

## EDUCATION

- ✍ ..... Ph.D., Washington State University, Pullman, Washington, USA
- ✍ ..... M.Sc., University of British Columbia, Vancouver, B.C., Canada
- ✍ ..... B.Sc., Pahlavi University, Shiraz, Iran

## WORK EXPERIENCE

Professor, Department of Engineering, Nova Scotia Agricultural College, Truro, NS (1982-Present)

## TEACHING

### UNDERGRADUATE COURSES

- ✍ AE1020 Drainage & Irrigation, Dalhousie University, Faculty of Eng.
- ✍ AE14 Surveying
- ✍ AE45 Soil & Water Management
- ✍ ENGN0102 Soil & Water Resources Management
- ✍ AE150 Engineering in Agriculture
- ✍ AE260 Surveying
- ✍ AE330 Hydrology
- ✍ ENGN3010 Soil & Water
- ✍ ENGN3011 Fluid Mechanics
- ✍ AE370 Irrigation & Drainage
- ✍ ENGN4000 Water & Water Quality Management
- ✍ AE415 Directed Studies in Agricultural Engineering
- ✍ ENGN4001 Water Quality Issues
- ✍ EB 01 The Agricultural Industry
- ✍ ENVS2000 Environmental Studies I
- ✍ ENGN2002 Introduction to Systems Analysis

Supervised numerous technical & undergraduate students at the NSAC and Faculty of Engineering of Dalhousie University, taught irrigation, drainage and salinity course to the International Potato Production technology students, taught the soil and water quality section of the best management practices for Atlantic Crop Production to the Atlantic Certified Crop Advisors, taught Irrigation Scheduling to the Turf Irrigation Managers

## CONTRIBUTION TO GRADUATE PROGRAMS

- ✍ AGRI5710 Module Course
  - ✍ AGRI5460 Special Topics in Soil & Water Management
1. Adjunct Professor, Biological Engineering Department, Dalhousie University
  2. Adjunct Professor, Faculty of Graduate Studies, Dalhousie University
  3. Adjunct Associate Professor, University of Guelph
  4. Honorary Research Associate, School of Graduate Studies, University of New Brunswick

## HPQ TRAINING

Supervised and co-supervised Sharon MacLean, Undergraduate Student NSERC recipient; Dr. Wienzhi Cao, Visiting Scientist (Xiamen Univ., China), GIS in Environmental Management 1999; Ms. Shufang Gao, Visiting Scientist (Fujian Agr. Univ., China), Water Quality Assessment. 1999; Dr. Nurul Akkhand, Post Doctoral Fellow, Soil & Water Systems Modeling, 2000-2001; Jalal Jebellie, Post Doctoral Fellow, Soil & Water Systems Modeling, Dept. of Agr. & Biosystems Eng., McGill University, 1999; Ms. Erin Smith, Research Associate, NSERC Graduate Scholarship recipient, 2003; Timothy Crowtz, Research Engineer, 2003; Jennifer Pryor, Undergraduate Student NSERC recipient, 2003 and 2004; Dr. Chris Aguirre, Post Doctoral Fellow, Finite Element Modeling, 2002-2003; Dr. Abdelrashid Elmi, Post Doctoral Fellow, Soil and Water Pollution, 2003-2004; John Langille, Undergraduate Student NSERC recipient, 2005, 2006; Amanada Bambrick, Undergraduate Student NSERC recipient, 2005, Mila McLean, Undergraduate Student NSERC recipient, 2006; Kathleen Atkinson, Undergraduate Student NSERC recipient, 2006; Dr. Khaled Hossien, Post Doctoral Fellow, 2007-2008; Dr. Kouros Mohammadi, Visiting Professor 2009-2010; Ebrahim Hashemi, visiting Ph.D, 2010. Student; and Raheleh Malekian, visiting Ph.D. Student, 2010.

April 27, 2011

Ali Madani, Professor, Nova Scotia Agricultural College  
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## GRADUATE STUDENT INVOLVEMENT

STUDENT NAME	REGISTERED AT	DEGREE SOUGHT
<b>Gordon Murray</b>	McGill University	M.Sc.
<b>Robert Gordon</b>	University of Guelph	Ph.D.
<b>Marc Sheeran</b>	NSAC	M.Sc.
<b>Stephen Welling</b>	NSAC	M.Sc.
<b>Bill Crooks</b>	NSAC	M.Sc.
<b>Ebrahim Hosseini</b>	Dalhousie	Ph.D.
<b>Jean-Paul Rochon</b>	NSAC	M.Sc.
<b>Teresa Hauser</b>	NSAC	M.Sc.
<b>Karl Caldwell</b>	Dalhousie	M.Sc.
<b>Bill Malay</b>	NSAC	M.Sc.
<b>Rob Jamieson</b>	Dalhousie	M.Sc.
<b>Paula Macdonald</b>	NSAC	M.Sc.
<b>Tricia Coulter</b>	NSAC	M.Sc.
<b>Terra McNutt</b>	NSAC	M.Sc.
<b>Jennifer Ferguson</b>	NSAC	M.Sc.
<b>Charles Brassard</b>	NSAC	M.Sc.
<b>Cornelius Isaac</b>	UNB	M.Sc.
<b>Scott Nauss</b>	NSAC	M.Sc.
<b>Marguerite Fortune-Phillips</b>	NSAC	M.Sc.
<b>Krista Sharples</b>	NSAC	M.Sc.
<b>Marisha Lamond</b>	NSAC	M.Sc.
<b>Erin Smith</b>	NSAC	M.Sc.
<b>Stephanie Robertson</b>	NSAC	M.Sc.
<b>Laura McDonald</b>	NSAC	M.Sc.
<b>Duane Gorman</b>	NSAC	M.Sc.
<b>Michelle Wall</b>	NSAC	M.Sc.
<b>Pubalee Bera</b>	McGill University	M.Sc.
<b>Scott Lomond</b>	NSAC	M.Sc.
<b>Mary Miles-MacDonnell</b>	NSAC	M.Sc.
<b>Balakumar Thangaraj</b>	NSAC	M.Sc.
<b>Arumugam Thiagarajan</b>	NSAC	M.Sc.
<b>Michele MacLean</b>	NSAC	M.Sc.
<b>Manasah Mkhabela</b>	NSAC	M.Sc.
<b>Debra McLellan</b>	NSAC	M.Sc.

April 27, 2011

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STUDENT NAME	REGISTERED AT	DEGREE SOUGHT
Mekeke Gebrehanna	NSAC	M.Sc.
Steve Tattrie	NSAC	M.Sc.
Jason Wells	NSAC	M.Sc.
Jeff Woods	Dalhousie	M.Sc.
Kathryne Bremner	NSAC	M.Sc.
Vivek Verma	NSAC	M.Sc.
Lee-Ann Nunn	NSAC	M.Sc.
Andrew Sinclair	Dalhousie	Ph.D.
Guenna MacCarthy	NSAC	M.Sc.
Mike Haverstock	NSAC	M.Sc.
Jeff Wentzell	NSAC	M.Sc.
Matt Murphy	Dalhousie	M.Sc.
Charlotte Sullivan	NSAC	M.Sc.
Shadi Dayyani	McGill University	Ph.D.
John McCabe	NSAC	M.Sc.
Robert Carreau	NSAC	M.Sc.
Angela Garnett	NSAC	M.Sc.
Aitrzaz-Ahsan Farooque	NSAC	M.Sc.
Jeff Wood	University of Guelph	Ph.D.
Golmar Golmohammadi	McGill University	Ph.D.
Fahad Khan	NSAC	M.Sc.
Shoaib Saleem	NSAC	M.Sc.
Shiva Ladan	McGill University	Ph.D.

## LIFE LONG LEARNING

- + Introduction to Computer Aided Drafting
- + Management for Soil Conservation and Enhancement
- + Situational Leadership
- + Making Effective Presentation
- + Managing Time
- + Advanced Situational Leadership
- + Land Application of Animal Manure Workshop
- + Teaching & Learning in Higher Education
- + Agr. Impact on Water Quality Workshop
- + Agricultural Drainage & Subirrigation Workshop
- + No Till/Ridge-Till Workshop
- + Managing Agricultural Drainage Waters in Today's Environment
- + Crop and Resource Management Workshop
- + Bridging Troubled Waters
- + Nutrient Management on the Farm
- + DRAINMOD-N Workshop
- + How to Lead a Team
- + How to Supervise People
- + Nutrient Management Session in Richmond, Virginia
- + Nutrient Management Session in Amherst, Massachusetts
- + SWAT Workshop

## TEACHING WORKSHOPS

- + Maximizing Interpersonal Relationship
- + Developing Problem Solving Skills Effectively
- + Preparing a Teaching Dossier
- + Student Evaluation of Teaching
- + Improving Our Teaching Methods
- + Teaching & Learning in Higher Education
- + Technical Education: Now and in the Future
- + Problems and Course Design Strategies
- + Student Evaluation of Instructors and Courses
- + Canadian Vocational Association Teaching Workshop

## MEMBERSHIPS

- ✚ Member of Agricultural Institute of Canada
- ✚ Member of Canadian Society of Bio-Engineering (CSBE)
- ✚ Member of Nova Scotia Institute of Agrologists
- ✚ Member of Irrigation Association
- ✚ Member of Atlantic Provinces Council on the Sciences, Natural Resources Committee
- ✚ Member of Advisory Committee on Soil & Water of Atlantic Committee on Agricultural Engineering
- ✚ Member of American Society of Agricultural Engineers (ASAE)
- ✚ Member of Nova Scotia Soils Institute
- ✚ Member of the Atlantic Land Improvement Contractors' Association (ALICA)
- ✚ Member of the Land & Engineering Advisory Committee of APASCC
- ✚ Chair, CSAE Awards Committee
- ✚ Vice-Chair and Chair, ASAE Drainage Research Committee
- ✚ Member of Drainage Benefits of the ASAE
- ✚ Member of ASAE Water Table Management in Humid Regions Committee
- ✚ Atlantic Regional Director of CSAE
- ✚ Member of the Editorial Board of the International Commission of Agricultural Engineering (CIGR) Journal.
- ✚ Member of the Editorial Board of the Canadian Water Resources Association (CWRA) Journal.
- ✚ External Reviewer of the Dr. Charles Maule's application for promotion from Associate Professor to Full Professor, University of Saskatchewan.
- ✚ Member of the Human Resources Working Group of CARC.
- ✚ Chair of the Soil and Water Committee of CSAE.
- ✚ Member of the Advisory Board of the Easter Canada Soil & Water Conservation Centre.
- ✚ Member of the Canadian National Committee of the International Commission on Irrigation and Drainage.
- ✚ Member of Dalhousie Faculty of Graduate Studies Council.

