, Barcelona, Spain.

Arnot J, Papa E. **2014**. Biotransformation: *In Vivo* and *In Silico*. Presentation at the Cefic-LRI Workshop on Recent Scientific Developments in Bioaccumulation Research at the European Chemicals Agency, September 24, Finland.

Arnot J, MacLeod M. **2014**. Laboratory Data. Presentation at the Cefic-LRI Workshop on Recent Scientific Developments in Bioaccumulation Research at the European Chemicals Agency, September 24, Helsinki, Finland.

Gobas FAPC, **Arnot J**. **2014**. Technical Background and Rationale. Presentation at the Cefic-LRI Workshop on Recent Scientific Developments in Bioaccumulation Research at the European Chemicals Agency, September 24, Helsinki, Finland.

Arnot J, Armitage J. **2014**. The role of biotransformation rates in food webs in pesticide bioaccumulation and risk assessment. Presentation at the American Chemical Society National Meeting and Exposition. AGRO: Ecosystem and Human Exposure and Risk Assessment. August 10-14, San Francisco, CA.

Arnot J, Ernstoff A, Shin HM, Csiszar SA, Fantke P, Zhang X, Jolliet O, Bennett D, Wetmore B. **2014**. Developing and applying high-throughput exposure models for screening-level chemical assessment: The ExpoDat Project. Presentation and panelist at the International Council of Chemical Association's Long-Range Research Initiative (ICCA-LRI) Workshop "What Is Safe? Integrating Multi-Disciplinary Approaches for Decision Making about the Human Health and Environmental Impacts of Chemicals", June 17-18, Lugano, Switzerland.

Armitage J, Wania F, **Arnot J**. **2014**. Long-range transport (LRT) screening tools and models. Workshop prepared for the Pesticide Management Regulatory Agency, Health Canada, March 21, Ottawa, ON.

Arnot JA. **2014**. Developing, applying and evaluating models for rapid screening of chemical exposures. Presentation and panelist at GlobalChem Conference, March 4, Baltimore, MD

Arnot JA, Brown TN, Wania F, Breivik K, McLachlan MS. **2013**. Holistic methods for chemical screening and priority setting. Presentation (web-based) for the European Chemicals Agency (ECHA): PBT Expert Group, March 12, Helsinki, Finland.

Arnot JA. **2012**. Improving mechanistic models for bioaccumulation assessment. Presentation at the HESI Bioaccumulation Project Committee *In Vivo* Experts Workshop. May 17-18, German Federal Environment Agency (UBA), Berlin, Germany.

Arnot JA, Reid L. **2012**. Mass balance models for assessing chemical fate and exposure. Workshop for the 17th Laurentian SETAC Annual General Meeting & Conference, March 21, Trent University, Peterborough, ON.

Arnot JA. **2012**. Technical workshop and training session for the new Health Canada Far-field Human Exposure (FHX-CAN) model. Workshop for Health Canada, March 8, Ottawa, ON.

Arnot JA, Brown T, Papa E, Gramatica P, Dimitrov S, Mekenyan O, Janzen W, Schüürmann G, Meylan B, Howard P. **2011**. A framework to improve *in vivo* biotransformation rate constant estimation. Presentation at the SETAC Conference Special Symposium: "Bioaccumulation – lessons learned and challenges ahead", November 13-17, Boston, MA.

Armitage J, Wania F, **Arnot J**. **2011**. The role of physical-chemical properties in the ecological assessment of organic chemicals. Workshop prepared for Environment Canada, November 3, Gatineau, QC.

Arnot JA. **2011**. Addressing key data gaps and issues for establishing linkages to high throughput risk assessment (HTRA). Presentation at the Exposure-Based Chemical Prioritization Workshop II: Extending Capabilities for High Throughput Assessment. United States Environmental Protection Agency, September 26-27, Research Triangle Park, NC.

Mackay D, **Arnot JA**. **2011**. Mass balance models of the environmental fate of chemicals and bioaccumulation and human exposure assessment models. Workshop for Health Canada and Environment Canada, February 28-March 1, Ottawa, ON.

Arnot JA. **2011**. Biotransformation rates and dietary uptake efficiencies: measurements and models. Presentation at the HESI Bioaccumulation Project Committee Workshop "Moving bioaccumulation assessments to the next level: progress made and challenges ahead", February 8-10, Alexandria, VA.

Arnot JA, Armitage JM. **2011**. Food web bioaccumulation models. Presentation at the European Food Safety Authority (EFSA), February 1, Parma, Italy.

Arnot JA. **2010**. Methods for organic chemical screening and priority setting. Presentation at the Industry Coordinating Group Canadian Environmental Protection Act Update Conference, May 12-13, Etobicoke, ON.

Arnot JA. **2010**. Models for organic chemical exposure and risk assessment. Environment Canada and Health Canada, April 1, Gatineau, QC.

Arnot JA. **2010**. Estimating persistence, bioaccumulation and future directions for exposure-based prioritization. Presentation at the US Environmental Protection Agency Exposure-Based Chemical Prioritization Workshop: Exploring Opportunities for Collaboration, April 6-7, Research Triangle Park, NC.

Arnot JA, Mackay D, Webster E, Wania F. **2009**. Tracking emissions from indoor sources to tissues using fugacity mass balance models. Presentation and panelist at the International Society of Exposure Science (ISES) Annual Conference, November 1-5, Minneapolis MN.

Arnot JA, Mackay D, Wania F. **2009**. Multimedia human exposure and pharmacokinetic models for screening assessments. Presentation at the ISES Annual Conference, November 1-5, Minneapolis MN.

Arnot JA, McCarty LS, Armitage J, Toose-Reid L, Wania F, Cousins I. **2009**. An evaluation of hexabromocyclododecane (HBCD) for persistent organic pollutant (POP) properties and the potential for adverse effects in the environment. Presentation at the United Nations Environment Programme Stockholm Convention Persistent Organic Pollutant Review Committee 5, Contact Group Meeting, October 13, Geneva, Switzerland.

Arnot JA. **2009**. Holistic mass balance modeling approach for chemical screening and priority setting. Presentation at the US Environmental Protection Agency Exposure Science Community of Practice (ExpoCoP, webinar), July 14.

Arnot JA, Mackay D, Parkerton TF, Meylan W, Tunkel J, Howard P, Mackay D, Boethling RS, Bonnell M. **2008**. In vivo metabolic biotransformation rate estimation and in silico prediction for organic chemicals in fish. Presentation at SETAC Conference, November 16-20, Tampa Bay, FL.

Arnot JA. **2008**. A thought starter for chemical prioritization. Presentation at Environment Canada and Health Canada DSL Priority Setting Workshop, June 17-18, Ottawa, ON.

Arnot JA. **2008**. Lectures and presentations at the NATO Advanced Study Institute on Exposure and Risk Assessment of Chemical Pollution - Contemporary Methodology, as a part of the NATO Science for Peace and Security Series – C: Environmental Security, July 1-10, Sofia, Bulgaria.

Arnot JA, Mackay D. **2007**. Chemical concentration, activity, fugacity, and toxicity: dynamic implications. Presentation at the International QSAR Foundation McKim Conference, September 24-27, Duluth, MN.

Gobas FAPC, **Arnot JA**. **2006**. Food web bioaccumulation modeling of organic substances. Short Course Workshop at the Society of Environmental Toxicology and Chemistry Conference, November 5-9, Montreal, QC.

Arnot JA, Gobas FAPC, Bonnell, M. **2006**. BCF and BAF models for organic chemicals in aquatic species. Presentation at the European Chemicals Bureau Training Course on (Q)SARs, July 24-26, Ispra, Italy.

Arnot JA, Mackay D, Webster E, Southwood J. **2006**. RAIDAR: A screening level risk assessment model for chemical fate and effects in the environment. Presentation at the Organisation for Economic Cooperation and Development (OECD) Workshop on the Application of Models for Identification of POPs, May 31-June 2, Ottawa, ON.

Arnot JA. **2005**. Bioaccumulation databases, quality assessment and evolution. Presentation at the Industry Coordinating Group for Canadian Environmental Protection Act Meeting, December 2, Mississauga, ON.

Arnot JA, Gobas FAPC. **2005**. Environment Canada BCF and BAF database. Presentation at the ILSI-HESI Bioaccumulation of Chemicals Subcommittee *In Vivo* Bioaccumulation Database Workshop, November 11-12, Baltimore, MD.

Arnot JA, Gobas FAPC. **2005**. The BAF-QSAR Model. Presentation at the ILSI-HESI and Procter & Gamble Sponsored Bioaccumulation Workshop, April 12-14, Cincinnati, OH.

Arnot JA, Mackay D. **2004**. Presentation and panelist at the ComET Farfield Modelling Health Canada's Complex Exposure Tool (ComET), Peer Consultation Workshop for ComET, November 8, Cincinnati, OH.

Arnot JA, Gobas FAPC. **2002**. A site-specific model for assessing bioaccumulation in aquatic food webs. Presentation at the Aquatic Toxicity Workshop, October 20-24, Whistler, BC.

INVITED PARTICIPANT AT NATIONAL AND INTERNATIONAL WORKSHOPS (20)

US EPA NAMs Conference. **2024**. U.S. Environmental Protection Agency NAMs Conference: State of Science on Development and Use of NAMs for Chemical Safety Testing. November 5-6, Research Triangle Park, NC.

US EPA PFAS TSCA Workshop. **2024**. US Environmental Protection Agency (EPA). February 13-15, National Institutes of Health, Bethesda, MD.

US EPA TSCA Occupational Conditions of Use and Exposure Scenario Workshop. **2023**. US EPA. October 3-4, Washington DC.

US EPA TSCA Occupational Exposure Workshop. **2023**. US EPA. January 12, Washington DC.

Quantitative Structure-Use Relationship (QSUR) Summit. **2022**. American Chemistry Council. Raleigh, NC.

Human Health Scoping & Progress Review Meeting. **2019**. Co-organized by European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC) and Cefic-LRI, January 30-31, Brussels, Belgium.

Environment Scoping & Progress Review Meeting. **2019**. Co-organized by European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC) and Cefic-LRI, January 28-29, Brussels, Belgium.

Human Health Scoping & Progress Review Meeting. **2018**. Co-organized by European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC) and Cefic-LRI, February 1-2, Brussels, Belgium.

Environment Scoping & Progress Review Meeting. **2018**. Co-organized by European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC) and Cefic-LRI, January 30-31, Brussels, Belgium.

Establishment of the Eco-TTC Approach for Environmental Risk Assessment of Chemicals: An International Workshop. **2017**. Organized by HESI, September 18 – 19, Ottawa, ON

US EPA Expert Workshop on Aggregate Exposure Pathway: A Conceptual Framework to Support Exposure Science Research and Complete the Source-to-Outcome Continuum for Risk Assessment. **2016**. Organized by the US Environmental Protection Agency, May 9-11, Research Triangle Park, North Carolina, USA

Defining the role of chemical activity in environmental risk assessment within the context of mode of action: Practical guidance and advice. **2015**. Co-organized by European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC) and Research Institute for Fragrance Materials (RIFM), October 29-30, Snowbird Resort, Utah, USA

What Will Work? Application of New Approaches for Chemical Safety Assessment. **2015**. Co-organized by International Council of Chemical Associations' Long-Range Research Initiative (ICCA-LRI) in collaboration with the United States Environmental Protection Agency (US EPA) June 16-17, New Orleans, USA

Experts Workshop on the Ecotoxicological Risk Assessment of Ionizable Organic Chemicals. **2014**. Co-sponsored by Environment Canada, SETAC, HESI, and Cefic, November 5-7, Vancouver, BC.

