

ABBREVIATED CURRICULUM VITAE (FEBRUARY 9, 2017)
ANNEMIEKE FARENHORST, Ph.D., P.Ag.

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ACADEMIC DEGREES

1998	Ph.D.	Geography, University of Toronto, Canada
1991	Doctorandus	Soil Science & Physical Geography, University of Amsterdam, The Netherlands

ACADEMIC CAREER

2013-present	Director, Collaborative Research and Training Experience Program for First Nations Water and Sanitation Security
2011-present	Natural Sciences and Engineering Research Council of Canada Chair for Women in Science and Engineering in the Prairie Region
2008-present	Professor, Department of Soil Science, University of Manitoba
2009-2010	Acting Head, Department of Soil Science, University of Manitoba
2003-2008	Associate Professor, Department of Soil Science, University of Manitoba
1998-2003	Assistant Professor, Department of Soil Science, University of Manitoba
1997-1998	Lecturer, Department of Soil Science, University of Manitoba

AWARDS AND RECOGNITIONS (since 2000)

2016	Canada's Most Powerful Women: Top 100 Award Winners
2016	Ace Burpee's Top 100 Most Fascinating Manitobans for 2016
2015	Dr. and Mrs. Ralph Campbell Award, University of Manitoba
2015	University of Toronto Science Leadership Program Fellow
2013	University of Manitoba Merit Award for Outreach
2013	Named one of The Globe and Mail's "Hot Shot Profs"
2012	The Queen Elizabeth II Diamond Jubilee Medal
2010	University of Manitoba Merit Award for Outreach
2006	University of Manitoba Merit Award for Research
2005	University of Manitoba Outstanding Teacher Award
2003	University of Manitoba Merit Award for Research and Teaching
2003	The Rh Institute Award for Outstanding Contributions to Interdisciplinary Scholarship and Research
2001	Faculty of Agricultural and Food Sciences Diploma I Teacher of the Year

THESES

1. Farenhorst, A. 1998. Influence of earthworms (*Lumbricus terrestris* L.) on the dissipation and distribution of herbicides in soil. Ph.D. Thesis, University of Toronto, Canada. 207 p.
2. Farenhorst, A. 1991. Surface Runoff and Nutrient Redistribution in Burnt-Mediterranean Forest Hillslope Systems. Doctoranda Thesis, University of Amsterdam, The Netherlands. 137 pp.

RESEARCH INTERESTS

Experimental studies on pesticide sorption and degradation in soils, Pesticide environmental monitoring, Pesticide fate modeling; Environmental policy development, Pesticide risk indicators, Pesticide Regulations; Near-infrared spectroscopy applications in soil science; Antibiotics and estrogens fate in soils, livestock manure and human waste products; First Nations drinking water security

RESEARCH AWARDS AND CONTRACTS (lifetime totals)

Funding as principal investigator: \$6,432,295

Funding as co-applicant: \$1,140,133

SUPERVISION OF HIGHLY QUALIFIED PERSONNEL IN RESEARCH PROJECTS

	Research Associates and Post Doctoral Fellows	Ph.D. students	M.Sc. students	B.Sc. students	High school students
Current	1	6	6	0	0
Previous	5	7	8	63	19

STUDENT ADVISORY COMMITTEES AND EXAMINATIONS

External Thesis Examiner: 7

M.Sc. advisory committee member: 13

Ph.D. advisory committee member: 7

CURRENT COURSES TAUGHT

SOIL 3520 Pesticides: Environment, Economics & Ethics

SOIL 7180 Environmental Chemistry of Pesticides

SOIL 7220 Principles of Scientific Research

SUMMARY OF PUBLICATIONS, REPORTS, PRESENTATIONS AND MEDIA INTERVIEWS

Refereed book chapters (lifetime): 7

Refereed journal articles (lifetime): 63

Reports (lifetime): 50+

Articles in conference proceedings (lifetime): 21

Conference presentations with abstracts (lifetime): 216

Invited presentations (lifetime): 50

Media interviews (lifetime): 30+

RECENT PUBLICATIONS (in bold are individuals supervised by me, including my students)