## SERVICES AT NSAC

- ✚ Member of the International Potato Production Technology Teaching team
- ✚ Member of the Engineering Research Advisory Committee
- ✚ Member of the TUNS/NSAC Liaison Committee
- ✚ Editor of the Information Booklet of Agricultural Engineering Department
- ✚ Member of the Banting Field Committee
- ✚ Recruitment Coordinator, Agricultural Engineering Department
- ✚ Member of ICAR (Inventory of Canadian Agri- Food Research) Team
- ✚ Member of Research Strategy Committee
- ✚ Member of Task Force on Student Recruitment Committee
- ✚ Member of Graduate Studies Committee
- ✚ Chair of Graduate Programme Committee
- ✚ Member of TUNS/NSAC Environmental Engineering Committee
- ✚ Member of Technical Curriculum Committee
- ✚ Member of Crops Advisory Committee
- ✚ International Students Advisor
- ✚ Member of NSAC WUSC Committee
- ✚ Member of Working Group on Manure Handling Committee
- ✚ Member of the Selection Committee of the NSAC Dean of Research
- ✚ Member of the Selection Committee of the NSAC VP Academic
- ✚ Member of the Atlantic Agricultural Science and Technology Workshop of the NSAC
- ✚ Chair, Research Committee
- ✚ Co-Chair, Tenure & Promotion Committee
- ✚ Editor of Agr. Eng. Dept. Newsletter
- ✚ Member of the Enrolment Management Council

## EDITORIAL RESPONSIBILITIES

- ✚ Reviewer of Canadian Agr. Eng. Journal
- ✚ Associate Editor, Canadian Water Resources Journal
- ✚ Reviewer of National Hyd. Res. Inst. Publications
- ✚ Reviewer of International Commission on Irr. & Drain. Journal
- ✚ Reviewer of Transactions of American Society of Agr. Eng.
- ✚ Reviewer of Journal of Agr. Eng. Research
- ✚ Reviewer of Journal of Environmental Technology
- ✚ Reviewer of Canadian Biosystems Eng. Journal

## RESEARCH INTERESTS

- ✚ Environmental Protection & Water Quality
- ✚ Subsurface Drainage
- ✚ Water Table Management
- ✚ Irrigation Scheduling

## PUBLICATIONS

Madani, A. and L. King. 1981. Effect of furrow geometry and water depth on infiltration rate. Paper Presented at the 36th Annual Meeting of Pacific Northwest of ASAE/CSAE. Edmonton, Canada, Sept. 2-4, 1981.

Desire, F. and A. Madani. 1986. Employment of agricultural engineering and agricultural mechanization graduates in Canada. CSAE Paper No. 86-603.

Gartley, C., Cochrane, L., R. DeHaan and A. Madani. 1986. Farm Drainage. ACAE Publication No. 3, AGDEX 752.

Madani, A. and L. King. 1986. Evaluation of a finite element model for estimating a two-dimensional infiltration function. CSAE Paper No. 86-310.

Havard, P. and A. Madani. 1988. Comparison of subsurface drain spacing equations. ACAE Publication No. 16, AGDEX 704.

Webster, T., A. Madani, L. Cochrane and D. Moerman. 1990. Subsurface drainage performance on a Queens soil. ACAE Publication No. 24, AGDEX 704.

Holmstrom, D., A. Madani, P. Brenton and T. Smith. 1991. Effect of subsoiling/drainage or tile spacing on soil trafficability. Poster Presentation at the 11th Annual Meeting of ACAE, Feb. 19-21, 1991, Halifax, NS.

Madani, A., R. Gordon, S.K. Asiedu, T. Canning and P. Brenton. 1991. Irrigation scheduling investigation with Norchip potatoes. Poster Presentation at the 11th Annual Meeting of ACAE, Feb. 19-21, 1991, Halifax, NS.

**PUBLICATIONS CONTD.....**

Sibley, K., A. Madani, P. Brenton and T. Canning. 1991. Preliminary investigation of the effects of tile drain spacing on soil trafficability. Paper Presentation at the 11th Annual Meeting of ACAE, Feb. 19-21, 1991, Halifax, NS.

Webster, T., A. Madani, L. Cochrane, D. Moerman, E. Bosveld and P. Brenton. 1991. Preliminary results on subsurface drainage performance of 3, 6 and 12 meter lateral spacing. Paper Presentation at the Northeast AG/BIO Engineering Conference, July, 21-24, 1991, Montreal, Quebec.

Asiedu, S.K., A. Madani and R. Gordon. 1992. Response of potatoes to irrigation schedules. Presentation at the Annual Meeting of the Nova Scotia Vegetable and Potato Producers Association, Jan. 14, 1992, Kentville, NS.

Webster, T., A. Madani, L. Cochrane, and P. Brenton. 1992. Subsurface drainage performance of 3, 6 and 12 meter lateral spacing. Paper presentation at the 12th Annual Meeting of ACAE, Feb., 1992, Charlottetown, PEI.

Pierik, D., A. Madani, L. Sanderson and L. Cochrane. 1992. A survey of subsurface drainage systems in Nova Scotia. Final Report Submitted to NSDAM, March 1992.

Madani, A. Irrigation scheduling investigation with Norchip Potatoes. 1992. Final Report Submitted to NSDAM, March 1992.

Madani, A., R. Gordon, S.K. Asiedu and S. MacLean. 1992. Effect of irrigation regimes on yields of Potatoes. Proceedings of the International Conference on Agricultural Engineering, Paper#9209-102, Uppsala, Sweden.

Madani, A., P. Brenton, T. Webster and L. Cochrane. 1992. Subsurface Drainage Performance: A Nova Scotia Experience. Proceedings of the International Conference on Agricultural Engineering, Paper#9209-101, Uppsala, Sweden.

Gupta, G.P., S.O. Prasher, A. Madani and C.M. Tejawat. 1992. Field validation of DRAINMOD in Atlantic Canada. CSAE Paper# 92-107, Brandon, Manitoba.

Mathur, I.N., S.O. Prasher, A. Madani, and A.K. Maheshwari. 1992. Field validation of SWACROP in Atlantic Canada. CSAE Paper#92-105, Brandon, Manitoba.

**PUBLICATIONS CONTD.....**

Madani, A., P. Brenton, L. Cochrane and T. Webster. 1992. Subsurface drainage performance on a shallow slowly permeable soil. ASAE paper#92-2645, Nashville, Tennessee.

Madani, A. 1993. Subsurface drainage performance on a shallow, slowly permeable Nova Scotia soil. ALFI final report, project # 12.

Sanderson, L., D. Pierik, A. Madani and L. Cochrane. 1993. A survey of farmer's satisfaction with the performance of subsurface drainage systems in Nova Scotia. Paper Presented at the Canadian Society of Extension, Agricultural Institute of Canada, St. John's, Newfoundland, August 21, 1993.

Madani, A., P. Brenton, R. Donald and L. Cochrane. 1993. The effect of animal waste on water quality in Nova Scotia. Proceedings of the International Conference for Agricultural Machinery & Process Engineering. Seoul, Korea. Vol. V :1415-1418.

Madani, A. and L. Cochrane. 1993. Effect of drain spacing on subsurface drainage performance in a shallow slowly permeable soil. Agriview. Fall 1993.

Madani, A. 1994. Nitrate nitrogen concentrations in tile drainage water from manure applications. NSDAM Research report, 94:25-26.

Blanchard, J.P., A. Madani and T. Papion. 1994. Evaporation rates and moisture retention characteristics of soil amended with composted manure. NSDAM Research report, 94:27-28.

Madani, A. 1994. Drainage and Water Quality Projects. Agriview, Winter 1994.

Madani, A. 1994. Comparative Performance of 50 mm Diameter Drainage Tubing and the Standard 100 mm Tubing. Agriview, Spring 1994.

Madani, A., P. Brenton, R. Donald and L. Cochrane. 1994. The effect of animal manure on surface and subsurface drainage water quality. Proceedings of the International Conference on Agricultural Engineering, Milan, Italy, Vol. 1: 15-16.

Madani, A., and P. Brenton. 1994. Validation of subsurface drainage equation for Atlantic Canada soils. Proceedings of the International Conference on Agricultural Engineering, Milan, Italy, Vol. 1: 86-87.