What Is Safe? Integrating Multi-Disciplinary Approaches for Decision Making about the Human Health and Environmental Impacts of Chemicals. **2014.** Co-organized by International Council of Chemical Associations' Long-Range Research Initiative (ICCA-LRI) and the Joint Research Centre (JRC), June 17-18, Lugano, Switzerland

What is Normal? Implications for Chemical Safety Assessment. **2013**. Co-organized by International Council of Chemical Associations' Long-Range Research Initiative (ICCA-LRI) and the U.S. National Institutes of Health's National Center for Advancing Translational Sciences (NCATS), June 11-12, Santa Fe, NM.

Terrestrial Bioaccumulation Workshop. **2013**. ILSI Health and Environmental Sciences Institute (HESI), January 8-10, Miami, FL.

Advancing Exposure Science to Improve Chemical Safety Workshop. **2011**. Co-organized by International Council of Chemical Associations' Long-Range Research Initiative (ICCA-LRI) and Health Canada, June 22-23, Quebec City, QC.

Lab-to-Field Bioaccumulation Workshop. **2009**. Co-sponsored by the Health and Environmental Sciences Institute (HESI) and the United States Environmental Protection Agency and SETAC, November 18-19, New Orleans, LA.

SETAC Pellston Workshop on Science-Based Guidance and Framework for the Evaluation and Identification of PBTs and POPs. **2008**. January 27-February 1, Pensacola, FL.

OTHER PRESENTATIONS (POSTERS, PLATFORMS) (259)

Becker R, Jensen E, DeLeo P, Zaleski R, **Arnot JA**. **2023**. Increasing scientific confidence in exposure models to accelerate the pace of their application for chemical assessments. Society for Risk Analysis Annual Meeting, December 10-14, Washington.

Sangion A, Breivik K, Toose L, Armitage J, Wania F, **Arnot JA**. **2023**. Fate and Persistence Estimation & Simulation Tool (F-PEST): A comprehensive tool for assessing the fate, persistence, and long-range transport of organic chemicals. Society of Environmental Toxicology and Chemistry (SETAC) North America 44th Annual Meeting, November 12-16, Louisville.

Sangion A, Armitage J, Toose L, Brown T, **Arnot JA**. **2023**. A tiered bioaccumulation assessment framework for organic chemicals. SETAC North America 44th Annual Meeting, November 12-16, Louisville.

Sangion A, Li L, Toose L, Brown T, Armitage J, **Arnot JA**. **2023**. EAS-E Suite: Bridging research and application for chemical assessments and sustainability. SETAC North America 44th Annual Meeting, November 12-16, Louisville.

Armitage J, Sangion A, **Arnot JA**. **2023**. Know Your Chemical, Know Your System: Why in vitro disposition and bioavailability Matter. SETAC North America 44th Annual Meeting, November 12-16, Louisville.

Brown T, Sangion A, **Arnot JA**. **2023**. Addressing uncertainty in chemical partitioning properties and prospects for improvement. SETAC North America 44th Annual Meeting, November 12-16, Louisville.

Brown T, Sangion A, Armitage J, **Arnot JA**. **2023**. QSARs for biodegradation of chemicals in the environment: insights from new data. SETAC North America 44th Annual Meeting, November 12-16, Louisville.

Arnot JA, Sangion A, Brown T, Armitage J, Toose L, Hughes L, Li L. **2023**. Applying EAS-E Suite to support chemical decision making. International Society of Exposure Science (ISES) Annual Meeting, August 27-31, Chicago.

Ahrens A, **Arnot J**, Becker RA, Bonnell M, Collins S, DeLeo P, Egeghy P, Embry M, Gouin T, Isaacs K, Jensen E, Zaleski R. **2023**. Quantitative Structure Use Relationships: Technical Summit Highlights. ISES Annual Meeting, August 27-31, Chicago.

Sangion A, Li L, Toose L, Brown T, Armitage J, **Arnot JA**. **2023**. EAS-E Suite: An integrated platform for New Approach Methodologies to facilitate hazard, exposure, and risk assessment. 12th World Congress on Alternatives and Animal Use in the Life Sciences (WC12), August 27-31, Niagara Falls.

Sangion A, Toose L, Armitage J, Embry M, **Arnot JA**. **2023**. Tiered methods for bioaccumulation assessment to reduce animal testing. WC12, August 27-31, Niagara Falls.

Sangion A, Armitage J, **Arnot JA**. **2023**. Addressing applicability domain and uncertainty in high throughput toxicokinetic data and applications. WC12, August 27-31, Niagara Falls.

Sangion A, Armitage J, **Arnot JA**. **2023**. Extrapolation of in vitro bioactivity and toxicity data to relevant human exposures. WC12, August 27-31, Niagara Falls.

Celsie A, Brown T, Parnis M, Arnot J, Sangion A, Armitage J. **2023**. Two case studies: predicting dermal and inhalation exposure from mixtures. WC12, August 27-31, Niagara Falls.

Sangion A, Armitage J, Toose L, Papa E, **Arnot JA**. **2023**. A tiered approach for screening chemicals for biomagnification potential in air-breathing organisms. SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Sangion A, Brievik K, Toose L, Armitage J, Wania F, **Arnot JA**. **2023**. An integrated tool for the screening of fate, persistence and long-range transport of organic chemicals. SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Sangion A, Armitage J, **Arnot JA**. **2023**. Extrapolation of in vitro bioactivity data to points of departure (PODs) using an in vitro mass balance model (IV-MBM V2.0). SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Sangion A, Armitage J, **Arnot JA**. **2023**. Addressing applicability domain and uncertainty in high throughput toxicokinetic data and applications. SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Toose L, **Arnot J**, Gouin T, Sangion A, Armitage J, Li L. **2023**. Tiered methods for screening-level ecological hazard and risk assessment: Case study application to octamethylcyclotetrasiloxane, D4. SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Toose L, **Arnot J**, Sangion A, Armitage J, **2023**. Using in silico bioaccumulation models: Review and comparison of the EPI Suite BCFBAF and EAS-E Suite BET. SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Parnis M, Celsie A, Brown T, Sangion A, **Arnot J**, Armitage J, Li L, Mackay D. **2023**. Tiered approaches to estimating human exposure to mixture components via inhalation and dermal absorption. SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Hughes L, Li L, Sangion A, **Arnot JA**. **2023**. Developing mass balance models for simulating indoor fate and human exposure to ionic and ionizable organic chemicals released indoors. SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Brown T, Armitage J, Sangion A. **Arnot JA**. **2023**. QSARs for abiotic degradation and biodegradation of chemicals in the environment. SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Brown T, Sangion A. **Arnot JA**. **2023**. Addressing uncertainty in chemical partitioning properties and prospects for improvement. SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Brown T, **Arnot J**, Sangion A, Celsie A, Parnis M. **2023**. Predicting the chemical properties and exposure of mixtures using QSPRs and PPLFERs. SETAC Europe 33rd Annual Meeting, April 30 – May 4, Dublin.

Sangion A, Armitage J, **Arnot JA**. **2022**. Addressing uncertainty in toxicokinetic data and applications to advance chemical exposure and risk assessment. SETAC North America 43rd Annual Meeting, November 13-17, Pittsburgh.

Sangion A, Zhang Z, Brown T, **Arnot JA**, Li L. **2022**. Review and comparison of QSAR/QSPR models in chemical mobility assessment. SETAC North America 43rd Annual Meeting, November 13-17, Pittsburgh.

Toose L, Sangion A, Armitage J, Embry M, **Arnot JA**. **2022**. Tiered methods for bioaccumulation assessment to reduce animal testing. SETAC North America 43rd Annual Meeting, November 13-17, Pittsburgh.

Brown T, **Arnot J**, Sangion A, Celsie A, Parnis M. **2022**. Predicting the chemical properties of mixtures and mixture components from chemical structure with QSPRs and PPLFERs. SETAC North America 43rd Annual Meeting, November 13-17, Pittsburgh.

Armitage J, Sangion A, **Arnot JA**. **2022**. Extrapolation of in vitro bioactivity data to points of departure (PODs) using an in vitro mass balance model (IV-MBM V2.0). SETAC North America 43rd Annual Meeting, November 13-17, Pittsburgh.

Zhang Z, Sangion A, Wang S, Brown T, **Arnot J**, Li L. **2022**. Should we assess the "mobility" of chemicals from a perspective of the "hazard" or "exposure? SETAC North America 43rd Annual Meeting, November 13-17, Pittsburgh.

Arnot JA, Toose L, Sangion A, Armitage JM, Embry M. **2022**. Tiered methods for bioaccumulation assessment to address uncertainty and reduce animal testing. Presentation at SETAC Asia Pacific Conference, September 5-8. (Virtual)

Arnot JA, Sangion A, Li L, Toose L, Brown TN, Armitage JM. **2022.** EAS-E Suite: Combining PBT and exposure and risk estimation methods for ecological and human health assessment. Presentation at SETAC Asia Pacific Conference, September 5-8. (Virtual)

Armitage JM, Sangion A, Toose L, **Arnot JA**. **2022**. A generic toxicokinetic model for mammals: case applications for rodents. SETAC Europe, May 15-19, Copenhagen.

Sangion A, Armitage JM, Toose L, Brown TN, **Arnot JA**. **2022**. A new integrated screening-level bioaccumulation modelling framework for organic chemicals. SETAC Europe, May 15-19, Copenhagen.

Celsie A, Parnis M, Brown T, Sangion A, Armitage J, **Arnot JA**. **2022**. Characterization of mixtures by assessing chemical similarity. SETAC Europe, May 15-19, Copenhagen.

Li L, Zhang Z, Sangion A, Brown T, **Arnot JA**. **2022**. Are the persistence and mobility of chemicals linked to their capability of contaminating drinking water? SETAC Europe, May 15-19, Copenhagen.

Toose L, Armitage J, Sangion A, Embry M, Hughes L, **Arnot JA**. **2022**. The Bioaccumulation Assessment Tool (BAT, Ver.2.0): A weight-of-evidence framework for bioaccumulation assessment. SETAC Europe, May 15-19, Copenhagen.

Armitage J, Sangion A, Parmar R, Looky A, **Arnot JA**. **2021**. Application of in vitro mass balance models to facilitate the interpretation and use of in vitro toxicity data for hazard and risk assessment. SETAC SciCon4: SETAC North America 42nd Annual Meeting (Virtual).

Armitage JM, Toose L, Hughes L, Sangion A, **Arnot JA**. **2021**. Application and evaluation of a tiered physiologically-based toxicokinetic modelling framework for mammals using empirical and QSAR-based biotransformation rate data. QSAR 2021 Virtual Conference, June 7-9.

Brown TN, Sangion A, **Arnot JA. 2021.** A new database and preliminary QSARs for environmentally relevant biodegradation half-lives. QSAR 2021 Virtual Conference, June 7-9.

Toose L, Armitage J, Sangion A, Embry M, Wyatt J, **Arnot JA. 2021.** Addressing uncertainty in bioaccumulation assessment using the Bioaccumulation Assessment Tool (BAT). QSAR 2021 Virtual Conference, June 7-9.

Sangion A, Li L, Brown TN, Armitage JM, Toose L, **Arnot JA. 2021.** EAS-E Suite: a platform to integrate curated databases and QSARs for chemical hazard, exposure, and risk assessment. QSAR 2021 Virtual Conference, June 7-9.

Sangion A, Foster K, Armitage J, Embry M, Bertato L, Casartelli I, Papa E, **Arnot JA. 2021.** In vitro biotransformation databases: data confidence evaluation for better QSARs and inter-species comparisons. QSAR 2021 Virtual Conference, June 7-9.

Wambaugh J, Sipes N, **Arnot J**, Brown T, Dawson D, Davidson S, Devito M, DiBella J, Ferguson S, Goldsmith R, Grulke C, Judson R, Lawless M, Mansouri K, Patlewicz G, Papa E, Pradeep P, Sangion A, Sayre R, Tornero-Velez R, Wetmore B. **2021**. Collaborative evaluation of in silico predictions for high throughput toxicokinetics. QSAR 2021 Virtual Conference, June 7-9.