Refereed book chapters

1. Gagnon, P., Sheedy, C., Farenhorst, A., Cessna, A.J., Newlands, N.K., and McQueen, R.D.A. (2016). Chapter 14. Pesticides, Pages 153-165 in R.L. Clearwater, T. Martin and T. Hoppe (eds.) 2016. *Environmental Sustainability of Canadian Agriculture: Agri-environmental indicator report series - Report #4*. Ottawa, Ontario: Agriculture and Agri-Food Canada.
2. Kookana, R.S., Ahmad, R., Farenhorst, A. (2015). Chapter 12. Sorption of pesticides and its dependence on soil properties: chemometrics approach for estimating sorption, Pages 221-240 in W. Chen, A. Sabljic, S.A. Cryer, R.S. Kookana (eds.). *Non-first order degradation and time-dependent sorption of organic chemicals in soil*. Washington DC: American Chemical Society Publications.
3. Farenhorst, A., **McQueen, R.D.A.**, Kookana, R.S., **Singh, B.**, Malley, D. (2015). Chapter 14. Spatial variability of pesticide sorption: measurements and integration to pesticide fate models, Pages 255-274 in W. Chen, A. Sabljic, S.A. Cryer, R.S. Kookana (eds.). *Non-first order degradation and*

time-dependent sorption of organic chemicals in soil. Washington DC: American Chemical Society Publications.

Refereed journal articles

1. Farenhorst, A., **Li, R., Jahan, M.**, Tun, H.M., **Mi, R., Amarakoon, I.**, Kumar, A., Khafipour, E. (2016). Bacteria in drinking water sources of a First Nation reserve in Canada. *Science of the Total Environment*, 575, 813-819.
2. **Amarakoon, I.**, Farenhorst, A., **Rose, K., Claeys, A., Ascef, B.** (2016). 17 β -Estradiol mineralization in human waste products and soil in the presence and the absence of antimicrobials. *Journal of Environmental Science and Health, Part B*. 51(10), 655-660
3. Fernando, D.M., Tun, N.M., Poole, J., Patidar, R., **Li, R., Mi, R., Amarawansa, G.**, Dilantha R., Khafipour, E., Farenhorst, A., Kumar, A. (2016). Identification of antibiotic resistance genes in source and drinking water samples from a First Nation Community in Canada. *Applied and Environmental Microbiology*, 82 (15):4767-4775.
4. **Singh, B.**, Farenhorst, A., **McQueen, R.D.A.** Malley, D.F. (2016). Near-infrared spectroscopy as a tool for generating sorption input parameters for pesticide fate modeling. *Soil Science Society of America Journal* 80, 604-612.
5. **Munira, S.**, Farenhorst, A., Flaten, D., Grant, C. (2016). Phosphate fertilizer impacts on glyphosate sorption by soil, *Chemosphere*, 153, 471-477.
6. Unsworth, J., Corsi, C., Van Emon, J., Farenhorst, A., Hamilton, D., Howard, C., Hunter, R., Jenkins, J., Kleter, G., Kookana, R., Lalah, J., Leggett, M., Miglioranza, K., Miyagawa, H., Peranginangin, N., Rubin, B., Saha, B., Shakil, N. (2016). Developing Global Leaders for Research, Regulation and Stewardship of Crop Protection Chemistry in the 21st Century. *Journal of Agricultural and Food Chemistry*, 64 (1), 52-60.
7. Farenhorst, A., **Andronak, L.A., McQueen, R.D.A.** (2015). Bulk deposition of pesticides in a Canadian city: Part 1. Glyphosate and other agricultural pesticides. *Water, Air and Soil Pollution*, 226:1-11 (DOI 10.1007/s11270-015-2343-4).
8. Farenhorst, A., **Andronak, L.A., McQueen, R.D.A.** (2015). Bulk deposition of pesticides in a Canadian city: Part 2. Impact of malathion use within city-limits. *Water, Air and Soil Pollution*, 226:1-8 (DOI 10.1007/s11270-015-2342-5).
9. Gagnon, P., Sheedy, C., Farenhorst, A., **McQueen, R.D.A.**, Cessna, A., Newlands, N. (2014). A coupled stochastic/deterministic model to estimate the evolution of the risk of water contamination by pesticides across Canada. *Integrated Environmental Assessment and Management*, 10(3), 429-436.
10. **Messing, P.**, Farenhorst, A., Waite D.T., Sproull, J.F. (2014). Air concentrations of currently used herbicides and legacy compounds in the Canadian prairies, subarctic, and arctic. *Journal of Environmental Science and Health, Part B*, 49(5), 338-343.
11. **Messing, P.**, Farenhorst, A., Waite D.T., Sproull, J.F. (2014). Current-use herbicides in air as influenced by their estimated agricultural use at various distances from six sampling locations. *Water, Air, & Soil Pollution*, 225, DOI 10.1007/s11270-014-2013-y
12. **Rose, K.P.**, Farenhorst, A. (2014). Estrone and 17 B-estradiol mineralization in liquid swine manure and soil in the presence and absence of penicillin or tetracycline. *Journal of Environmental Science and Health, Part B*. 49(5), 331-337.
13. **Rose, K. P.**, Farenhorst, A., **Claeys, A., Ascef, B.** (2014). 17 β -estradiol and 17 α -ethinylestradiol mineralization in sewage sludge and biosolids. *Journal of Environmental Science and Health, Part B*. 49(11), 871-879.
14. **Singh, B.**, Farenhorst, A., **Gaultier, J.**, Pennock, D.J., **Degenhardt, D.A, McQueen, D.A.R.** (2014). Soil characteristics and herbicide sorption coefficients in 140 soil profiles of two irregular undulating to hummocky terrains of western Canada. *Geoderma (232-234)*, 107-116.