Pavard, P.L., S.O. Prasher, R.B. Bonnell and A. Madani. 1994. LINKFLOW, A Water Flow Computer Model for Water Table Management: Part 1. Model Development. Transactions of the ASAE 38(2):481-488

**PUBLICATIONS CONTD.....**

Shukla, M.B., S.O. Prasher, A. Madani and G.P. Gupta. 1994. Field validation of DRAINMOD in Atlantic Canada. *Can. Agr. Eng. J.* 36(4):205-213

Gordon, R., A. Madani and T. Webster. 1995. The Question of Irrigation: A Nova Scotia Perspective. *Proceedings of the Agr. Sci. and Tech. Workshop, Truro, NS.* PP.58.

Blackburn, J., J. Nowak and A. Madani. 1995. Some Factors for Consideration in Pre-Elite Seed Potato Production. *Proceedings of the Agr. Sci. and Tech. Workshop, Truro, NS.* PP.159-160.

Brenton, P., A. Madani, L. Cochrane and W. Thomas. 1995. Water Quality as Affected by Manure Application. *Proceedings of the Agr. Sci. and Tech. Workshop, Truro, NS.* PP.176-177.

Welling, S., A. Madani, L. Cochrane, K. Webb, P. Havard, W. Thomas and K. Read. 1995. Performance of Small Diameter Subsurface Drains in Nova Scotia. *Proceedings of the Agr. Sci. and Tech. Workshop, Truro, NS.* PP. 178-180.

Brenton, P., A. Madani, L. Cochrane, K. Webb, J. van Roestel and W. Thomas. 1995. Nitrate Concentrations in Subsurface Drainage Water. *Proceedings of the Agr. Sci. and Tech. Workshop, Truro, NS.* PP. 180-182.

Madani, A., J. Brookhouse, C. Easu and K. Bekkers. 1995. Nova Scotia Agricultural College's Milkhouse Wastewater Treatment System. *Proceedings of the Agr. Sci. and Tech. Workshop, Truro, NS.* PP. 219.

Madani, A. and P. Brenton. 1995. Effect of Drain Spacing on Subsurface drainage performance in a shallow slowly permeable soil. *Can. Agr. Eng. J.* 37(1):9-12

Blanchard, J.P., T.G. Papion and A. Madani. 1995. The Impact of Compost Soil Amendments on the Leaching of Nutrients Originating from Inorganic Fertilizer. *Green Plan Final Report, Project # GP-032.*

Gurgel C., A. Shirmohammadi, A. Madani, K. Haghighi and I. Aguirre. 1995. Finite Element Analysis of Water and Chemical Flow Through Porous Media. *ASAE Paper # 95-2669.* Chicago, USA.

Havard, P.L., A. Madani, K. Thompson and S.O. Prasher. 1995. Performance of a Simulation Model on Shallow Soils With Subsurface Drainage. *CSAE Paper #95-105,* Ottawa, Ontario.

**PUBLICATIONS CONTD.....**

Madani, A., P. Brenton, L. Cochrane, B. Thomas, J. van Roestel and K. Webb. 1995. Water Quality Monitoring for Three Crop Production Practices. CSAE Paper #95-105, Ottawa, Ontario.

Madani, A. 1996. An Assessment of the Impact of Manure Application on Water Quality. Final Report, Green Plan Project # GP-034.

Madani, A. 1996. Agricultural Land Use VS Water Quality. Final Report, Green Plan Project # GP-103.

Prasher, S.O., A. Bhardwaj, A. Madani, G. Geng and R.S. Clemente. 1996. Field Validation of SWACROP in Atlantic Canada. Can. Water Resources J. 21(2):93-108.

Astatkie, T., S. Welling and A. Madani. 1996. Application of a nested exponential model with autocorrelated residuals in drainage engineering. Proceedings of Amer. Soc. of Statistics.

Gurgel C., K. Haghghi, A. Madani and A. Shirmohammadi. 1996. Analysis of reactive solute transport in Porous Media using the finite element. International Conference on Agricultural engineering, 2:551-552.

Welling, S. and A. Madani. 1996. Hydraulic and structural evaluation of 50mm and 100mm diameter subsurface drains. International Conference on Agricultural engineering, 2:653-655.

Shirmohammadi, A., L. Bergstrom, A. Madani and K. Haghghi. 1996. NPS models for implementing ground water monitoring programs. International Conference on Agricultural engineering, 2:747-749.

Prasher, S.O., A. Madani, R.S. Clemente, G.Q. Geng and A. Bhardwaj. 1996. Evaluation of two water table management models for Atlantic Canada. Agricultural Water Management 32:49-69.

Madani, A. 1997. Evaluation of the Improvement of Water Quality by Nitrogen Management Practices. Final Report, Green Plan Project # GP-00089.

Yang, C.C., S.O. Prasher, R. Lacroix and A. Madani. 1997. Application of artificial neural networks in subsurface drainage system design. Can. Water Resources Journal 21(2):1-12.

Astatkie, T, S. Welling and A. Madani. 1997. Comparing subsurface drain size and depth using a nonlinear regression model. Can. Water Resources Journal 22(2):105-114.

Havard, P.L. S.O. Prasher, R.B. Bonnell and A. Madani. 1997. A water flow computer model for water table management: Part 2. Model verification. Transactions of the ASAE 40(6):1539-1542

**PUBLICATIONS CONTD.....**

Havard, P.L. S.O. Prasher, R.B. Bonnell and A. Madani. 1997. A water flow computer model for water table management: Part 3. Model application. Transactions of the ASAE 40(6):1543-1547

Madani, A., S. Welling and P. Havard. 1997. A comparison of performance of 50mm and 100mm subsurface drain tiles in Atlantic Canada. ASAE Paper # 97-2135

Caldwell, K., V. Rodd, R. Gordon, J. MacLeod, A. Madani, A. Reid, L. Cochrane, P. Warman, R. Theriault and R. Fiddes. 1997. Effect of time and rate of manure application. Proceedings of Southern Gulf of St. Lawrence Environmental Workshop, Miramichi, NB

Rochon, J.P., R. Gordon, V. Rodd, L. Cochrane, D. Moerman, A. Madani, S. Barrington, K. Hunter, W. White, D. Thompson and J. van Vulpen. 1997. Evaluation of artificial wetlands for the treatment of agricultural wastes in Nova Scotia. Proceedings of Southern Gulf of St. Lawrence Environmental Workshop, Miramichi, NB

Gurgel C., K. Haghghi, A. Madani and A. Shirmohammadi. 1998. Stochastic vs deterministic finite element modelling of chemical transport in soils. Proceedings of the International Conference on Agricultural Engineering, 5:148-158

Madani, A., R. Gordon, K. Caldwell, A. Shirmohammadi, and K. Haghghi. 1998. Nitrate concentration of subsurface water from a corn field in Atlantic Canada. Proceedings of the International Conference on Agricultural Engineering, 1:557-561

Gordon R., A. Madani, K. Caldwell, S. Welling, P. Havard and L. Cochrane. 1998. Leaching characteristics of nitrate -N in a subsurface drained soil in Atlantic Canada. Proceedings of the Seventh International Drainage Symposium, PP. 567-573

Madani, A., R. Gordon, T. Astatkie and K. Caldwell. 1998. Nitrate nitrogen concentrations in subsurface drainage water. CSAE Paper # 98102, Vancouver, BC

Astatkie, T., A. Madani, R. Gordon, and K. Caldwell. 1998. Seasonal variation of nitrate nitrogen in a soil profile in a subsurface drained field. CSAE Paper # 98103, Vancouver, BC

Gordon, R., A. Madani, L. Cochrane and V. Rodd. 1998. Water quality research initiatives in Nova Scotia. CSAE Paper # 98111, Vancouver, BC

Rochon, J.P., R. Gordon, A. Madani, L. Cochrane and V. Rodd. 1998. Evaluation of artificial wetlands for treatment of agricultural wastewater. NABEC Paper #9811, Halifax, NS

**PUBLICATIONS CONTD.....**

Hauser, T., A. Madani, R. Gordon, J. Burney, L. Cochrane, P. LeBlanc and V. Rodd, 1998. The impact of carrot production on subsurface drainage water quality. NABEC Paper #9826, Halifax, NS

Caldwell, K., R. Gordon, A. Madani, J. Burney, V. Rodd and L. Cochrane, 1998. The effects of timing and application rate of manure on water quality. NABEC Paper #9828, Halifax, NS

Nowak, J., S. Bensalim, C.D. Smith, S.K. Asiedu, A. Madani, G. Lazarovits, D. Northcott, A.V. Sturz, B. Christie and S. Turgeon. 1998. Microplant Weaning by *in vitro* Bacterization. Proceedings of Potato Seed Production by Tissue Culture. Brussels, 25th-28th, Feb., 1998

Gordon, R., A. Madani, J-P Rochon, L. Cochrane and V. Rodd. Agricultural wastewater treatment program. 1998. Rural Resource Colloquim. NS Agric. College, Truro, NS. Feb. 23, 1998.

Ferguson, J., A. Madani, R. Gordon, P. Warman, K. Rouvinen-Watt, L. Cochrane, C. Newell, M. Johnson and C. Esau. 1999. Developing methods for the on-farm composting of mink manure. International Composting Symposium . Halifax, Nova Scotia. September 19-23, 1999.

Caldwell, K., R. Gordon, A. Madani, J. Burney, V. Rodd and L. Cochrane. 1999. The effect of timing and rate of manure application on water quality. Proceedings of Agro-Environmental Management for the Next Millennium Conference, Moncton, NB.