Sangion A, Papa E, Bertato L, Foster K, Armitage J, Looky A, Toose L, Embry M, **Arnot JA. 2021.** Biotransformation rates in humans: from in vitro data to QSAR models. QSAR 2021 Virtual Conference, June 7-9.

Li L, Sangion A, Wania F, Armitage JM, Toose L, Hughes L, **Arnot JA. 2021.** Integrating mechanistic computational modeling and QSXR techniques in support of high-throughput screening of ecological and human exposure to synthetic chemicals. QSAR 2021 Virtual Conference, June 7-9.

Arnot JA Sangion A, Toose L, Armitage JM, Looky A, Becker R. **2021.** Methods for developing iTTCs for human health safety assessment. QSAR 2021 Virtual Conference, June 7-9.

Brown TN, Sangion A, Toose L, Li L, Armitage J, Gouin T, Zhang X, Wania F, **Arnot JA. 2021.** Developing guidance and recommendations for using overall fate and monitoring data in a weight-of-evidence for assessing petroleum hydrocarbon persistence under REACH. Society of Environmental Toxicology and Chemistry (SETAC) Europe, Virtual Conference, May 3-6.

Papa E, Bertato L, Casartelli I, Chirico N, Sangion A, Armitage JM, Embry MR, **Arnot JA. 2021.** QSAR advances in biotransformation assessment in mammals: main results from the CEFIC-LRI ECO.44 project. SETAC Europe, Virtual Conference, May 3-6.

Brown TN, Sangion A, **Arnot JA. 2021.** Biodegradation of organic trace pollutants in the environment. SETAC Europe, Virtual Conference, May 3-6.

Brown TN, Sangion A, **Arnot JA. 2021.** IFSQSAR - an interface integrated with EAS-E Suite for applying group contribution QSARs to predict chemical properties related to chemical fate and exposure. SETAC Europe, Virtual Conference, May 3-6.

Sangion A, Armitage J, Foster K, Looky A, Embry M, Papa E, **Arnot JA. 2021.** Critical evaluation of in vitro and in vivo rodent biotransformation databases. SETAC Europe, Virtual Conference, May 3-6.

Sangion A, Li L, Armitage J, Toose L, Brown TN, **Arnot JA. 2021.** EAS-E Suite: an integrated platform to facilitate hazard, exposure, and risk assessment. SETAC Europe, Virtual Conference, May 3-6.

Arnot JA. 2021. Prioritizing chemicals and research needs using high throughput exposure models. Society of Toxicology, Virtual Event, March.

Breen M, Stanfield Z, Isaacs K, Hull V, **Arnot J**, Sangion A, Linakis M, Sfeir M, Wambaugh J. **2021**. High-throughput toxicokinetics exposure inference for environmental chemicals. Society of Toxicology, Virtual Event, March.

Sangion A, Li L, Brown TN, Armitage J. Toose L, **Arnot JA. 2020**. Curated databases and QSARs for chemical hazard and risk assessment in EAS-E Suite. SETAC North America SciCon2, November 15-19.

Sangion A, Looky A, Foster K, Armitage J. **Arnot JA. 2020**. Top-down and bottom-up approach for rodent biotransformation data: two sides of the same coin. SETAC North America SciCon2, November 15-19.

Li L, Sangion A, Wania F, **Arnot JA. 2020**. Integrating mechanistic computational modeling and QSXR techniques in support of high-throughput screening of human chemical exposure. SETAC North America SciCon2, November 15-19.

Sangion A, Foster K, Armitage J, Embry M, Papa E, **Arnot JA. 2020**. Critical evaluation of an in vitro biotransformation rate database for fish. SETAC North America SciCon2, November 15-19.

Sangion A, Looky A, Armitage J, Embry M, Papa E, **Arnot JA. 2020**. A critically evaluated in vivo toxicokinetic database for rodents. SETAC North America SciCon2, November 15-19.

Arnot JA, Sangion A, Li L, Toose L, Armitage J. Brown TN. **2020.** Bridging the gap between the development and application of exposure models with EAS-E Suite. International Society of Exposure Science (Virtual Conference), September 20-24.

Arnot JA. 2020. High-throughput risk-based prioritization for ecological risk assessment. Society of Toxicology Webinar (Virtual Conference), May 19.

Arnot JA, **2020**. Bridging the gap between the development and application of exposure models with EAS-E Suite. SETAC Europe SciCon1 - Virtual Conference, May 3-7.

Arnot JA, Li L, De Brouwere K, Geerts L, Lamoree M. **2020**. Evaluating the CiP-CAFE and RAIDAR models with monitoring and biomonitoring data from Europe. SETAC Europe SciCon1 - Virtual Conference, May 3-7.

Coady K, Kim J, Belkhiria S, Plotzke K, **Arnot JA. 2020.** Assessing bioaccumulation of cyclosiloxanes using the Bioaccumulation Assessment Tool (BAT). SETAC Europe SciCon1 - Virtual Conference, May 3-7.

Droge S, McLachlan M, Armitage JM, **Arnot JA. 2020.** Using rainbow trout S9 clearance rates as first W-o-E for the biotransformation potential for surfactants. SETAC Europe SciCon1 - Virtual Conference, May 3-7.

Embry M, **Arnot JA.** Brinkmann M, Fan Y, Fay K, Gobas F, Goss K-U, Hultman M, Johanning K, Laue H, Nabb D, Nichols J, Schirmer K, Segner H. **2020.** Fish biotransformation in bioaccumulation: Output from a HESI Technical Workshop. SETAC Europe SciCon1 - Virtual Conference, May 3-7.

Papa E, Casartelli I, Mazzucotelli M, Bertato L, Chirico N, Sangion A, Looky A, Foster K., Armitage JM, Embry MR, **Arnot JA. 2020.** QSAR approach for the analysis and prediction of in vitro intrinsic hepatic clearance in rat and mouse. SETAC Europe SciCon1 - Virtual Conference, May 3-7.

Papa E, Bertato L, Chirico N, Sangion A, Armitage JM, Embry MR, **Arnot JA. 2020.** QSAR modelling and prediction of organic chemical half-lives in aquatic and terrestrial organisms. SETAC Europe SciCon1 - Virtual Conference, May 3-7.

Ribbenstedt A, Armitage JM, **Arnot JA**, Droge S, McLachlan M. **2020.** Bioconcentration of anionic surfactants in fish. SETAC Europe SciCon1 - Virtual Conference, May 3-7.

Papa E, Bertato L, Casartelli I, Mazzucotelli M, Chirico N, Sangion A, Foster K., **Arnot JA**, Armitage JM, Embry MR. **2020.** QSAR prediction of in vitro biotransformation in human and rodents. SETAC Europe SciCon1 - Virtual Conference, May 3-7.

Schirmer K, **Arnot JA**, Bramaz N, Bury N, Embry MR, Fitzgerald J, Hogstrand C, Kropf C, Segner H, Schoenenberger R, Stadnicka-Michalak J. **2020.** Tiered testing strategy for rapid estimation of bioaccumulation via modelling and in vitro data. SETAC Europe SciCon1 - Virtual Conference, May 3-7.

Arnot JA, Li L, Wania F, Becker R. **2019**. Developing and applying tools for high-throughput human health safety assessment. Society of Environmental Toxicology and Chemistry (SETAC) North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Li L, **Arnot JA**, Wania F. **2019**. Using mechanistic, integrative environmental modeling to address the multi-dimensional human chemical exposure. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Lamoree M, van der Veen I, Brandsma S, de Wit C, Tao F, Sellström U, Sandblom O, Plassmann MM, Benskin JP, Harrad SJ, Drage D, Wemken N, Coggins M, Covaci A, Poma G, Christia C, De Brouwere K, Geerts L., **Arnot JA**, Li L, de Boer J, Leonards P. **2019**. Target and nontarget screening of chemicals in the indoor environment for human exposure assessment. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Armitage JM, **Arnot JA**. **2019**. Application of toxicokinetic models to simulate organic chemicals in air-breathing animals for B assessment. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Sangion A, Foster K, Armitage JM, Embry M, Papa E, **Arnot JA**. **2019**. In vitro biotransformation in fish and mammals: Differences and similarities. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Mackay D, **Arnot JA**, Di Toro D. **2019**. A spotlight on environmental modeling. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Toose L, Armitage JM, Foster K, Embry M, Hughes L, **Arnot JA**. **2019**. The Bioaccumulation Assessment Tool (BAT): Case studies for the assessment of bioaccumulation of chemicals in both air-breathing and aquatic organisms. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Li L, **Arnot JA**, Wania F. **2019**. Using lifecycle chemical emission information for high-throughput exposure-based risk assessments. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Arnot JA, Li L, De Brouwere K, Geerts L, Lamoree M. **2019**. Evaluating the RAIDAR-ICE model with monitoring and biomonitoring data from Europe. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Sangion A, Bertato L, Casartelli I, Chirico N, Foster K, Looky A, Armitage JM, Embry M, Papa E, **Arnot JA**. **2019**. Biotransformation for bioaccumulation assessment: From in vitro data to in silico models. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Brown TN, Sangion A, **Arnot JA**. **2019**. A new database and preliminary QSARs for environmentally relevant biodegradation half-lives. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Toose L, Backus S, **Arnot JA**. **2019**. Applying the RAIDAR model to assess chemical contaminants in the Great Lakes. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

Droge S, McLachlan M, Nichol JW, Armitage JM, **Arnot JA**. **2019**. Using S9 clearance rates and membrane-water partitioning to predict surfactant BCF values for fish. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

McLachlan M, Kierkegaard A, Strandell M, Yuan B, Chen CL, Armitage JM, **Arnot JA**, Droge S. **2019**. Bioconcentration of cationic surfactants in rainbow trout. SETAC North America 40th Annual Meeting, November 3-7, Toronto, Canada.

De Brouwere K, **Arnot JA**, Li L, Geerts L, Lamoree M. **2019**. Evaluating the RAIDAR-ICE model with monitoring data of emerging SVOC compounds in the indoor environment. 29th Annual International Society of Exposure Science (ISES) Conference, August 18-22, Kaunas, Lithuania.

Arnot JA, Li L, De Brouwere K, Geerts L, Lamoree M. **2019**. Evaluating the RAIDAR-ICE model with monitoring and biomonitoring data. SETAC Europe Meeting, May 26-30, Helsinki, Finland.

Sangion A, Bertato L, Casartelli I, Foster K, **Arnot JA**, Armitage JM, Looky A, Toose L, Embry M, Papa E. **2019**. Integrated alternative approaches for bioaccumulation and toxicokinetics: from in vitro data to in silico models. SETAC Europe Meeting, May 26-30, Helsinki, Finland.

Bertato L, Casartelli I, Sangion A, Foster K, **Arnot JA**, Papa E. **2019**. Integrating bioaccumulation assessment tools for mammals: from data collection to in silico modelling. SETAC Europe Meeting, May 26-30, Helsinki, Finland.

Arnot JA, Armitage JM, Papa E, Embry M, Sangion A, Foster K, Looky A, Wyatt J, Ramos E, Toose L. **2019**. Developing and testing models to integrate toxicokinetic data for assessing bioaccumulation in mammals. SETAC Europe Meeting, May 26-30, Helsinki, Finland.

Papa E, Casartelli I, Bertato L, Sangion A, Foster K, **Arnot JA**. **2019**. In silico investigation of hepatic clearance in rodents. SETAC Europe Meeting, May 26-30, Helsinki, Finland.