Task force reports

Farenhorst, A., Steggles, M, Varnhagen, C, Wuetherick, B. 2016. Taking Our Place as Leaders in Undergraduate Student Engagement: Report of the Undergraduate Research and Creative Works Review Committee. University of Manitoba, 19 pages, February 22 2016.

BOARD MEMBERSHIP AND COMMITTEES

International, National, Provincial (selected current examples)

- Associate Editor, Journal of Environmental Science and Health, Part B.
- Division of Chemistry and the Environment, International Union of Pure and Applied Chemistry (IUPAC)
- Advisory Committee on Crop Protection Chemistry, IUPAC
- Canadian Agricultural Human Resource Council Advancement of Women in Agriculture Advisory Committee
- Government of Canada Contaminants Working Group for the State of Lake Winnipeg Report.

At University of Manitoba (selected current examples)

- Senate Committee on Instruction and Evaluation
- Senate Committee on Honorary Degrees
- Committee to review gender-based salary differentials
- Centre for Human Rights Research Advisory Board
- Tenure and Promotion Nucleus Committee, Faculty of Agricultural and Food Sciences

CONFERENCES AND WORKSHOPS ORGANIZED (selected recent examples)

- Becoming Leaders: An Introduction to Leadership Skills and Strategies, Saskatoon, December 1, 2016
- NSERC CREATE H2O and Water Rights conference, Winnipeg, Manitoba, May 26-27, 2016
- Women in Science and Engineering Tenure/Promotion Workshop, Calgary, April 28, 2016
- International Day of the Girl at the Legislature Building, Winnipeg, October 2015
- NSERC CREATE H2O and Water Rights conference, Winnipeg, Manitoba, June 1, 2015
- Women in the Science Cluster working luncheon: Meet the new Deans & develop an action plan, Winnipeg, May 12, 2015
- Manitoba Community for Women in Engineering, Science, Technology and Trades (MCWESTT) 2015 Conference, Winnipeg, Manitoba, May 10, 2015
- NSERC CREATE H2O and Water Rights conference, Winnipeg, Manitoba, June 25-26, 2014
- Effective Communications for Women in Science, Engineering, Technology, and Trades, Regina, May 21, 2014
- Supporting Women Academics in their Career Paths and Research: What Academic Administrators Need to Know, Winnipeg, May 2, 2014
- MCWESTT 2013 Conference, Winnipeg, Manitoba, May 10, 2013
- Central American Symposium: Community-based pest management in Central American agriculture, Nicaragua, February 13-15, 2013

WORKSHOPS OFFERED AS CONSULTANT (since 2010)

- FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, 2013, 5-days, Temuco, Chile, 5; 13 participants from 11 countries.
- FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, 2010, 5-days, Vienna, Austria, 18 participants from 14 countries