Jamieson, R., A. Madani, R. Gordon and J. Burney. 1999. Evaluation of milkhouse wastewater treatment alternatives. Proceedings of Agro-Environmental Management for the Next Millennium Conference, Moncton, NB.

Malay, W.J., L. Eaton, C. Esau, R. Gordon, A. Madani and G. Patterson. 1999. Mapping variability in carrots and wild blueberries. Proceedings of Agro-Environmental Management for the Next Millennium Conference, Moncton, NB.

Caldwell, K., A. Madani, R. Gordon, V. Rodd and L. Cochrane. 1999. The effect of manure application on water quality. ASAE/CSAE Paper # 99-2080, Toronto, Ontario.

Hauser, T., A. Madani, R. Gordon, P. Leblanc, V. Rodd and L. Cochrane. 1999. An evaluation of subsurface water quality for carrot production systems in Nova Scotia. ASAE/CSAE Paper # 99-2204, Toronto, Ontario.

Rochon, J.P., R. Gordon, A. Madani, V. Rodd and L. Cochrane. 1999. Evaluation of four constructed wetlands treating dairy and swine wastewater. ASAE/CSAE Paper # 99-2205, Toronto, Ontario.

**PUBLICATIONS CONTD.....**

Aguirre, C.G., K. Haghghi, A. Madani and A. Shirmohammadi and H. Montas. 1999. Stochastic element analysis for large-scale model of contaminant transport through porous media. ASAE/CSAE Paper # 99-3100, Toronto, Ontario.

Gordon, R., A. Madani and L. Cochrane. 1999. Impact of agricultural practices on water quality. In: Work Sciences in Sustainable Agriculture. Proceedings of CIOSTA-CIGR V Congress, 18:261-268

Gordon R., D.M. Brown, A. Madani and M.A. Dixon. 1999. An assessment of potato sap flow as affected by soil water status, solar radiation and vapour pressure deficit. Can. J. Soil Sci. 79:245-253

Jebellie, S.J., S.O.Prasher and A. Madani. 1999. Effect of soil moisture content on metribuzin degradation in a sandy soil. Can. Agr. Eng. J. 41(4):221-226

Nowak, J., S. Bensalim, C.D. Smith, C. Dunbar, S.K. Asiedu, A. Madani, G. Lazarovits, D. Northcott and A.V. Sturz. 1999. Behaviour of plant material issued from in vitro bacterization. Potato Research 42:505-519

Malay, W., L. Eaton, C. Esau, A. Madani, R. Gordon and G. Patterson. 2000. Yield variability in wild blueberries. North American Wild Blueberry Research and Extension Workers Conference. Charlottetown, PEI March 22-23, 2000.

Gordon,R., A. Madani, K. Caldwell, N. Boyd and T. Astatkie. 2000. Subsurface Nitrate-N Leaching Loss as Affected by Drainage Size and Depth in a Shallow Slowly Permeable Soil. Can. Water Resour. J. 25(4): 331-341

Jamieson, R , R. Gordon, A. Madani, L. Cochrane, C. Esau and J. Burney. 2000. Milking center wastewater treatment alternatives. Proceedings of the CIGR Conference: R1-R6.

Jamieson, R., R. Gordon, A. Madani, L. Cochrane, C. Esau and J. Burney. 2000. Vegetated infiltration areas for the treatment of milking center wastewater. ASAE Paper # 2079. Milwaukee, Wisconsin.

Havard, P., A. Madani and R. Gordon. 2000. Wastewater reduction from milkhouse cleaning. ASAE Paper # 4105. Milwaukee, Wisconsin.

Malay, W.J., G. Patterson, C. Esau, R. Gordon and A. Madani. 2000. A prototype yield monitoring for carrots. ASAE Paper # 1127. Milwaukee, Wisconsin

**PUBLICATIONS CONTD.....**

Jamieson, R., R. Gordon, A. Madani. 2000. Evaluation of a lime flocculator to treat milking centre wastewater. Agri-Food 2000 Conference. AFL Paper # 195. Winnipeg, Manitoba.

Salehi, F., S. Amin, S. O., Prasher, A. Madani, S. J. Jebelli, C. Tan and C. F. Drury. 2000. Prediction of Annual Nitrogen Losses is Drain Outflows With Artificial Neural Networks. Transactions of the ASAE 43(5):1137-1143.

Astatkie, T., A. Madani, R. Gordon, K. Caldwell and N. Boyd. 2001. Seasonal variation of Nitrate-nitrogen in the soil profile in a subsurface drained field. Can. Biosys. Eng. 43(1):1-6.

Aguirre, C.G., K. Haghghi, A. Shirmohammadi, H. Montas and A. Madani. 2001. Modeling soil heterogeneity, spatial variability of soil properties and transient unsaturated flow: a stochastic finite element approach. Second International Preferential Flow Symposium, 185-188.

MacDonald, P.M., R. Gordon, A. Madani, G.W. Stratton and V. Rodd. 2001. Comparison of leaching pattern of nitrate nitrogen in the soil profile and drainage water. CSAE Paper No. 01-100

Coulter, T, R. Gordon, A. Madani and G.W. Stratton. 2001. Bacteria in agricultural drainage water. CSAE Paper No. 01-103.

Ghaley, A.E., R. Cote, M. Miles, R. Gordon and A. Madani. 2001. Engineered wetland for treatment of landfill leachate. In: Management of Industrial Toxic Waste, NATO, Ioannina, Greece.

Jamieson, R C., R. J. Gordon, L. M. Cochrane and A. Madani. 2001. Long-term effects of milking centre wastewater application on soil and groundwater quality. Can. Water Resou. J. 26(4): 515-536.

Luo, W., R. W. Skaggs, A. Madani, S. Cizicki and A. Mavi 2001. Predicting field hydrology in cold conditions with DRAINMOD. Transactions of the ASAE, 44 (4):825-834.

Bera, P., S.O. Prasher, A. Madani, K. Davary, J. Gaynor and C. Tan. 2001. Development and testing of DRAINMOD-P. CSAE-NABEC Paper No. 01-600.

MacDonald, P.M., R. Gordon, A. Madani, G.W. Stratton and V. Rodd. 2001. Nitrate-nitrogen in drainage water in Nova Scotia. ASAE Paper No. 01-2043

Coulter, T, R. Gordon, A. Madani and G.W. Stratton. 2001. Bacteria in agricultural surface and subsurface drainage water. ASAE Paper No. 01-2041.

**PUBLICATIONS CONTD.....**

Jamieson, T. S., G. W. Stratton, R. J. Gordon and A. Madani. 2001. Nitrogen removal mechanisms in constructed wetlands receiving agricultural wastewater. Proceedings of the Second International Conference on Wetlands and Remediation. Burlington, Vermont.

Jamieson, R. C., R. J. Gordon, L. M. Cochrane, A. Madani and J. R. Burney. 2002. Land application of milking centre wastewater. Can. Biosys. Eng. J. 44:6.1-6.10.

Jamieson, T. S., G. W. Stratton, R. Gordon and A. Madani. 2002. Phosphorous adsorption characteristics of a constructed wetland soil receiving dairy farm wastewater. Can. J. Soil. Sci. 82:97-104.

Jamieson, R. C., R. J. Gordon, K. E. Sharples, G. W. Stratton, and A. Madani. 2002. Movement and Persistence of fecal bacteria in agricultural soils and subsurface drainage water: A review. Can. Biosys. Eng. J. 44:1.1-1.9

Madani, A. and R. Gordon. 2002. Agricultural drainage water quality. Proceedings of the International Conference of the ASCE/CSCE, July 21-24, Niagara Falls, Ontario, Paper No. 73.

Madani, A. and R. Gordon. 2002. Water quality research activities in Atlantic Canada. Proceedings of the ICID Conference, CANCID Session on Soil and Water Quality Management, July 21-26, Montreal, Quebec.

Madani, A., R. Gordon and G. W. Stratton. 2002. Drainage Water Quality. Proceedings of the ICID Conference, CANCID Session on Soil and Water Quality Management, July 21-26, Montreal, Quebec.

Smith, E., R. Gordon, A. Madani and G. W. Stratton. 2002. Evaluation of water quality parameters in an agricultural constructed wetland treatment system in cold climates. International Conference of the ASAE, July 28-August 1, Chicago, Illinois, Paper No. 02-2057.

Wang, S., S. O. Prasher, C. C. Yang, S. Kim, A. Madani, P. Macdonald and S. Robertson. 2002. Field validation of DRAINMOD-N, a mathematical simulation model, to estimate nitrate-nitrogen pollution from subsurface drained farmlands. International Conference of the ASAE, July 28-August 1, Chicago, Illinois Paper No. 02-2039.

**PUBLICATIONS CONTD.....**

Stratton, G. W., A. Madani and R. Gordon. 2002. Pathogen management in agriculture: water quality monitoring in Atlantic Canada. International Conference of the ASAE, July 28-August 1, Chicago, Illinois Paper No. 02-2058.

Gordon, R., A. Madani, G. W. Stratton and L. Cochrane. 2002. An Overview of Water Quality Research Program in Nova Scotia, Canada. International Conference of the ASAE, July 28-August 1, Chicago, Illinois Paper No. 02-2056.

Gordon, R., A. Madani, G. W. Stratton, L. Cochrane and V. Rodd. 2002. Nova Scotia's agricultural water quality research program: drainage water nitrate-nitrogen monitoring. In: National Conf. on Nutrients and Their Impact on Rural Water Quality. April 28-30, Waterloo, Ontario.