Stadnicka-Michalak J, **Arnot JA**, Bramaz N, Bury N, Embry MR, Fitzgerald J, Hogstrand C, Kropf C, Segner H, Schoenenberger R, Schirmer K. **2019**. A tiered testing strategy for rapid estimation of bioaccumulation by a combined modelling - in vitro testing approach: derivation of kinetic rate constants in different in vitro models. SETAC Europe Meeting, May 26-30, Helsinki, Finland.

Toose L, Armitage JM, Foster KL, Embry M, Hughes L, **Arnot JA**. **2019**. The Bioaccumulation Assessment Tool (BAT): Case studies for assessing "data rich" and "data poor" chemicals for regulatory purposes and informing integrated testing strategies. SETAC Europe Meeting, May 26-30, Helsinki, Finland.

Laue H, Hostettler L, Jenner K, Sanders G, **Arnot JA**, Natsch A. **2019**. Evaluation of major uncertainties as part of in vitro-in vivo extrapolation to predict the bioaccumulation potential of fragrance chemicals. SETAC Europe Meeting, May 26-30, Helsinki, Finland.

Arnot JA, Armitage JM, Toose L, Bonnell M. **2019**. Application of the RAIDAR model to aid chemical prioritization in Canada. SETAC Europe Meeting, May 26-30, Helsinki, Finland.

Arnot JA, Armitage J, Foster K, Looky A, Sangion A, Bertato L, Casartelli I, Embry M, Toose L, Papa E. **2019**. Developing databases and models to integrate toxicokinetic data for human health assessment. Society of Toxicology (SOT), March 10-14, Baltimore, MD.

Becker RA, **Arnot JA**. **2019**. The missing link: Using the TTC to provide a risk-based approach for focusing non-targeted analysis efforts. SOT, Baltimore, MD, March 10-14, Baltimore, MD.

Li L, Hoang C, **Arnot JA**, Wania F. **2018**. What can we learn from the temporal trend of human exposure and concentrations of PBDEs? SETAC North America Meeting, November 4–8, Sacramento, CA.

Li L, **Arnot JA**, Wania F. **2018**. Elucidating the dominant pathways of human exposure to chemicals used indoors. SETAC North America Meeting, November 4–8, Sacramento, CA.

Toose L, Armitage JM, Hughes L, Foster KL, Embry M, **Arnot JA**. **2018**. The Bioaccumulation Assessment Tool (BAT): A quantitative weight of evidence approach for bioaccumulation assessment. SETAC North America Meeting, November 4–8, Sacramento, CA.

Arnot JA, Armitage JM, Toose L, Bonnell M. **2018**. Application of the RAIDAR model to aid chemical prioritization in Canada. SETAC North America Meeting, November 4–8, Sacramento, CA.

Arnot JA, Embry MR, Armitage JM, Nichols JW. **2018**. Updated models for predicting biotransformation impacts on chemical bioconcentration in rainbow trout. SETAC North America Meeting, November 4–8, Sacramento, CA.

Armitage JM, **Arnot JA**, Bonnell M. **2018**. Comparing Mode of Action (MOA) classification using body residues, membrane concentrations and chemical activity for toxicity assessment and chemical prioritization. SETAC North America Meeting, November 4–8, Sacramento, CA.

Arnot JA. **2018**. Evaluating exposure models. Symposium "Consensus Modeling of Chemical Exposure", ISES-ISEE 2018 Joint Meeting, August 26-30, Ottawa, ON.

Li L, **Arnot JA**, Wania F. **2018**. Incorporating lifecycle emission information in promoting chemical exposure screening. ISES-ISEE 2018 Joint Meeting, August 26-30, Ottawa, ON.

Arnot JA, Li L, Givehchi B. **2018**. Comparisons of the RAIDAR-ICE model with other exposure models and exposure estimates. International Council of Chemical Association's Long-Range Research Initiative, Health Canada and US Environmental Protection Agency Workshop, June 20-21, Ottawa, ON.

Armitage JM, **Arnot JA**. **2018**. Application of mass balance models to understand the behaviour of organic chemicals in in vitro toxicity tests. International Council of Chemical Association's Long-Range Research Initiative, Health Canada and US Environmental Protection Agency Workshop, June 20-21, Ottawa, ON.

Papa E, Sangion A, **Arnot JA,** Gramatica P. **2018**. QSAR prediction of biotransformation half-lives in multiple species and PBT assessment refinement of pharmaceuticals and personal care products. 18th International Conference on QSAR in Environmental and Health Sciences, June 11-15, Bled, Slovenia.

Foster KL, Looky AB, Armitage JM, Embry M, Sangion A, Papa E, **Arnot JA. 2018**. A human in vitro biotransformation rate database for QSAR model development. 18th International Conference on QSAR in Environmental and Health Sciences, June 11-15, Bled, Slovenia.

Li L, **Arnot JA**, Wania F. **2018**. Using a dynamic, aggregate exposure model to identify far and near-field contributions to human PCB exposure through time. Society of Environmental Toxicology and Chemistry (SETAC) Europe Meeting, May 13-17, Rome, Italy.

Papa E, Sangion A, **Arnot JA**, Gramatica P. **2018**. Development of biotransformation half-life QSARs and PBT assessment refinement of pharmaceuticals and personal care products. SETAC Europe Meeting, May 13-17, Rome, Italy.

Gouin T, Parmar R, **Arnot JA**. **2018.** Towards the development of a framework for applying non-target chemical analysis data within exposure and risk assessment. SETAC Europe Meeting, May 13-17, Rome, Italy.

Armitage JM, **Arnot JA**. **2018.** Application of equilibrium and toxicokinetic models to understand the behaviour of organic chemicals in in vitro toxicity tests. SETAC Europe Meeting, May 13-17, Rome, Italy.

Nguyen V, Colacino J, **Arnot JA**, Kvasnicka J, Jolliet O. **2018.** Age-based and time trends of exposure chemical biomarkers in the US population 1999-2014. SETAC Europe Meeting, May 13-17, Rome, Italy.

Sangion A, **Arnot JA**, Gramatica P, Papa E. **2018.** A tiered approach for screening chemicals for biomagnification potential in humans. SETAC Europe Meeting, May 13-17, Rome, Italy.

Foster KL, Looky AB, Armitage JM, Embry M, Nichols JW, Wetmore B, **Arnot JA. 2018.** Critical evaluation of a human in vitro biotransformation rate database: case study of seven chemicals. SETAC Europe Meeting, May 13-17, Rome, Italy.

Arnot JA, Westgate J, Hughes L, Li L, Zhang X, Givehchi B, Armitage JM. **2018.** A modelling framework to link aggregate exposure pathways with internal exposures and potential bioactivity. SETAC Europe Meeting, May 13-17, Rome, Italy.

Arnot JA, Looky A, Foster KL, Armitage JM, Halder M, Lostia A, Kienzler A. **2018**. A critically evaluated database of in vitro and in vivo toxicokinetic data for mammals and fish. SETAC Europe Meeting, May 13-17, Rome, Italy.

Schirmer K, **Arnot JA**, Bramaz N, Bury N, Embry MR, Fitzgerald J, Hogstrand C, Kropf C, Segner H, Stadnicka-Michalak J. **2018**. A tiered testing strategy for rapid estimation of bioaccumulation by a combined modelling - in vitro testing approach: derivation of kinetic rate constants in different in vitro models. SETAC Europe Meeting, May 13-17, Rome, Italy.

Toose L, Armitage JM, Foster KL, Embry M, **Arnot JA**. **2018**. The Bioaccumulation Assessment Tool (BAT): A quantitative weight of evidence approach for bioaccumulation assessment. SETAC Europe Meeting, May 13-17, Rome, Italy.

Kierkegaard A, Chen CL, McLachlan M, Armitage JM, **Arnot JA**, Droge S. **2018**. Measuring bioconcentration of cationic surfactants in fish. SETAC Europe Meeting, May 13-17, Rome, Italy.

Gouin T, Falls A, Armitage JM, Toose L, Bonnell M, **Arnot JA**. **2017**. Applying the RAIDAR model for ecological risk assessment: A case study for 10 organic flame retardants. SETAC North America Meeting, November 12-16, Minneapolis, MN.

Foster KL, Looky AB, Armitage JM, Embry M, **Arnot JA**. **2017**. Critical evaluation of an in vitro biotransformation rate database for humans. SETAC North America Meeting, November 12-16, Minneapolis, MN.

Armitage JM, Gouin T, **Arnot JA**. **2017**. Simulating the toxicokinetics of organic contaminants in in vitro test systems: When do they matter? SETAC North America Meeting, November 12-16, Minneapolis, MN.

Otter RR, Beasley A, Embry MR, Allen DK, **Arnot JA**, Bonnell M, Leon Paumen M, Lillicrap A, Salvito D, Valenti T. **2017**. ecodatahub: Big data techniques to create actionable ecotox data. SETAC North America Meeting, November 12-16, Minneapolis, MN.

Toose L, Armitage JM, Foster KL, Embry M, **Arnot JA**. **2017**. The Bioaccumulation Assessment Tool: Overview and Case Study Application. SETAC North America Meeting, November 12-16, Minneapolis, MN.

Doucette WJ, Shunthirasingham C, Dettenmaier EM, Fantke P, **Arnot JA**. **2017**. Organic chemical uptake in terrestrial plants: experimental variability. SETAC North America Meeting, November 12-16, Minneapolis, MN.

Gouin T, **Arnot JA**, Zidek A. **2017**. Towards the development of a framework for applying non-target chemical analysis data within exposure and risk assessment. SETAC North America Meeting, November 12-16, Minneapolis, MN.

Arnot J, Toose L, Armitage J, Gouin T, Falls A, Bonnell M. **2017**. Case study applications of the RAIDAR model for chemical risk assessment. 254th American Chemical Society National Meeting & Exposition, August 20-24, Washington, DC

Arnot J, Bury N, Embry M, Hogstrand C, Segner H, Stadnicka-Michalak J, Schirmer K. **2017.** A tiered testing strategy for rapid estimation of bioaccumulation by a combined modelling - in vitro testing approach: Identification of candidate test chemicals. Society of Environmental Toxicology and Chemistry (SETAC) Europe Meeting, May 7-11, Brussels, BE

Arnot J, Armitage J, Foster KL, Toose L, Embry M. **2017.** The bioaccumulation assessment tool: An organizational framework for bioaccumulation assessment. SETAC Europe Meeting, May 7-11, Brussels, BE.

Armitage J, **Arnot J**, Orazietti A, Gouin T, Brown TN, Celsie A, McCarty LS, Mackay D. **2017.** Expanding the evaluation of the chemical activity hypothesis for toxicity assessment. SETAC Europe Meeting, May 7-11, Brussels, BE.

Papa E, Sangion A, **Arnot J**, Brown TN, van der Wal L, Gramatica P. **2017**. Prediction of in vivo biotransformation in fish and human for the refinement of bioaccumulation. SETAC Europe Meeting, May 7-11, Brussels, BE.

Celsie A, Mackay D, Parnis JM, McCarty L, **Arnot J**, Powell D. **2017**. The chemical exposure toxicity space (CETS) model: Relating exposure, concentration, activity and toxicity onset time. SETAC Europe Meeting, May 7-11, Brussels, BE.

Arnot J. Development and application of computational tools to support chemical exposure and risk assessment. **2017**. Society of Toxicology (SOT) Annual Meeting March 12-16, Baltimore, MD.

Arnot J, Foster KL, Looky AB, Brown TN, Armitage J, Papa E, Wetmore B, Nichols J. Comparisons of in vitro, in vivo and in silico biotransformation rates in fish and humans. **2016**. SETAC North America Annual Meeting, November 6-10, Orlando, FL.

Arnot J, Armitage J, Foster KL, Toose L, **2016.** The bioaccumulation assessment tool: An organizational framework for bioaccumulation assessment. SETAC North America Annual Meeting, November 6-10, Orlando, FL.

