

Professor Steven N. Liss, Vice-Principal (Research), Queen's University, Kingston



Steven N. Liss is the Vice-Principal (Research) and a full professor of Environmental Studies and Chemical Engineering at Queen's (www.queensu.ca), with research focused on environmental biotechnology and engineering, applied microbiology, microbial structures (flocs, films and granules), wastewater and water management, and fate of contaminants in engineered and natural environmental systems. He has played a significant leadership role in the advancement of university education at the undergraduate and graduate levels at several universities. He is a member and Chair of a number of Boards and management groups as part of his role in supporting research and innovation across Canada. Professor Liss is Chair

of the Ontario Council for University Research for 2015-16, and Chair of the Board of Management of TRIUMF, Canada's national laboratory for particle and nuclear physics. Professor Liss was the founding co-chair of the Leadership Council on Digital Infrastructure, and currently serves as Vice-Chair. Professor Liss was awarded the *Queen Elizabeth II Diamond Jubilee Medal* in 2012 for his contributions to advancing research across Canada.

EDUCATION

Degree	Program/Department	University	Year
BSc (Hon)	Microbiology & Immunology	Western Ontario	1980
MSc	Applied Microbiology & Food Science	Saskatchewan	1983
PhD	Applied Microbiology & Food Science	Saskatchewan	1987

AWARDS, HONOURS and RECOGNITION

2016-	Visiting Professor, Advanced Environmental Biotechnology Centre, Nanyang Technological University, Singapore
2015-	High-end Foreign Expert of the State Administration of Foreign Experts Affairs, Visiting Professorship, China (Tongji University, Shanghai)
2012	Queen Elizabeth II Diamond Jubilee Medal for Contributions to Research in Canada
2010	Canadian Who's Who
1998	Ryerson-Sarwan Sahota Distinguished Research Award <i>Award given annually to a faculty member(s) for outstanding research contributions to a conducted while employed at the university.</i>
1995	Program Award Canadian Association for University Continuing Education (<i>Post-Graduate Certificate in Environmental Engineering Science</i>)
1988	Organization for Economic and Co-operative Development (OECD) Fellowship, AFRC Institute for Animal Physiology and Genetics Research, Cambridge, UK.
1987	Canadian Government Laboratory Visiting Fellowship, Natural Sciences and Engineering Research Council of Canada (NSERC) Biotechnology Training Award, Animal Research Centre, Agriculture Canada, Ottawa.
1982	J.H. Wesson Memorial Scholarship, Saskatchewan Wheat Pool
1980-86	University of Saskatchewan Graduate Scholarship

Representative Refereed Publications (2015)

- Hao, L., S.N. Liss, B. Liao. 2015. Influence of nutrient condition on sludge properties and their role in membrane fouling of a submerged membrane bioreactor. *Wat. Res.* (revision submitted and under review).
- Aqueel, H., B. Mahendran, K. Engel, M. Hall, J. Neufeld, and S.N. Liss. 2015. Physicochemical properties and microbial ecology of aerobic granules and filamentous outgrowth in a laboratory scale sequencing batch reactor. *Appl. Microbiol. Biotechnol.* September 22, 2015, 1-14 DOI 10.1007/s00253-015-6981-7.
- Sousa, A.J., Droppo, I.G., Wolfaardt, G., Liss, S.N. and Warren, L. 2015. Influence of Wave Action on the Partitioning and Transport of Planktonic and Floc-Associated Bacteria in Freshwater. *Can. J. Microbiol.* (In Press) <http://www.nrcresearchpress.com/doi/abs/10.1139/cjm-2014-0815>.
- Martin, N.L., P. Bass and S.N. Liss. 2015. Antibacterial properties and mechanism of activity of a novel silver-stabilized hydrogen peroxide. *PLOS ONE* <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0131345>.
- Mahendran, B., J. Fein and S.N. Liss. 2015. Protein and polysaccharide content of tightly and loosely bound extracellular polymeric substances and the development of a granular activated sludge floc. *Wat. Res.* 82; 104-117, <http://dx.doi.org/10.1016/j.watres.2015.05.014>.
- Droppo, I.G., L. D'Andrea, B.G. Krishnappen, C. Jaskot, B. Trapp, M. Basuvaraj. M. and S.N. Liss. 2015. Understanding sediment dynamics of the Ellis River: Towards improved modeling of contaminant source, fate and effect. *J. Soils and Sediment* 15:467-479.