Smith, E., R. Gordon, A. Madani and G. W. Stratton. 2002. Evaluation of water quality parameters in an agricultural constructed wetland treatment system in cold climates. In: National Conf. on Nutrients and Their Impact on Rural Water Quality. April 28-30, Waterloo, Ontario.

Madani, A., R. Gordon, N. Akhand, J. Burney and K. Caldwell. 2002. Performance of RZWQM in Atlantic Canada. Proceedings of the World Congress of Computers in Agriculture and Natural Resources, ASAE, Iguacu Falls, Brazil: 850-856.

Smith, E., R. Gordon, A. Madani and G. Stratton. 2002. Winter management of constructed wetland treatment systems. In: Drinking Water Supplies Assessment and Management Strategies for the 21st Century. Virginia Water Research Symposium. VWRRC Special Report SR21-2002.

Madani, A., R. Gordon, A. and G. Stratton. 2002. Water quality and water quantity research activities in Nova Scotia, Canada. In: Drinking Water Supplies Assessment and Management Strategies for the 21st Century. Virginia Water Research Symposium. VWRRC Special Report SR21-2002.

Akhand, N., A. Madani and R. Gordon. 2003. Application of RZWQM in predicting subsurface drainage under Nova Scotia conditions. *Can. Water Resou. J.* 28(1):1-19.

Jamieson, T.S., G.W. Stratton, R. Gordon, and A. Madani. 2003. The use of aeration to enhance ammonia nitrogen removal in constructed wetlands. *Can. Biosys. Eng.* 45: 1.9-1.14

Madani, A., R. Gordon, G. Stratton and E. Smith. 2003. Water quality research activities in Nova Scotia. *Proceedings of Can. Water Resour. Asso.* pp. 257-263

**PUBLICATIONS CONTD.....**

Havard, P., A. Madani and R. Gordon. 2003. Development of a conservation wash system for dairy farms. CSAE Paper No. 03-604

Bera, P. S.O. Prasher, A. Madani, R. Lacroix, J. D. Gaynor and C.S. Tan.2003. Application of MARS in simulating pesticide concentrations in soils. CSAE Paper No. 03-116

Bera, P. S.O. Prasher, A. Madani, R. Lacroix, J. D. Gaynor and C.S. Tan. 2003. Development and validation of DRAINMOD-P for southern Ontario conditions. CSAE Paper No. 03-117

Akhand, N., A. Madani and R. Gordon. 2003. Simulation of RZWQM for subsurface drainage in Nova Scotia. CSAE Paper No. 03-119

Stratton, G.W., A. Madani and R.J. Gordon. Overview of research on the quality of drainage water in Atlantic Canada. ASAE Paper No. 03-2263

Smith, E., R Gordon, A. Madani, G. Stratton. 2003. Seasonal hydrological flow in agricultural constructed wetland treatment. ASAE Paper No. 03-2328

Miller, M.N., G.W. Stratton, G.B. Murray, R. J. Gordon and A. Madani. 2003. Examination of factors affecting the degradation of pentachlorophenol in a biopile. ASAE Paper No, 37043.

Smith, E., N. Wheeler, M. Miles-MacDonnell, S. Tattrie, A. Madani, R. Gordon and G. Stratton. 2003. Use of constructed wetland technology to improve agricultural water quality. International Conference on Water and Environment. Bhopal, India. Dec. 15-18, 2003. CD Rom.

Stratton, G.W., A. Madani, R.J. Gordon, K. Sharples, T. Coulter and A. Thiagarajan. 2004. Bacteria quality of surface and subsurface drainage water from manured fields. In: Drainage VIII: Proceedings of the Eight International Drainage Symposium, pp. 197-205. ASAE Publication No. 701Po304.

Madani, A., A. Elmi, R. Gordon and G. Stratton. 2004. Quality of drainage water in Nova Scotia, Canada. In: Advances in Hydro-Science and Engineering. pp VI(129)1-10.

Madani, A., R. Gordon and G. Stratton. 2004. Constructed Wetland Research in Nova Scotia, Canada. Proceedings of Can. Water Resources Association. C-D Rom.

Tattrie, S., A. Elmi, R. Gordon, R. Jamieson, A. Madani, G. Stratton, D. Hebb and K. Fuller. 2004. Integrated surface water quality assessment of a rural watershed in Nova Scotia, Canada.

**PUBLICATIONS CONTD.....**

Presentation at the ASAE/CSAE Annual International Meeting. Ottawa, Canada. ASAE/CSAE Paper No. 04-2007.

Elmi, A., R. Gordon, C. Madramootto, A. Madani. 2004. Water table management impacts on nitrogen transformation in the soil profile: an environmental perspective. Presentation at the ASAE/CSAE Annual International Meeting. Ottawa, Canada. ASAE/CSAE Paper No. 04-2184.

Sharples, K., G. Stratton, A. Madani, R. Gordon and G. Patterson. 2004. The survival of *E. coli* in agricultural soil treated with dairy manure. Presentation at the ASAE/CSAE Annual International Meeting. Ottawa, Canada. ASAE/CSAE Paper No. 04-2209.

Jebelli, S.J., A. Madani and M. Mamat. 2004. Role of cultivation season in reducing soil and water pollution from nitrate in subsurface drained farms of dry regions. Presentation at the ASAE/CSAE Annual International Meeting. Ottawa, Canada. ASAE/CSAE Paper No. 04-2239.

Fuller, K., R.J. Gordon, R.S. Bush, G.W. Stratton, A. Madani and M. G. Grimmett. 2004. Appearance of fecal coliforms in tile drainage waters from agricultural land. Presentation at the ASA-CSSA-SSSA International Annual Meeting. Seattle, Washington.

Madani, A., R. Gordon and G. Stratton. 2004. Agricultural water quality research. Proceedings of ICID Interregional Conference on Food Production and Water. CD Rom.

Jebellie, S.J., A. Madani and S.O. Prasher. 2004. Computer simulation of fate and transport of metolachlor in a soil column study. *Can. Water Resou. J.* 29(3):159-170.

Elmi, A., A. Madani, R. Gordon, P. Macdonald and G.W. Stratton. 2005. Nitrate nitrogen in the soil profile and drainage water as influenced by manure and mineral fertilizer application in a barley production system. *Water Air Soil Pollu.* 160: 119-132.

Bera, P. S.O.Prasher, A. Madani, J.D. Gaynor, C.S. Tan, R.M. Patel and S.H. Kim. 2005. Development and field validation of the PESFATE model in Southern Ontario. *Transactions of the ASAE.* 48(1):85-100.

Smith, E. R. Gordon, A. Madani and G. Stratton. 2005. Cold climate hydrological flow characteristics of constructed wetlands. *Ca. Biosys. Eng.* 47:1.1-1.7.

Gordon , R., Elmi, A., A. Madani, , T. Hauser, V. Rodd and P. Lablanc. 2005. Nitrate and pesticide leaching from a processing carrot production system in Nova Scotia. *Can. J. Plant Sci.* 85:205-211.

**PUBLICATIONS CONTD.....**

Cudmore, D., P. Havard, A. Madani, R. Gordon, K. Sibley, K. Anderson and R. Sampson. 2004. Evaluation of an on-farm prototype conservation wash system. Presentation at the Agricultural Innovation: Powering the Bio-Economy. Atlantic Agricultural Science and Technology Workshop, Nova Scotia Agricultural College, Nov. 17-18, 2004.

Gebreghanna, M.M., R. Gordon, A. Madani and G. Stratton. 2004. Management of silage effluent: Examination of treatment options. Presentation at the Agricultural Innovation: Powering the Bio-Economy. Atlantic Agricultural Science and Technology Workshop, Nova Scotia Agricultural College, Nov. 17-18, 2004.

Thiagarajan, A., A. Madani, G. Stratton and R. Gordon. 2004. Bacterial discharge in drainage water under zero and conventional tillage: A field study. Presentation at the Agricultural Innovation: Powering the Bio-Economy. Atlantic Agricultural Science and Technology Workshop, Nova Scotia Agricultural College, Nov. 17-18, 2004.

Lamond, M., A. Madani, G. Stratton and R. Gordon. 2004. Subsurface pathways and their influence on phosphorus movement in selected agricultural soils of Nova Scotia. Presentation at the Agricultural Innovation: Powering the Bio-Economy. Atlantic Agricultural Science and Technology Workshop, Nova Scotia Agricultural College, Nov. 17-18, 2004.

Madani, A., R. Gordon and G. Stratton. 2004. Agricultural water quality research. Proceedings of the Food Production and Water: Social and Economics Issues of Irrigation and Drainage. ICID, Sept. 8-10, Moscow, Russia, CD Rom.

Madani, A., R. Gordon, G. Stratton, M. Gebreghanna, M. Lamond, A. Thiagarajan, J. Wood, K. Bremner, V. Vivek Varma, S. Tattrie, D. Cudmore, J. Wells and C. Sullivan. 2005. Overview of current environmental research projects on farm waste management. Proceedings of the Integrated Land and Water Resources Management: Towards Sustainable Rural Development. May 15-19, Frankfurt (Oder), Germany, CD Rom.