Gouin T, Embry M, **Arnot J**. **2016**. Building improved in-vitro exposure assessment capability: Towards the development and implementation of enhanced QIVIVE tools. SETAC North America Annual Meeting, November 6-10, Orlando, FL.

Arnot J, Armitage J, Westgate J, Embry M, Gouin T. **2016**. Examining underlying assumptions when translating in vitro bioassay results to in vivo conditions. International Society of Exposure Science (ISES) Meeting, October 9-13, Utrecht, The Netherlands.

Arnot J, Foster KL, Looky AB, Brown TN, Armitage J, Papa E, Nichols, J. **2016**. Merging methods, measurements and models to estimate metabolism rates in fish and select mammal species. ISES Meeting, October 9-13, Utrecht, The Netherlands.

Arnot J, Westgate J, Hughes L, Zhang X, Armitage J. **2016**. A modelling framework to link aggregate exposure pathways with internal exposures. ISES Meeting, October 9-13, Utrecht, The Netherlands.

Arnot JA, Falls A, Armitage JM, Gouin T, Toose L, Bonnell M. Applying the RAIDAR model and the chemical activity approach for ecological risk assessment: A case study for select organic flame retardants. **2016**. SETAC Conference, May 22-26, Nantes, France.

Arnot J, Armitage J, Embry M, Gouin T. Examining underlying assumptions when translating in vitro bioassay results to in vivo conditions. **2016**. SETAC Conference, May 22-26, Nantes, France.

Schmidt SN, Armitage JM, **Arnot JA**, Kusk KO, Mayer P. **2015**. Linking algal growth inhibition to chemical activity. SETAC Conference, November 1-5, Salt Lake City, UT.

Falls A, Armitage JM, Gouin T, Bonnell M, **Arnot JA**. **2015**. Applying and evaluating the RAIDAR model to address data gaps for chemical exposure assessment: Case study for Dechlorane Plus. SETAC Conference, November 1-5, Salt Lake City, UT.

Armitage JM, Brown T, Wania F, Mackay D, **Arnot JA**. **2015**. Introducing BIONIC v2: A mechanistic mass balance model for predicting bioconcentration factors (BCFs) of ionizable organic chemicals in fish. SETAC Conference, November 1-5, Salt Lake City, UT.

Arnot JA, Falls A, Armitage JM, Gouin T, Bonnell M. **2015**. Applying the RAIDAR model and the chemical activity approach for ecological risk assessment: A case study for select organic flame retardants. SETAC Conference, November 1-5, Salt Lake City, UT.

Armitage JM, **Arnot JA**. Mackay D. **2015**. Why is chemical activity successful as a metric of aquatic toxicity? A gedankenexperiment explains why. SETAC Conference, November 1-5, Salt Lake City, UT.

Brown TN, Armitage JM, **Arnot JA**. **2015**. Addressing uncertainty in sub-cooled liquid property estimation: Applications for chemical activity calculations. SETAC Conference, November 1-5, Salt Lake City, UT.

Pawlowski S, **Arnot JA**, Champ S. **2015**. A bioaccumulation assessment of triclosan (TCS) using a weight of evidence approach. SETAC Conference, November 1-5, Salt Lake City, UT.

Fantke P, Trapp S, **Arnot JA**, Doucette WJ. **2015**. The role of dissipation processes in plants for modeling bioaccumulation. SETAC Conference, November 1-5, Salt Lake City, UT.

Jolliet O, Huang L, Csiszar SA, **Arnot J**, Bennett D, Ernstoff AS, Shin H, Wetmore BA. **2015**. Tier 2 high-throughput exposure screening of chemicals in consumer products: chemicals encapsulated in articles and in cosmetics. International Society for Exposure Science (ISES) Exposure 25th Annual Meeting, Exposures in an Evolving Environment, October 18-22, Henderson, NV

Arnot JA, Nichols J, MacLeod M, Papa E, Borgå K, Laue H, Leonards P, Gobas F. **2015**. Bioaccumulation assessment: Developing frameworks and finding common ground. SETAC Conference, May 3-7, Barcelona, Spain.

Papa E, van der Wal L, **Arnot J**, Gramatica P. **2015**. Recent advances in QSAR prediction of fish and human biotransformation half-lives. SETAC Conference, May 3-7, Barcelona, Spain.

Papa E, van der Wal L, **Arnot J**, Sangion A, Cassani S, Gramatica P. **2015**. Prediction and screening of fish biotransformation half-lives. SETAC Conference, May 3-7, Barcelona, Spain.

Armitage JM, Brown T, Wania F, Mackay D, **Arnot JA**. **2015**. Expanding the applicability of a mechanistic mass balance model for estimating the bioaccumulation potential of ionizable organic chemicals in fish. SETAC Conference, May 3-7, Barcelona, Spain.

Brown TN, Armitage JM, **Arnot JA**. **2014**. Exploring fragment-based QSARs to predict the equilibrium partitioning of ionogenic organic chemicals to biologically relevant media. SETAC Conference, November 9-13, Vancouver, BC.

Armitage JM, **Arnot JA**, Wania F. **2014**. Simulating the bioaccumulation behaviour of the neutral organic chemical hexachlorobenzene and its ionogenic metabolite, pentachlorophenol, in mammals. SETAC Conference, November 9-13, Vancouver, BC.

Doucette B, Dettenmaier E, Shunthirasingham C, Arnot J. **2014**. A review of measured bioaccumulation data in terrestrial plants for organic chemicals: variability and the need to develop standard protocols. SETAC Conference, November 9-13, Vancouver, BC.

Arnot J, Mayer P, Schmidt SN, Armitage J, Gouin T, McCarty LS, Mackay D. **2014**. Chemical activity for integrated chemical assessment. SETAC Conference, November 9-13, Vancouver, BC.

Arnot JA, Armitage JM, Gouin T, Toose L, Bonnell M, Hughes D, Romano M, Wania F, Mackay D. **2014**. Exploring the exposure and hazard potential of ionogenic organic chemicals released to the environment. SETAC Conference, November 9-13, Vancouver, BC.

McCarty LS, Mackay D, **Arnot J**. **2014**. Exposure-Dose Relationships in Aquatic Toxicity: Interaction of Test Design, Modifying Factors, and Dose Surrogates. SETAC Conference, November 9-13, Vancouver, BC.

Arnot J, Quinn C. **2014**. Evaluating and applying laboratory dietary bioaccumulation testing data and models for organic chemicals in fish. SETAC Conference, November 9-13, Vancouver, BC.

Krogseth IS, Breivik K, **Arnot J**, Wania F. **2014**. Screening chemicals in commerce in the Nordic countries using multimedia environmental models – the role of emissions. SETAC Conference, November 9-13, Vancouver, BC.

Shin HM, Ernstoff A, **Arnot J**, Jolliet O, Wetmore B, Csiszar SA, Fantke P, Zhang X, McKone T, Bennett D. **2014**. Risk-based High-Throughput Chemical Screening and Prioritization Using Exposure Models and in Vitro Bioactivity Assays. SETAC Conference, November 9-13, Vancouver, BC.

Binnington MJ, Quinn C, Curren MS, Armitage JM, **Arnot J**, Chan HM, Wania F. **2014**. Quantifying the Effect of Permanent Dietary Transitions in the North on Human Exposure to Persistent Organic Pollutants. SETAC Conference, November 9-13, Vancouver, BC.

Bennett D, Jolliet O, **Arnot J**, Shin HM, Ernstoff A, Csiszar SA, Fantke P, Zhang X, Wetmore B. **2014**. The Long-Range Initiative (LRI) ExpoDat Modeling Case Study. International Society for Exposure Science (ISES) Exposure Science Integration to Protect Ecological Systems, Human Well-Being and Occupational Health, October 12-16, Cincinnati, OH.

Binnington MJ, Quinn C, Curren MS, Armitage JM, **Arnot J**, Chan HM, Wania F. **2014**. Quantifying the Effect of Permanent Dietary Transitions in the North on Human Exposure to Persistent Organic Pollutants. International Society for Exposure Science (ISES) Exposure Science Integration to Protect Ecological Systems, Human Well-Being, and Occupational Health, October 12-16, Cincinnati, OH.

Doucette B, Dettenmaier E, Shunthirasingham C, **Arnot J**. **2014**. Terrestrial Plant Bioconcentration Factors for Organic Chemicals: Experimental Values Database. 11th International Phytotechnologies Conference, September 30 – October 3, Heraklion, Crete, Greece.

Armitage JM, Wania F, **Arnot JA**. **2014**. An In Vitro Test System Model to Facilitate the Use of Toxicity and Bioassay Data for Screening-Level Hazard and Risk Assessment. US EPA ToxCast Data Summit, September 29-30, Research Triangle Park, NC.

Csiszar SA, Ernstoff A, Shin HM, Bennett D, **Arnot J**, Fantke P, Wetmore BA, Zhang Z, Jolliet O. **2014**. ExpoDat High-Throughput Exposure Assessment of 229 ToxCast I and II Chemicals: Comparing Near- and Far-field Exposures to in vitro Bioactivities. US EPA ToxCast Data Summit, September 29-30, Research Triangle Park, NC.

Arnot J, Mayer P, Schmidt SN, Armitage JM, Gouin T, Mackay D. **2014**. Chemical activity for integrated chemical assessment. ICCA-LRI Workshop, June 17-18, Lugano, Switzerland.

Ernstoff A, Shin HM, Bennett D, **Arnot J**, Wetmore B, Judson R, Dioniso K, Isaacs K, Csiszar SA, Fantke P, Jolliet O. **2014**. Flagging health risks of chemicals by combining environmental and consumer product exposure modeling with in vitro bioactivity. SETAC Conference, May 11-15, Basel, Switzerland.

Xiao R, **Arnot JA**, MacLeod M. **2014**. A dynamic multi-compartment fish bioaccumulation model with a focus on dietary chemical absorption. SETAC Conference, May 11-15, Basel, Switzerland.

Lillicrap A, **Arnot JA**, Borgå K, Embry M. **2014**. A tiered strategy for Bioaccumulation assessment. SETAC Conference, May 11-15, Basel, Switzerland.

Adolfsson-Erici M, Arnot J, McLachlan MS, MacLeod M. **2014**. A benchmarking approach to determine biotransformation rate constants for organic chemicals in fish from in-vivo experiments. SETAC Conference, May 11-15, Basel, Switzerland.

Krogseth IS, Breivik K, **Arnot J**, Wania F. **2014**. Screening chemicals in commerce in the Nordic countries using multimedia fate and bioaccumulation models. SETAC Conference, May 11-15, Basel, Switzerland.

Arnot JA, Armitage JM, Orazietti A, Gouin T, Brown TN, McCarty LS, Mackay D. **2013**. Expanding the evaluation of the chemical activity hypothesis for toxicity assessment. SETAC Conference, November 17-21, Nashville, TN.

Armitage JM, **Arnot JA**, Wania F. **2013**. Evaluating the performance of a mechanistic screening level model for assessing the bioaccumulation potential of Active Pharmaceutical Ingredients (APIs) in fish. SETAC Conference, November 17-21, Nashville, TN.

Xiao R, McLachlan MS, MacLeod M, **Arnot JA**. **2013**. A kinetic modeling study of sources of variability in measurements of absorption efficiency of chemicals by fish. SETAC Conference, November 17-21, Nashville, TN.

Zhang X, **Arnot JA**, Wania F. **2013**. Screening organic chemicals for human exposure potential in the indoor environment: The roles of chemical properties and biotransformation rates. SETAC Conference, November 17-21, Nashville, TN.

Binnington MJ, Quinn CL, Curren M, Armitage JM, **Arnot JA**, Chan HM, Wania F. **2013**. Quantifying Human Exposure to Persistent Organic Pollutants in the Arctic: Developing New Bioaccumulation Models for Narwhal, Beluga Whale and Caribou. SETAC Conference, November 17-21, Nashville, TN.

Gobas FAPC, Burkhard L, Doucette B, Sappington K, Verbruggen E, Hope B, Bonnell M, **Arnot JA**. **2013**. Terrestrial Bioaccumulation Models for Bioaccumulation Screening and Exposure Assessment: Workshop Summary. SETAC Conference, November 17-21, Nashville, TN.

Zhang X, **Arnot JA**, Wania F. **2013**. Integrating near-field and far-field environmental fate and exposure models for screening-level exposure and risk assessment. ICCE 2013, June 25 - 28, Barcelona, Spain.

Arnot JA, Brown TN, Wania F. **2013**. Estimating screening-level organic chemical half-lives in humans. What is Normal? Implications for Chemical Safety Assessment. 2013. Co-organized by International Council of Chemical Associations' Long-Range Research Initiative (ICCA-LRI) and the U.S. National Institutes of Health's National Center for Advancing Translational Sciences (NCATS), June 11-12, Santa Fe, NM.

Arnot JA, Reid L, Brown TN, Mackay D. **2013**. The role of chemical mode-of-entry and biotransformation on trophic magnification factors in the terrestrial environment. SETAC Conference, May 12-16, Glasgow, Scotland.

Arnot JA, Shunthirasingham C, Dettenmaier E, Doucette B, Mackay D. **2013**. Measured plant bioaccumulation data and screening-level models for organic chemicals. SETAC Conference, May 12-16, Glasgow, Scotland.

McCarty LS, **Arnot JA**, Mackay D. **2013**. Critical body residue validation for aquatic organisms exposed to chemicals causing toxicity by baseline narcosis. SETAC Conference, May 12-16, Glasgow, Scotland.

Krogseth IS, Breivik K, **Arnot JA**, Schlabach M. **2013**. Evaluating the environmental fate of short-chain chlorinated paraffins (SCCPs) in the Nordic environment using a dynamic multimedia model. SETAC Conference, May 12-16, Glasgow, Scotland.

Armitage JM, **Arnot JA**, Wania F. **2013**. Modelling the accumulation and internal tissue distribution of PCBs and their hydroxylated metabolites in polar bears (*Ursus maritimus*). SETAC Conference, May 12-16, Glasgow, Scotland.

MacLeod M, **Arnot JA**, Borga K, McLachlan MS. **2013**. Controls on the Trophic Magnification Factor of organic chemicals in aquatic foodwebs. SETAC Conference, May 12-16, Glasgow, Scotland.

Kierkegaard AH, McLachlan MS, Breivik K, **Arnot JA**, Wania F. **2013**. Prioritization, screening and identification of organosilicon contaminants in the environment. SETAC Conference, May 12-16, Glasgow, Scotland.

Arnot JA, Brown TN, Breivik K, Thomas RS, Wetmore B. **2012**. Combining in vitro toxicity data with QSARs and mass balance exposure models for high throughput risk assessment. SETAC Conference, November 11-15, Long Beach, CA.

Gobas FAPC, Arblaster J, Wing Ho Luc P, **Arnot JA. 2012**. Towards ecologically relevant sediment quality criteria. SETAC Conference, November 11-15, Long Beach, CA.

Mackay D, **Arnot JA**. **2012**. Has the time come to revisit, revise and expand PBT criteria? SETAC Conference, November 11-15, Long Beach, CA.

Armitage JM, **Arnot JA**, Brown TN, Wania F, Mackay D. **2012**. Prospects and limitations for applying mechanistic bioaccumulation models for ionogenic organic chemicals in aquatic ecosystems. SETAC Conference, November 11-15, Long Beach, CA.

Arnot JA, Brown TN, Breivik K, Thomas RS, Wetmore B. 2012. High throughput exposure screening and critical emission rate simulations. American Chemistry Council Long-Range Research Initiative Workshop: Exposure Determinants for High-Throughput Exposure Assessment, June 14-15, Budapest, Hungary.

Arnot JA, Mackay D, McCarty L. **2012**. A tiered modeling approach for simulating toxicokinetics of baseline narcosis in aquatic organisms. SETAC Conference, May 20-24, Berlin, Germany.

Arnot JA, Brown TN, Breivik K, Wania F, McLachlan MS. **2012**. Development, application, and evaluation of models for screening organic chemical exposures to humans. SETAC Conference, May 20-24, Berlin, Germany.

Arnot JA, Armitage JM, Reid L, Wania F, Mackay D. **2012**. Simulating ionogenic chemical fate, bioaccumulation and exposure with RAIDAR. SETAC Conference, May 20-24, Berlin, Germany.

Brown TN, **Arnot JA**. **2012**. Prediction of environmental and biological degradation half-lives with quantitative structure-activity relationships. SETAC Conference, May 20-24, Berlin, Germany.

Brown TN, **Arnot JA**, Wania F. **2011**. Generation of 2D QSARs for properties relevant to chemical prioritization. SETAC Conference, November 13-17, Boston, MA.

Brown TN, **Arnot JA**, Wania F. **2011**. Evaluating overall degradability of chemicals with QSARs. SETAC Conference, November 13-17, Boston, MA.

Mackay D, Gobas F**, Arnot JA**. **2011**. Exploiting relationships between metrics of biouptake in fish to improve laboratory to field extrapolation. SETAC Conference, November 13-17, Boston, MA.

Arnot JA. **2011**. Exposure based prioritization of organic chemicals and data needs using the RAIDAR and FHX models. International Society of Exposure Science (ISES) Conference, US

EPA Symposium "Exposure based prioritization of chemicals: A global challenge" October 23-27, Baltimore, MD.

Hermens J, **Arnot JA**, van der Heijden S, Jonker M, Mackay D, Mayer P, McCarty L. **2011**. The CEFIC ECO16 project: Critical body residue validation for aquatic organisms exposed to chemicals causing toxicity by baseline narcosis. SETAC Conference, May 15-19, Milan, Italy.

Arnot JA. **2011**. Using exposure models to identify data gaps and develop knowledge infrastructure. SETAC Europe and International Society of Exposure Science (ISES) Joint Special Session "Emerging exposure science for developing chemical regulatory policy: REACH, Biocides, TSCA reform", SETAC Conference, May 15-19, Milan, Italy.

Armitage JM, **Arnot JA**, Wania F, Mackay D. **2011.** The development and evaluation of a mass balance bioaccumulation model for ionogenic chemicals in fish. SETAC Conference, May 15-19, Milan, Italy.

Arnot JA, Burkhard L, Reid L. **2011**. Applying multimedia models to calculate trophic magnification factors (TMFs): exploring basic assumptions and the role of the physical environment. SETAC Conference, May 15-19, Milan, Italy.

Malmvärn A, Kierkegaard A, Radke M, Alsberg T, McLachlan MS, **Arnot JA**, Breivik K, Brown T, Wania F. Dicyclohexylamine: Discover of an environmental contaminant using in-silico screening tools. SETAC Conference, May 15-19, Milan, Italy.

Breivik K**, Arnot JA**, Brown TN, Wania F, McLachlan MS. **2011**. A high-throughput method to screen organic chemicals in commerce for emissions. SETAC Conference, May 15-19, Milan, Italy.

Arnot JA, Brown TN, Wania F, McLachlan MS, Breivik K. **2011**. Screening and prioritizing chemicals based on far-field human exposure. SETAC Conference, May 15-19, Milan, Italy.

Mackay D, Reid L, MacLeod M, **Arnot JA**. **2010**. Towards a global source-receptor analysis for persistent organic chemicals. PacifiChem Conference, December 15-20, Honolulu, HI.

Arnot JA, Burkhard L, Reid L. **2010**. Exploring the use of multimedia fate and bioaccumulation models to calculate trophic magnification factors (TMFs). SETAC Conference, November 7-11, Portland, OR.

Arnot JA, Armitage JM, Mitchell GC, Leggett MF, O'Grodnick J, Eickhoff CV, Hardy I. **2010**. Integrating laboratory and field data with mass balance models for bioaccumulation and exposure assessment: A case study with bifenthrin. SETAC Conference, November 7-11, Portland, OR.

Burkhard L, **Arnot JA**, Embry M, Farley K, Hoke R, Kitano M, Leslie HA, Lotufo G, Parkerton T, Sappington K, Tomy G. **2010**. Comparing laboratory and field measured bioaccumulation endpoints. SETAC Conference, November 7-11, Portland, OR.

Lee SH, **Arnot JA**, Wania F, Yim BJ, Huh YJ, Kim SD. **2010**. Risk assessment of organic pollutants in the Yeongsan and Seomjin Rivers, South Korea. SETAC Conference, November 7-11, Portland, OR.

Arnot JA, Brown TN, Wania F, McLachlan MS, Breivik K. **2010**. Prioritizing chemicals and data requirements for exposure and risk assessment. SETAC Conference, May 23–27, Seville, Spain.

Mackay D, Reid L, **Arnot JA**, Powell D. **2010**. Where have all the siloxanes gone? Evaluating fate and transport of a "challenging" class of chemical substances using an updated, state of the science EQuilibrium Criterion (EQC) model. SETAC Conference, May 23–27, Seville, Spain.

Brown TN, **Arnot JA**, Wania F. **2010**. Prediction of metabolic biotransformation half-lives using iterative fragment selection (IFS). SETAC Conference, May 23–27, Seville, Spain.

Papa E, Moccia A, Gramatica P, **Arnot JA**, Mackay D. **2010**. Metabolic biotransformation in fish: A QSAR approach. SETAC Conference, May 23–27, Seville, Spain.

Burkhard L, **Arnot JA**, Embry M, Farley K, Hoke R, Kitano M, Leslie HA, Lotufo G, Parkerton T, Sappington K, Tomy G. **2010**. Comparison of laboratory and field measured bioaccumulation endpoints. SETAC Conference, May 23–27, Seville, Spain.

Breivik K, Arnot JA, Brown TN, Wania F, McLachlan MS. **2010**. Screening organic chemicals in commerce for emissions. SETAC Conference, May 23–27, Seville, Spain.

Arnot J, Brown T, Wania F, McLachlan M, Breivik K. **2009**. QSARs and mass balance models for screening level exposure and risk assessment. SETAC Conference, November 19–23, New Orleans, LA.

Mackay D, **Arnot JA**. **2009**. Can the combination of Lewis's fugacity, Ferguson's activity hypothesis and Lipnick's excess toxicity form the basis of a new generation of multi-media environmental QSARs? SETAC Conference, November 19–23, New Orleans, LA.

Burkhard L, Hoke R, **Arnot J**, Lotufo G, Parkerton T, Sappington K. **2009**. Comparison of laboratory measured BCFs, BMFs, and BSAFs to field measured BAFs, BMFs, and BSAFs. SETAC Conference, November 19–23, New Orleans, LA.

Mekenyan O, Dimitrov S, Dimitrova N, **Arnot J**, Bonnell M, Parkerton T. **2009**. QSAR model for predicting rate of metabolism in fish. SETAC Conference, November 19–23, New Orleans, LA.

Arnot JA, Brown T, Wania F, McLachlan M, Breivik K. **2009**. Screening organic chemical inventories for human exposure potential. 12th EuCheMS International Conference on Chemistry and the Environment (ICCE), June 14-17, Stockholm, Sweden.

Arnot JA, Mackay D. **2008**. Do current chemical assessment methods effectively identify chemicals of greatest concern?: implications and importance to REACH. SETAC Conference, November 16-20, Tampa Bay, FL.

Mackay D, Reid L, **Arnot JA 2008**. Global scale modeling of contaminant transport: the role of the Distant Residence Time concept. SETAC Conference, November 16-20, Tampa Bay, FL.