Aguirre, C.G., A. Madani, R. Mohtar and K. Haghghi. 2005. Deterministic finite element solution of unsteady flow and transport through porous media: Model development. Can. Biosys. Eng. J. 47:1.29-1.35

Elmi, A.A., R. Gordon, C. Madramootoo, and A. Madani. 2005. Water table management for reducing nitrate accumulation in a soil profile under corn production. Can. Biosys. Eng. J. 47:1.23-1.28

**PUBLICATIONS CONTD.....**

Smith, E., R. Gordon, A. Madani, and Glenn Stratton. 2005. Pathogen removal by agricultural constructed wetlands in cold climates. *J. Env. Informatics*, 6(1):46-50

Bera, P., S.O. Prasher, R.M. Patel, A. Madani, R. Lacroix, J.D. Gaynor, C.S. Tan and S.H. Kim. 2006. Application of MARS in simulating pesticide concentrations in soil. *Transactions of the ASABE*, 49(1):297-307

Verma, V., G. Stratton, A. Madani, and R. Gordon. 2005. Surface phosphorus losses from manured cropping systems. *Proceedings of the Third International conference on Sustainable Agriculture for Food, Energy and Industry*. August 22-27, St. Catharines, ON

Stratton, G., R. Gordon, A. Madani, A. Thiagarajan, C. Shaw, K. Sharples and T. Coulter. 2005. Drainage water quality impacted by manure application. *ASAE Paper No. 05-2067*

Stratton, G., D. Gorman, A. Madani, and R. Gordon. 2005. Characterization of phosphorus adsorption in a constructed wetland receiving agricultural wastewater. *ASAE Paper No. 05-2231*

Tattie, S., R. Gordon, A. Madani, and G. Stratton. 2005. Performance evaluation of a constructed wetland treating multiple wastewaters. *ASAE Paper No. 05-2232*

R. Gordon, A. Madani, G. Stratton, D. Cudmore, A. Thiagarajan, M. Lamond and V. Vinayavarmaraja. 2006. Surface and subsurface drainage water quality. *Proceedings of the International Symposium on Water and Land Management for Sustainable Irrigated Agriculture in Adana, Turkey*, CD ROM.

Fuller, K. D., R. Gordon, G. Stratton, A. Madani, M. Grimmett, and J. Van Roestel. 2006. Presentation at the Atlantic Agronomy Workshop, Charlottetown, PEI, Jan. 17-18.

Coffin, R., D. Gorman, W. Hardy, M. Webber, D. Dawson, R. Gordon, A. Madani, J. McCabe and S. Anderson. 2006. Effect of different fertility applications and irrigation regimes on the yield and processing quality of Russet Burbank and Shepody potatoes. Presentation at the North East Potato Technology Forum, March 15 Bangor, Maine

Shaw, C.L., G.W. Stratton, R. Gordon and A. Madani. 2006. Variability and decay patterns of *E. coli* in drainage water. *ASABE Paper No. 06-2268*.

Patel, R.M., S. Wang, S.O. Prasher, A. Madani, S. Barrington, P.M. Macdonald and S.D. Robertson. 2006. Validation of DRAINMOD-N in cold regions. *NABEC Paper No. 06-047*.

Smith, E., R. Gordon, A. Madani and G. Stratton. 2006. Year-round treatment of dairy wastewater by constructed wetlands in Atlantic Canada. *Wetlands*, 26(2):349-357

Karimi, Y., S.O. Prasher and A. Madani. 2006. Estimation of crop biophysical parameters from hyperspectral observations using support vector machines. NABEC Paper No. 06-035.

Patel, R.M., S. Wang, S.O. Prasher, A. Madani, C.C. Yang, S. H. Kim, P.M. Macdonald and S.D. Robertson. 2006. Evaluation of Swap-Manimeea model for predicting nitrate-nitrogen leaching in hog manured fields. NABEC Paper No. 06-P023.

Dayyani, S., S. Prasher, C. Madramootoo and A. Madani. 2006. Modelling surface and subsurface nitrogen transport in an agricultural watershed. CSBE Paper No. 06-144.

Fuller, K. D., R. Gordon, G. Stratton, A. Madani, M. Grimmett, and J. Van Roestel. 2006. Appearance of *E. Coli* in Tile Drainage Waters from Maritime Agricultural Soils. Presentation at the ASA-CSSA-SSSA International Annual Meeting. Indianapolis, IN. Nov. 13-16

Rodd, A. V., J. Wells, R. Gordon, J.A. MacLeod and A. Madani. 2006. Timing of Manure Application Effects on Forage Yield and N and P Uptake. Presentation at the ASA-CSSA-SSSA International Annual Meeting. Indianapolis, IN. Nov. 13-16

Rodd, A. V., J. Wells, R. Gordon, J.A. MacLeod and A. Madani. 2006. Environmentally Neutral N and P Application and its Relationship to Forage Yield after 10 years of Application. Presentation at the ASA-CSSA-SSSA International Annual Meeting. Indianapolis, IN. Nov. 13-16

Vanderzaag, A. V. Glass, R. Gordon, D. Burton, A. Madani, G. Stratton, and C. Wagner-Riddle. 2006. A Research Facility that Enables Replicated Experimentation on both Water and Air Quality Effects of Pilot-Scale Treatment Wetlands. Presentation at the ASA-CSSA-SSSA International Annual Meeting. Indianapolis, IN. Nov. 13-16

Vanderzaag, A., R. Gordon, D. Burton, R. Jamieson, A. Madani, and G. Stratton. 2006. Greenhouse Gas Emissions from Surface Flow and Subsurface Flow Treatment Wetlands. Presentation at the ASA-CSSA-SSSA International Annual Meeting. Indianapolis, IN. Nov. 13-16

**PUBLICATIONS CONTD.....**

Wood, J., R Gordon, G.W. Stratton and A. Madani. 2006. A Long Term Assessment of Phosphorus Treatment by a Constructed Wetland Receiving Agricultural Wastewater in Nova Scotia, Canada. Presentation at the ASA-CSSA-SSSA International Annual Meeting. Indianapolis, IN. Nov. 13-16

Mkhabela, M.S., R. Gordon, D. Burton, A. Madani, and W. Hart. 2006. Effect of lime, dicyandiamide and soil water content on ammonia and nitrous oxide emissions following application of liquid hog manure to a marshland soil. *Plant Soil* 284:351-362.

Mkhabela, M.S., R. Gordon, D. Burton, A. Madani, W. Hart and A. Elmi. 2006. Ammonia and nitrous oxide emissions from two acidic soils of Nova Scotia fertilized with liquid hog manure mixed with and without dicyandiamide. *Chemosphere* 65:1381-1387.

Wang, S., S.O. Prasher, R. M. Patel, C.C. Yang, S. H. Kim, A. Madani, P.M. Macdonald and S.D. Robertson. 2006. Fate and transport of nitrogen compounds in a cold region soil using DRAINMOD. *Computers Elector. Agr.* 53:113-121

Gordon, R., J. Wood, A. Vanderzaag, E. Smith, S. Tattrie, N. MacPhee, G. Stratton , and A. Madani. 2007. Treatment wetland Research in Atlantic Canada. *In: Connecting Management to Aquatic Communities*. Virginia West Virginia Water Research Symposium. CD Rom

Jamieson, R., R. Gordon, N. Wheeler, E. Smith, G. Stratton and A. Madani. 2006. Determination of first order rate constants for wetlands treating livestock wastewater in cold climates. *J. Environ. Eng. Sci.* 6:65-72

Dayyani, S., S. O. Prasher, C.A. Madramootoo and A. Madani. 2007. Modelling surface and subsurface nitrogen transport in an agricultural watershed: linking DRAINMOD 5.1 with WARMF. ASABE Paper No. 07-2005.

Mkhabela, M.S., R. Gordon, A. Madani, and D. Burton, 2007. Odour emissions following hog slurry application to grassland. ASABE Paper No. 07-4098.

Gordon, R., A. Madani, G.Stratton, J. Wood, E. Smith, N. MacPhee, S. Tattrie, A. Vanderzaag, and V. Glass. 2007. Progress in the understanding of constructed wetlands in the agricultural context. *Proceedings of the International Conference on Multi-Functions of Wetland Systems*, Padova, Italy, CD

**PUBLICATIONS CONTD.....**

Vanderzaag, A., R. Gordon, V. Glass, and A. Madani. 2007. Assessment of gaseous emissions from constructed wetlands treating agricultural wastewater in Nova Scotia, Canada. Proceedings of the International Conference on Multi-Functions of Wetland Systems, Padova, Italy, CD

Thiagarajan, A. R. Gordon, A. Madani, and G.W. Stratton. 2007. Discharge of *Escherichia Coli* from Agricultural Surface and Subsurface Drainage Water: Tillage Effects. Water Air Soil Pollut. 182:3-12

Aguirre, C. G. , A. Madani, R. Mohtar and K. Haghghi. 2007. Deterministic finite element solution of unsteady water and transient transport porous media: Part II. Model verification. Can. Biosys. Eng. J. 49:1.1-1.9

Mkhabela, M.S., A. Madani, R. Gordon, D. Burton, D. Cudmore, A. Elmi and W. Hart. 2007. Gaseous and Leaching Nitrogen Losses from No-Tillage and Conventional Tillage Systems Following Surface Application of Cattle Manure. Soil Till. Res. 98:187-199.

Mkhabela, M.S., R. Gordon, D. Burton, A. Madani and W. Hart. 2008. Nitrogen oxide emissions and soil mineral nitrogen status following application of hog slurry and inorganic fertilisers to acidic soils under forage grass. Can. J. Soil Sci. 88:145-151.

Brisbois, M.C., R. Jamieson, R. Gordon, A. Madani and G. Stratton. 2008. Stream Ecosystem Health in Rural Mixed Land-Use Watersheds. Proceedings of the 21<sup>st</sup> Century Watershed Technology: Improving Water Quality and Environment Conference in Concepcion, Chile. CD ROM.