Arnot JA, Mackay D, Parkerton TF, Zaleski RT, Warren CS. **2008**. The influence of biomagnification and biotransformation on exposure assessments in a regional environment. SETAC Conference, November 16-20, Tampa Bay, FL.

McLachlan M, Czub G, MacLeod M, **Arnot J**. **2008**. Overall bioaccumulation from a multimedia perspective – What is the relative importance of partitioning properties and metabolic biotransformation? SETAC Conference, November 16-20, Tampa Bay, FL.

McLachlan M, **Arnot J**, MacLeod M, McKone T, Wania F, Cowan-Ellsberry CE. **2008**. Using fate and exposure models in the evaluation of potential POPs. SETAC Conference, November 16-20, Tampa Bay, FL.

McCarty LS, **Arnot JA**. **2008**. Ecological risk assessment for pyridalyl. Presentation to FIFRA SAP on Selected Issues Associated with the Risk Assessment Process for Pesticides with P, B, and T Characteristics, October 28-31, Washington, DC.

MacLeod MJ, **Arnot J**, McLachlan M, Wania F. **2008**. Tracking the sources, transport, and fate of persistent pollutants at regional, continental, and global scales. International Society of Environmental Epidemiology and International Society of Exposure Analysis (ISEE and ISEA) Joint Annual Conference, October 12-16, Pasadena, CA.

McKone TE, **Arnot J**, Sohn M, Vallero D. **2008**. Characterizing source-to-dose relationships for persistent pollutants. ISEE and ISEA Joint Annual Conference, October 12-16, Pasadena, CA.

Cowan-Ellsberry CE, McKone TE, Vallero D, McLachlan M, MacLeod MJ, Wania, F, **Arnot, J**. **2008**. The role of models in an international framework for characterizing persistence, long-range transport and exposure for POPs. ISEE and ISEA Joint Annual Conference, October 12-16, Pasadena, CA.

Arnot JA, Meylan W, Tunkel J, Howard P, Mackay D, Boethling RS, Bonnell M. **2008**. Predicting metabolic biotransformation rates for fish. QSAR Conference 2008, June 8-12, Syracuse, NY.

Arnot JA, Mackay D. **2008**. Combining persistence, bioaccumulation, toxicity and quantity information for hazard and risk assessment. QSAR Conference 2008, June 8-12, Syracuse, NY.

Leggett MF, **Arnot JA**, Fay D, Rose A, Miyamoto M. **2008**. Aquatic risk of plant protection products with low solubility. 4th Pan Pacific Conference on Pesticide Science, June 1-4, Honolulu, HI.

Arnot JA, Mackay D, Bonnell, M. **2007**. Estimating metabolic biotransformation rates in fish from laboratory data. SETAC Conference, November 11-15, Milwaukee, WI.

Mackay D, Webster E, Hubbarde JE, **Arnot JA**. **2007**. Towards a credible model of chemical bioaccumulation in plants. SETAC Conference, November 11-15, Milwaukee, WI.

Arnot JA, Gobas FAPC, Mackay D, Bonnell M. **2006**. A tiered method to assess the bioaccumulation of organic chemicals in aquatic systems. SETAC Conference, November 5-9, Montreal, QC.

Arnot JA, Mackay D, Webster E, Southwood J. **2006**. RAIDAR: A modelling approach to assess risk and uncertainty of organic chemicals released to the environment. SETAC Conference, November 5-9, Montreal, QC.

Mackay D, **Arnot JA**, Powell A. **2006**. Understanding and displaying bioaccumulation and biomagnification in organisms and food webs. SETAC Conference, November 5-9, Montreal, QC.

Bonnell M, **Arnot JA. 2006**. Effect of fish biotransformation rate on the bioaccumulation and biomagnification potential of substances regulated under CEPA: Case studies from wildlife risk assessment. SETAC Conference, November 5-9, Montreal, QC.

Mackay D, **Arnot JA**, Webster E. **2006**. Evaluating potential PBT substances: The Fractional Approach to Toxic Effects (FATE) model. American Chemical Society National Meeting, September 10-14, San Francisco, CA.

Gobas FAPC, **Arnot JA. 2006**. Assessing B(ioaccumulation) of commercial chemicals. American Chemical Society National Meeting, September 10-14, San Francisco, CA.

Bonnell M, Robinson P, Davidson N, **Arnot JA**, Gobas FAPC. **2006**. Canadian bioaccumulation experience from the assessment of substances under CEPA. HESI/JRC/SETAC Europe Workshop on Bioaccumulation Assessments, May 5-6, Brussels, Belgium.

Gobas FAPC, **Arnot JA. 2006**. Lessons learned from the evaluation of bioconcentration and bioaccumulation factors of commercial chemicals. ILSI-HESI Meeting.

Arnot JA, Mackay D, Webster E, Southwood J. **2005**. Screening level risk assessment model for chemical fate and effects in the environment. SETAC Conference, November 13-18, Baltimore, MD.

Mackay D, **Arnot JA**. **2005**. Paracelsus got it wrong: fugacity makes the poison. SETAC Conference, November 13-18, Baltimore, MD.

Arnot JA, Mackay D, Toose-Reid L, Macleod M. **2005**. Modelling the long-range transport of contaminants to the arctic: a contribution to international negotiations on POPs. Northern Contaminants Program Results Workshop, September 27-29, Victoria, BC.

Arnot JA, Mackay D, Toose-Reid L, Ponce-Hernandez R. **2005**. Towards a BETR-Africa: fate and risk assessment of persistent organic pollutants originating in Africa at local, regional and global scales. Dioxin Conference, August 21-26, Toronto, ON.

Arnot JA, Gobas FAPC. **2004**. Application of a food web bioaccumulation model as an ecosystem approach to sediment target levels: a case study for PCBs in SFB. Fourth SETAC World Congress, November 13-18, Portland, OR.

Arnot JA, Gobas FAPC. **2002**. A QSAR for categorizing the bioaccumulation potential of organic chemicals in aquatic food chains QSAR Conference, May 25-29, Ottawa, ON.

Arnot JA, Gobas FAPC. **2001**. Evaluation of QSAR and simulation models for the screening of potentially bioaccumulative substances. SETAC Conference, May 6-10, Madrid, Spain.

SUCCESSFUL GRANT AND RESEARCH FUNDING (69)

Health Canada: Improving new organic chemical assessment capacity (2023 – 2024). **Principal investigator**

Health Canada: Data and tools to aid the experimental design for cannabinoids and related organic chemicals for *in vitro* testing (2023 – 2024). **Principal investigator**

Environment and Climate Change Canada: Functionality updates to EAS-E Suite modules: CiP-CAFE and RAIDAR (2023 – 2024). **Principal investigator**

United Kingdom Environment Agency: Scoping the uncertainty in screening for bioaccumulation potential of substances for which octanol is not a reasonable simple surrogate for partitioning;

including an assessment of alternative surrogates and toxicokinetic methods (2023 – 2024). **Principal investigator**

Health Canada: Expanding new organic chemical assessment capacity (2022 – 2023). **Principal investigator**

Health Canada: Developing a confidence framework to characterize uncertainty in the application of NAMs in a risk assessment context (2022 – 2023). **Principal investigator**

Health Canada: Advancing high throughput toxicokinetics, exposure models and new approach methods (NAMs) for risk assessment activities (2022 – 2023). **Principal investigator**

ExxonMobil Biomedical Sciences Inc: Addressing uncertainty in toxicokinetics data and applications to advance chemical exposure and risk assessment. Phase 2 – Theme 1: Analysis of toxicokinetic data (2022-2023). **Principal investigator**

American Chemistry Council Long-Range Research Initiative (ACC-LRI): Improving EAS-E Suite (2021 – 2024). **Principal investigator**

Health Canada: Case study and workshop for guiding the selection of appropriate exposure models for risk assessment using the EAS-E suite platform (2021 – 2022). **Principal investigator**

Health Canada: Application of mass balance modeling and in vitro and in vivo extrapolation to support scoping and risk assessment applications for per- and poly-fluorinated alkyl substances (PFAS) (2021 – 2022). **Principal investigator**

Health Canada: Application of mass balance modeling and in vitro and in vivo extrapolation to higher-throughput genetic toxicology assays for risk assessment applications (2021 – 2022). **Principal investigator**

ExxonMobil Biomedical Sciences Inc: Addressing uncertainty in toxicokinetics data and applications to advance chemical exposure and risk assessment. Phase 1: Exploratory analysis of toxicokinetic data (2021-2022). **Principal investigator**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ECO 54: Next generation risk assessment methods for substances associated with mobility concerns (2021 – 2024). **Co-applicant**

Environment and Climate Change Canada: Training Course for BIONIC, BAT and EAS-E Suite (2021 - 2022). **Principal investigator**

Natural Environment Research Council (NERC) UK. Contamination from LEgacy Waste: effects on Seabirds CLEWS) (2020 – 2023). **Co-applicant**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) B22: Human exposure assessment framework for complex substances (2020 – 2023). **Co-Principal investigator**

Concawe. Developing guidance and recommendations for using overall fate and monitoring data in a weight-of-evidence for assessing petroleum hydrocarbon persistence under REACH (2020 – 2021). **Principal investigator**

Health Canada: Modernize Health Canada's consumer and industrial/aquaculture release models and incorporate them into the EAS-E Suite platform (2020 – 2021). **Principal investigator**

Health Canada: In vitro and in silico toxicokinetics for high throughput data interpretation: addressing model domain of applicability and uncertainty for in vitro-in vivo extrapolation (2020 – 2021). **Principal investigator**

Health Canada: Applying in vitro mass balance models to interpret chemical distribution when using in vitro toxicity data for prioritization and assessment activities (2020 – 2021). **Principal investigator**

Health Canada: Analysis of far-field dietary exposures with food web considerations in human health assessment (2020 – 2021). **Principal investigator**

Health Canada: Provision of scientific expertise in the development or application of new and emerging technologies and tools in support of human health risk assessment (2019 – 2024). **Principal investigator**

Global Silicones Council. Comparison of PBT vs. holistic methods for chemical prioritization and screening assessment (2018 – 2023). **Principal investigator**

American Chemistry Council Long-Range Research Initiative (ACC-LRI): Applying 21st Century Science for Risk-Based Chemical Assessments (2018 – 2021). **Principal investigator**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ECO 41: Improved characterization of partitioning and biotransformation for screening organic compounds for the potential to bioaccumulate in air-breathing species (2018 – 2021). **Co-applicant**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ECO 44: Integrating Bioaccumulation Assessment Tools for Mammals (2018 – 2020). **Principal investigator**

Environment Canada: Generation of physical-chemical property data and the application of models for estimating fate and transport and exposure and risk potential for organic substances on the Canadian DSL (2017 – 2018). **Principal investigator**

Health Canada: Advances in Exposure Methodology, through standing offer reference number: 4600001172 with Summit Toxicology (2017 – 2018).

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ECO 37: D-BASS: Developing a bioaccumulation assessment strategy for surfactants (2017 – 2020). **Co-applicant**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ARC3: Development of the bioaccumulation assessment tool (BAT ver.1.0) to aid in the bioaccumulation assessment of organic chemicals. (2016 – 2020). **Principal investigator**

European Commission - Joint Research Centre (JRC): Developing databases of in vitro and in vivo biotransformation rates in fish and mammalian species (2016 – 2018). **Principal investigator**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ECO 34: A tiered testing strategy for rapid estimation of bioaccumulation by a combined modelling - in vitro testing approach (2016 – 2019). **Co-applicant**

American Chemistry Council Long-Range Research Initiative (ACC-LRI): Improving exposure models and integrating exposure and risk information for high-throughput chemical screening (prioritization) and higher tiered assessments (2015 – 2018). **Principal investigator**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ECO 30: Expanding the applicability domain of the chemical activity approach for hazard and risk assessment (2015 – 2017). **Principal investigator**

The Research Council of Norway: Climatic, abiotic and biotic drivers of mercury in freshwater fish in northern ecosystems (Climer) (Researcher project – OKOSYSTEM, 2015 – 2018). **Co-applicant**

U.S. Environmental Protection Agency: Enhance and Integrate RAIDAR-ICE Near-Field Human Exposure Model (2014 – 2015). **Principal investigator**

Environment Canada: Calibration of the RAIDAR model to determine environmental exposure concentrations from monitoring data (2015). **Principal investigator**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ECO 21: Improving the performance and expanding the applicability of a mechanistic bioconcentration model for ionogenic organic compounds (IOCs) in fish (BIONIC) (2013 – 2015). **Principal investigator**

U.S. Environmental Protection Agency: Expanding the RAIDAR model framework for consumer product exposures (2012 – 2013). **Principal investigator**

Unilever: Expanding the evaluation of the chemical activity hypothesis for toxicity and risk assessment (2012 – 2014). **Principal investigator**

Northern Contaminants Program (NCP): Quantifying the effect of transient and permanent dietary transitions in the north on human exposure to persistent organic pollutants (2012 – 2014). **Co-applicant**

American Chemistry Council Long-Range Research Initiative (ACC-LRI): Developing, applying and evaluating models for screening level chemical exposure and risk assessment (2012 – 2015). **Principal investigator**

International Life Sciences Institute - Health and Environmental Sciences Institute (ILSI – HESI): Update of laboratory BCF and BMF databases for fish and calibration/verification of improved mechanistic models for bioaccumulation assessment (2012 – 2013). **Principal investigator**

Environment Canada: Developing databases and models for mammalian biotransformation rate and dietary assimilation efficiency for improved bioaccumulation assessment (2012 – 2013). **Principal investigator**

Health Canada: Developing and applying methods to reduce uncertainty in chemical biodegradation rate estimates for ecological and human health assessment (2012). **Principal investigator**

The Research Council of Norway, Leiv Eiriksson Mobility Grant: Merging food web contaminant empirical and modeling expertise - Visiting Researcher Dr. Jon Arnot (2012). **Co-applicant**

Stockholm University: Grant for Internationally Renowned Visiting Scientists and Postdocs (2012). **Co-applicant**

Health Canada: Development of a new Health Canada Far-field Human Exposure (FHX-CAN) model including selected regional Canadian environments (2011 – 2012). **Principal investigator**

ExxonMobil Biomedical Sciences Inc.: Exploring the role of plant biotransformation on human exposure to organic chemicals (2011 – 2013). **Principal investigator**

Health Canada and Environment Canada: Development, evaluation and application of novel methods for exposure and risk assessment for 'problematic' CMP substances (2011 – 2014). **Co-applicant**

Unilever: Exploring the fate, bioaccumulation and exposure potential of ionogenic chemicals released to the environment using the RAIDAR model (2011 – 2012). **Principal investigator**

UK Defra. Task Brief 6: Bioaccumulation Test Method Validation: Analysis of Results from an OECD Ring Test. (2011-2012). **Principal investigator**

Health Canada: Model updates and work to aid in the prioritization and assessments of chemicals including ionisable substances (2010 – 2011). **Co-principal investigator**

U.S. Environmental Protection Agency: Rapid exposure-based prioritization of environmental chemicals (2010 – 2011). **Principal investigator**

Northern Contaminants Program (NCP): Bioaccumulation modelling of current use pesticides and new organohalogens in Arctic marine and terrestrial food webs (2010 – 2011). **Co-principal investigator**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ECO 16: Generate a validated CBB database and validate a CBB chronic toxicity range for narcotics (2010 – 2013). **Co-applicant**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ECO 15: Rapid estimation of trophic magnification factor (TMF) using laboratory, field and computer modelling methods in aquatic organisms (2010 – 2013). **Co-applicant**

European Oleochemicals and Allied Products Group (APAG): Assessing the bioaccumulation potential of long chain amines (cationic surfactants) in fish (2010 – 2011). **Principal investigator**

Environment Canada: Revising models for estimating chemical dietary uptake efficiency in fish (2009 – 2010). **Principal investigator**

European Chemical Industry Council Long-range Research Initiative (Cefic-LRI) ECO 13: Applying and verifying PBT/POP models through comprehensive screening of chemicals (2009 – 2012). **Co-applicant**

European Brominated Flame Retardant Industry Panel (EBFRIP): Systematic scientific evaluation of HBCD for Persistent Organic Pollutant (POP) properties according to the UNEP Stockholm Convention criteria and comparison with existing classified POPs (2009 – 2010). **Principal investigator**

Health Canada and Environment Canada: Screening Chemical Management Plan chemicals to identify those with the greatest exposure potential to humans and wildlife (2008 – 2011). **Co-applicant**

Canadian Environmental Protection Act Industry Coordinating Group: Postdoctoral Research Grant (2008). **Principal investigator**

International Life Sciences Institute - Health and Environmental Sciences Institute (ILSI – HESI): Funding to support the development of a QSAR model to predict biotransformation rates of organic chemicals in fish (2008). **Principal investigator**

Environment Canada: A critical evaluation of the limitations and uncertainties associated with the use of molecular size information when evaluating the bioaccumulation of substances (2007). **Principal investigator**

Environment Canada: Develop and evaluate a method to calculate probability distributions for rates of organic chemical biotransformation by fishes (2007). **Co-principal investigator**

ExxonMobil Biomedical Sciences Inc.: Development of a model to estimate human intake fractions and compare results with estimates calculated by the European Union System for the Evaluation of Substances (2006 – 2007). **Co-applicant**

Environment Canada: Development of methods to estimate environmentally relevant biodegradation rates for organic chemicals (2006). **Co-applicant**

SCHOLARSHIPS AND AWARDS

NSERC Postdoctoral Fellowship	2009 – 2010
SETAC Best Student Paper Award	2009
Trent University President's Medal: best academic record, Ph.D. (Science)	2009
James M. McKim III Innovative Student Research Award	2008
NSERC Postgraduate Scholarship	2005 – 2008
Trent University Research Fellowship	2005

SERVICES, MEMBERSHIPS AND ACADEMIC ASSOCIATIONS

- Canada's Chemical Management Plan Scientific Committee (Member: 2017 – 2021)
- Society of Toxicology (Member: 2017 – present)
- American Chemical Society (Member: 2017 – present)
- HESI RISK21 Scientific Advisory Board (Member: 2017 – present)
- National Academy of Sciences Committee Member: Incorporating 21st Century Science into Risk-Based Evaluations (2015 – 2016)
- International Society of Exposure Science (Member: 2010 – present)
- Society of Environmental Toxicology and Chemistry Bioaccumulation Science Advisory Group (Member: 2006 - present; Co-chair: 2014 – 2017)
- Green Party of Canada (Member: 2006 – 2017)
- HESI Bioaccumulation Workgroup (Member: 2005 – present)
- Society of Environmental Toxicology and Chemistry (Member: 2001 – present)

PEER-REVIEWER (JOURNALS)

- AIMS Environmental Science
- Atmospheric Environment
- Bulletin of Environmental Contamination and Toxicology
- Chemosphere
- Critical Research in Toxicology
- Ecotoxicology and Environmental Safety
- Environment International
- Environmental Health Perspectives
- Environmental Modelling & Software
- Environmental Pollution
- Environmental Research

- Environmental Science & Policy
- Environmental Science & Technology
- Environmental Toxicology & Chemistry
- Human and Ecological Risk Assessment
- Journal of Environmental Management
- Journal of Exposure Science & Environmental Epidemiology
- Journal of Great Lakes Research
- Journal of Hazardous Materials
- Journal of Toxicology
- SAR and QSAR in Environmental Research
- Science of the Total Environment
- Toxicology and Applied Pharmacology
- Water Research

PEER-REVIEWER (GOVERNMENT AGENCIES)

- Health Canada
- Environment and Climate Change Canada
- Aboriginal Affairs and Northern Development Canada
- Ontario Centre for Excellence
- Swiss Brazilian Scientific and Technology Cooperation Program

CONFERENCE CO-CHAIR

- Differing biotransformation capacity across species: measurements, modeling and implications for decision-making (SETAC North America Conference, November 6-10, 2016, Orlando, FL)
- Measuring and estimating bioavailability: Linking exposures to effects for improved ecological risk assessment (SETAC North America Conference, November 6-10, 2016, Orlando, FL)
- Quantitative in vitro to in vivo extrapolation (QIVIVE): Advances in tools to quantify exposure-response relationships for risk assessment (International Society of Exposure Science Conference, October 9-15, 2016 Utrecht, The Netherlands)
- Quantitative in vitro to in vivo extrapolation (QIVIVE): Advances in tools to link external and internal exposures for applications in risk assessment (SETAC Europe Conference, May 22-26, 2016, Nantes, France)
- Building a weight of evidence for bioaccumulation assessment (SETAC North America Conference, November 1-5, 2015, Salt Lake City, UT)
- Recent scientific developments in bioaccumulation research and assessment (SETAC Europe Conference, May 3-7, 2015, Barcelona, Spain)
- Bioaccumulation: Science & regulation (SETAC North America Conference, November 9–13, 2014, Vancouver, BC, Canada)
- Advances in exposure-science research and technology: expanding the integration among multiple disciplines (SETAC Europe and ISES Joint Special Session “Emerging exposure science for developing chemical regulatory policy: REACH, Biocides, TSCA reform” SETAC Europe Conference, May 15–19, 2011, Milan, Italy)
- From molecular structure to properties and toxicity. In honor of Dr. Bob Lipnick (SETAC North America Conference, November 19–23, 2009, New Orleans, LA, USA)

ORGANIZING COMMITTEE MEMBER (WORKSHOPS, CONFERENCES, SYMPOSIA)

- Quantitative Structure-Use Relationship (QSUR) Summit. Organized by ACC-LRI. November 2-4, 2022, Raliegh NC
- How Can Fit-For-Purpose Exposure Assessments Best Be Integrated Into Risk-Based Decision Making? Co-organized by International Council of Chemical Associations' Long-Range Research Initiative (ICCA-LRI) in collaboration with the Joint Research Centre (JRC) June 21-22, 2017, Como, Italy
- Advances in Exposure Modelling: Bridging the Gap between Research and Application. Organized by European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC) May 4-5, 2017, Brussels, Belgium
- What Will Work? Application of New Approaches for Chemical Safety Assessment. Co-organized by International Council of Chemical Associations' Long-Range Research Initiative (ICCA-LRI) in collaboration with the United States Environmental Protection Agency (US EPA) June 16-17, 2015, New Orleans, USA
- SETAC International Programs Committee Symposium: Application of Weight-of-Evidence (WOE) in Risk-Based Ecological Assessment Frameworks (May 3, 2015, Barcelona, Spain)
- Cefic-LRI Workshop on Recent Scientific Developments in Bioaccumulation Research (September 24, 2014, European Chemicals Agency, Helsinki, Finland)
- What Is Safe? Integrating Multi-Disciplinary Approaches for Decision Making about the Human Health and Environmental Impacts of Chemicals. Co-organized by International Council of Chemical Associations' Long-Range Research Initiative (ICCA-LRI) and the Joint Research Centre (JRC), June 17-18, 2014 Lugano, Switzerland

LECTURES

- Interdisciplinary Toxicology (PCL483)
- Drugs, Poisons and Public Policy: The Role of Pharmacology and Toxicology in Policy Making (PCL490)
- Advanced Seminar in Environmental Science (EES1100)
- Environmental Chemistry (CHMB55)
- Modelling the Fate of Organic Chemicals in the Environment (CHMD59/CHM1425/EES1121)
- Applications of Modelling in the Natural and Social Sciences (AMOD5610)
- Pollution Ecology (ERSC355)
- Current Issues in Environmental Science and Policy (ERSC/T395)