Sinclair, A., D. Hebb, R. Jamieson, R. Gordon, K. Benedict, K. Fuller, G. Stratton and A. Madani. 2008. Growing Season Surface Water Loading of Fecal Bacteria Within a Rural Watershed. Proceedings of the 21<sup>st</sup> Century Watershed Technology: Improving Water Quality and Environment Conference in Concepcion, Chile. CD ROM.

Mkhabela, M., R. Gordon, A. Madani, D. Burton. 2007. Odour Emissions Following Hog Slurry Application to Grassland. ASABE Paper No. 07-4098.

Dayyani, S., S. Prasher, C. Madramootoo and A. Madani. 2007. Modeling surface and subsurface nitrogen transport in an agricultural watershed: Linking DRAINMOD 5.1 with WARMF. ASABE Paper No. 07-2005.

**PUBLICATIONS CONTD.....**

Vanderzaag, A., R. Gordon, V. Glass and A. Madani. 2007. Assessment of Gaseous Emissions from Constructed Wetlands Treating Agricultural Wastewater in Nova Scotia, Canada. Proceedings of International Conference on Multi-Functions of Wetland Systems in Padaova, Italy, CD ROM

R. Gordon, A. Madani, G. Stratton, J. Wood, E. Smith, N. MacPhee, S. Tattrie, A. Vanderzaag, and V. Glass. 2007. Progress in the Understanding of the Constructed Wetlands in the Agricultural Context. Proceedings of International Conference on Multi-Functions of Wetland Systems in Padaova, Italy, CD ROM

Gordon, R. J. Wood, A. Vanderzaag, E. Smith, S. Tattrie, N. MacPhee, G. Stratton and A. Madani. 2007. Treatment Wetland Research in Atlantic Canada. In: Connecting Management to Aquatic Communities. Proceedings of the Virginia- West Virginia Water Research Symposium, CD ROM

Madani, A., R. Gordon, G.W. Stratton, M.D.K. Hossain, J. Wood and A. Thiagarajan. 2008. Subsurface Drainage Water Quality Impacted by Manure Application. Proceedings of the International Conference on Agricultural Engineering: Agricultural and Biosystems Engineering for a Sustainable World. Crete, Greece, CD ROM

Roper, J., D. Burton, A. Madani and G. Stratton. 2008. Development and assessment of a dissolved nitrous oxide sampling instrument. ASABE Paper No. 08-4291

Haverstock, M., A. Madani, R. Gordon and P. Havard. 2008. An initial assessment of an agricultural drainage water treatment and reuse system. ASABE Paper No. 08-4063

Arshad, M., Q. Zaman and A. Madani. 2008. Modelling approach to simulate water percolation in rice-wheat system. ASABE Paper No. 08-0039

Roper, J., D. Burton, A. Madani and G. Stratton. 2008. Influence of tillage practices on the loss of dissolved nitrous oxide from agricultural drainage water. ASABE Paper No. 08-4580

Dayyani, S., S. Prasher, C. Madramootoo and A. Madani. 2008. Modeling Nitrogen movement on a watershed scale. ASABE Paper No. 08-4079

Arshad, M., Q. Zaman, and A. Madani. 2008. Lining impact on water losses in watercourses: a case study in Indus Basin, Pakistan. CSBE Paper No. 08-171.

**PUBLICATIONS CONTD.....**

Dayyani, S., S. Prasher, C. Madramootoo and A. Madani. 2008. Modeling surface and subsurface Nitrogen transport in an agricultural watershed: subsurface modeling using DRAINMOD 5.1. CSBE Paper No. 08-141

Roper, J.D., J. Wood, A. Madani, R. Gordon, D.L.Burton, G. Stratton, and A. Thiagarajan. 2008. Influence of Tillage on Nitrate-Nitrogen in Agricultural Drainage Water. Proceedings of 10<sup>th</sup> International Drainage Workshop. Helsinki University of Technology Water Resources Publications, Publication No. 16:21-30.

Dayyani Dardashti, S., S. Prasher, C. Madramootoo, and A. Madani. 2008. DRAIN-WARMF: A Watershed Scale Coupled Surface and Subsurface Flow/Water Quality Model. Presentation at the 24<sup>th</sup> Eastern Canada Symposium of the Canadian Association for Water Quality. Montreal, Quebec. November 7, 2008.

Brisbois, M.C., R. Jamieson, R. Gordon, G. Stratton, and A. Madani 2008. Stream ecosystem health in rural mixed land-use watersheds. *J. Environ. Eng. Sci.* 7:439-452.

Karimi, Y., S.O. Prasher, A. Madani and S. Kim. 2008. Application of support vector machine technology for the estimation of crop biophysical parameters using aerial hyperspectral observations. *Can. Biosys. Eng.* 50:7.13-7.20

Wood, J.D., R. Gordon, A. Madani, and G. W. Stratton. 2008. A Long term assessment of phosphorus treatment by a constructed wetland receiving dairy wastewater. *Wetlands* 28 (3): 715-723.

Mkhabela, M.S., R. Gordon, E. Smith, A. Madani, and D. Burton. 2009. Measurements of odour emissions using micrometeorological techniques following application of hog slurry to grass. *Can. Biosys. Eng.* 50:6.37-6.45.

Mkhabela, M.S., R. Gordon, D. Burton, E. Smith, and A. Madani. 2009. The impact of management practices and meteorological conditions on ammonia and nitrous oxide emissions following application of hog slurry to grass in Nova Scotia. *Agr. Ecosys. Environ.* 130:41-49.

Dayyani, S., C. Madramootoo, P. Enright, G. Simard, A. Gullamudi, S. O. Prasher, and A. Madani. 2009. Field evaluation of DRAINMOD 5.1 under a cold climate: Simulation of daily midspan water table depths and drain. *J. Amer. Water Resou. Assoc.* 1-13.

**PUBLICATIONS CONTD.....**

Rodd, V., B. Thomas, J. VanRoestel, R. Gordon, A. Campbell, J. Duynisveld, G. Bezanson, S. Fillmore, B. Walker, K. Fuller, D. Hebb, D. Burton, A. Madani, R. Lalande, and S. Bittman. 2009. Selected low disturbance liquid manure application systems: results, implications and future considerations. *Can. J. Plant Sci.* 88:726.

Madani, A. and D. Langille. 2009. Soil Moisture and its Measurements. Invited Speakers at the Water Use and Conservation Symposium. March 7, 2009. Halifax, NS.

Madani, A. 2009. Agricultural Drainage Water Management Systems and Strategies. Invited Speaker at the Agricultural Water Workshop. April 22, 2009. Kentville, NS.

Gordon, R., A. Madani, J. Wood, and G. Stratton. 2009. Transport of Pathogens in Agricultural Drainage Water. Presentation at the First International Conference on Microbial Transport and Survival in Porous Media in Niagara-on-the-Lake, Ontario. May10-13, 2009

Shirmohammadi, A., K. Haghghi, A. Madani, and C. Gurgel. 2009. Finite element application to flow of water and chemicals through porous media: a historical reminder. Presentation at the Annual International Meeting of the ASABE, Reno, Nevada, June 21-24, 2009.

Madani, A. And A. Shirmohammadi. 2009. A path of friendship: is it finite element. Presentation at the Annual International Meeting of the ASABE, Reno, Nevada, June 21-24, 2009.

Hafiz, A., P. Havard, R. Jamieson, A. Madani, and Q. Zaman. 2009. Evaluation of an assessment tool for a small watershed under eastern Canada conditions. ASABE Paper No. 09-5750.

Sinclair, A.C., R. Jamieson, D. Hebb., K. Benedict, R. Gordon, G. Stratton, and A. Madani. 2009. Growing season surface water loading of fecal indicator organisms within a rural watershed. *Water Res.* 43(5):1199-1206.

Dayyani, S., S.O. Prasher, C.A. Madrammootoo, and A. Madani, 2009. Development of DRAIN-WARMF model to simulate flow and nitrogen transport and evaluate the impact of climate change on water pollution on watershed scale. CSBE Paper No. 09-611.

Hafiz, A., P. Havard, R. Jamieson, and A. Madani. 2009. Hydrologic evaluation of SWAT for a small watershed. CSBE Paper No. 09-510.

**PUBLICATIONS CONTD.....**

Fuller, K.D., R. Gordon, M. Grimmett, S. Fillmore, A. Madani, J. VanRoestel, G.W. Stratton, J. MacLeod, C. Embree, and E. St. George. 2010. Seasonal and crop rotational effects of manure management on nitrate-nitrogen leaching in Nova Scotia. *Agr. Ecosys. Environ.* 137:267-275.

Dayyani, S., C. A. Madramootoo, S. O. Prasher, A. Madani, and P. Enright 2010. Modeling water table depth, drained outflow, and nitrogen losses in a cold climate using DRAINMOD 5.1. *Transactions of the ASABE* 53(2):385-395.

Murphy, M., R. Jamieson, R. Gordon, G.W. Stratton, and A. Madani. 2010. Inactivation of *Escherichia* during storage of irrigation water in agricultural reservoirs. *Can. Water Resour. J.* 35(1):69-78.

Ahmad, H., P. Havard, R. Jamieson, A. Madani, and Q. Zaman. 2009. Evaluation of SWAT for a small watershed in eastern Canada. Paper Presentation at the Joint International Agricultural Conference of ECPA/EFITA/ECPLF, Wageningen, Holland.

Dayyani, S., S. Prasher, A. Madani, and C. Madrammootoo. 2010. Impact of climate change on drainage outflow and water quality in eastern Canada. Presentation at the 9<sup>th</sup> International Drainage Symposium, Quebec City, Canada.

Farooque, A.A., Q. Zaman, A. Schumann, A. Madani, and David Percival. 2010. Mapping soil moisture content variability using electromagnetic induction method. Presentation at the 9<sup>th</sup> International Drainage Symposium, Paper No. IDS-CSBE100204, Quebec City, Canada.

Price, G.W., A. Madani, and J.D. Gillis. 2009. Impact of drainage water quality from amending agricultural soils in Nova Scotia with an alkaline stabilized biosolids. Presentation at the 9<sup>th</sup> International Drainage Symposium, Quebec City, Canada.

Haverstock, M., A. Madani, R. Gordon and P. Havard. 2010. An initial assessment of an wetland-reservoir wastewater treatment and reuse system receiving agricultural drainage water in Nova Scotia. Presentation at the 9<sup>th</sup> International Drainage Symposium, Quebec City, Canada.

Haverstock, M., A. Madani, R. Gordon and P. Havard. 2010. Design, Construction, and Operation of a Wetland/Reservoir System Receiving Agricultural Drainage Water. 19<sup>th</sup> World Congress on Soil Science. Brisbane, Australia, August 1-7, 2010. CD Rom.

**PUBLICATIONS CONTD.....**

Farooque, A., Q. Zaman, A. Madani, D. Percival, A. Schumann, 2010. Prediction of Soil Organic Matter and Clay Content Using Electromagnetic Induction Methods. 10th International, Conference on Precision Agriculture, Denver, Colorado, USA. Canada. July 18-21, 2010.

Haverstock, M., A. Madani, R. Gordon and P. Havard. 2010. Performance of a wetland – reservoir wastewater treatment and reuse system receiving agricultural drainage water in Nova Scotia. International Conference on Agricultural Engineering. Clermont Ferrand, France, September 6-8, 2010. CD Rom.

Farooque, A., Q. Zaman, A. Madani, D. Percival, A. Schumann, 2010. Site-specific moisture management based on the moisture variability using EMI. Annual International Meeting ASABE, Pittsburgh, Pennsylvania. June 20-23, 2010.

Farooque, A., Q. Zaman, A. Madani, D. Percival, A. Schumann, 2010. Impact of bio-solid application on percolated water quality. ASABE's 9th International Drainage Symposium, Quebec City, Canada. June 13-16, 2010.

Dayyani, S., S. O. Prasher,, A. Madani and C. A. Madramootoo. 2010. Development of DRAIN–WARMF model to simulate flow and nitrogen transport in a tile-drained agricultural watershed in eastern Canada. Agric. Water Manage. 98:55-68.

Haverstock, M. A. Madani, R. Gordon, and P. Havard. 2010. Design, construction, and operation of a wetland/reservoir system receiving agricultural drainage water. 19<sup>th</sup> World Congress of Soil Science. Brisbane, Australia. Paper No. 0912.

Miller, C., T. Astatkie, and A. Madani. 2010. Soil Test Phosphorus recovery from livestock manures compared with inorganic fertilizer in soil incubations, Appl. Environ. Soil Sci. doi:10.1155/2010/425613.

Haverstock, M. A. Madani, R. Gordon, and P. Havard. 2010. An initial assessment of a wetland-reservoir wastewater treatment and reuse system receiving agricultural drainage water. International Conference on Agricultural Engineering, Clermont-Ferrand, France. Paper No. REF375.

**PUBLICATIONS CONTD.....**

Wood, J.D., R.J. Gordon, C. Wagner-Riddle, K.E. Dunfield, and A. Madani. 2010. Physical vs. Biological Processes Driving Methane Fluxes From Surface and Subsurface Filled Dairy Slurry Storages. In: E.J. McGeough and S.M. McGinn (Eds). Proceedings of the 4th International Conference on Greenhouse Gases and Animal Agriculture, Banff, Canada, October 3-8.

Dayyani, S., S. O. Prasher, A. Madani, and C.A. Madramootoo. 2011. Impact of climate change on the hydrology and nitrogen pollution in a tile-drained agricultural watershed in eastern Canada. Transactions of the ASABE, in review.

Dayyani, S., S. Prasher, C. A. Madramootoo, A. Madani and P. Enright. 2011. Evaluation of WARMF model to flow and nitrogen transport in an agricultural watershed in a cold climate. Transactions of the ASABE, in review.

Carreau, R., S. VanAcker, A. VanderZaag, A. Madani, A. Drizo, and R. Gordon. 2011. Evaluation of a surface flow constructed wetland treating abattoir wastewater. Appl. Eng. Agr., In Review.

Farooque, A., F. Abbas, Q. Zaman, A. Madani, D. Percival, and M. Arshad, 2011. Soil nutrient availability, plant nutrients uptake, and wild blueberry (*Vaccinium angustifolium*. Ait) yield in response to N-Viro biosolids and irrigation applications. Sustain. Agr. J. In Review.

Gordon, R.J., A.C. VanderZagg, P.A. Dekker, R. DeHaan, and A. Madani. 2011. Impact of modified tillage on runoff and nutrient loads from potato fields in Prince Edward Island. Agr. Water Manage. In Review.

Farooque, A., Q. Zaman, A. Madani, D. Percival, A. Schumann. 2011. Spatial variability of soil properties and fruit yield in wild blueberry fields. Soil Sci. In Review.

Ahmad, H.M.N., A. Sinclair, R. Jamieson, A. Madani, P. Havard, D.Hebb, and E. Yiridoe. 2011. Modelling sediment and nitrogen export for a rural watershed in eastern Canada using SWAT model. J. Environ. Qual. In Review

Sinclair, A., H. Ahmad, R. Jamieson, A. Madani and D. Hebb. 2011. Evaluation of the Soil and Water Assessment Tool (SWAT) for simulating hydrological processes in a small rural watershed in eastern Canada. Can. Water Resour. J. In Review.

#### PUBLICATIONS CONTD.....

Farooque, A., Q. Zaman, F. Abbas, , A. Madani, D. Percival, and T. Esau, 2011. Ecological impacts of the N-Viro biosolids land application for wild blueberry (*Vaccinium angustifolium*. Ait) production in Nova Scotia. J. Enviro. Sci. Health. In Press.

#### OTHER SCHOLARLY WORK

- ✚ Chair of the 9<sup>th</sup> ASABE International Drainage Symposium, 2010 in Quebec City
- ✚ Chaired the Water Quality Symposium at the AIC meeting in Fredericton
- ✚ Established a drainage/water quality research site in Streets Ridge, NS
- ✚ Established a drainage/water quality research site in Lower Onslow, NS
- ✚ Established Two drainage/water quality research sites at the Agri-Tech Park, NS
- ✚ Chaired the Land/Water Quality Workshop at the AIC Conference in Fredericton, NB, 1991
- ✚ Organizer of “Agricultural Land Use VS Water Quality” in Truro, NS, 1995
- ✚ Co-organizer of two workshops for the Atlantic Committee on Agricultural Engineering (ACAE) in Truro, NS
- ✚ Co-organizer of several symposia for the Atlantic Committee on Land and Engineering (ACLE) in Moncton, NB
- ✚ Co-organizer of the program content of two international drainage symposia, 1998 in Orlando, FL; and 2004 in Sacramento CA.
- ✚ Organized and chaired several soil & water, and water quality sessions at the international meeting of the American Society of Agricultural Engineers and Canadian Society of Agricultural Engineering, in Chicago, Las Vegas, Sacramento, Orlando, Montreal, Ottawa, Toronto.

EXTERNAL EXAMINER: Jalal Jebellie (Ph.D., McGill University), Tom Hartz (M.Sc., NSAC), Ramanbhai (Ph.D., McGill University), Zisheng Xing (Ph.D., University of New Brunswick), Yousef Karimi Zindashty (Ph.D., McGill University), Osvaldo Salazar (Ph.D., Swedish University of Agricultural Sciences), Qi Yang (Ph.D., University of New Brunswick), Rufa Doria (Ph.D., McGill University), and Jamshid Jazestani (Ph.D., McGill University).

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NSDAM, ALFI, Green Plan, AFDA, Agri-Focus 2000, Centre for Compost Technology, Laser Drainage Company, AAFC Matching Investment Initiative, DalTech University/Industry Research & Development Partnership Program, CFI, NSERC Operating (discovery) Grant, Canadian Infectious Disease Society, ALICA, AWARD 2000, Canadian Beef Research Council (CBRC), NSDAF TECH Development, AIF, Agriculture & Agri-Food Canada, Canada – Nova Scotia Water Expansion Program

## AWARDS

- ✚ Recipient of the Jim Beamish Award from the Canadian Society of Agricultural Engineering for outstanding achievements in research and teaching in the area of soil & water engineering, July, 1996.
- ✚ Recipient of the 2003 Nova Scotia Agricultural College Research Excellence Award.
- ✚ Recipient of the best paper award, Canadian Society of Plant Science, 2005
- ✚ Recipient of the best poster award, Multi-Functions of Wetland Systems Conference, Padova, Italy, 2007
- ✚ Recipient of the 2008 Nova Scotia Agricultural College Teaching Excellence Award
- ✚ Fellow of the Canadian Society of BioEngineering, 2008
- ✚ Recipient of the American Society of Agricultural and Biological Engineering Award for outstanding leadership as the Chair of the 9<sup>th</sup> International Drainage Symposium
- ✚ Recipient of the 2011 Distinguished Life Member Award from the Nova Scotia Institute of Agrologists

## VOLUNTARY WORK

Vice-President & Treasurer of Multicultural Association of NS  
Member of the NSAC Refugee and WUSC Committees  
Youth Soccer Coach