

**Isobel Jane Simpson**

May 24, 2007

Department of Chemistry  
University of California, Irvine  
Irvine, CA, USA 92697-2025  
*phone:* (403) 529-6089  
*email:* isimpson@uci.edu

3148 17<sup>th</sup> Ave SE  
Medicine Hat, Alberta  
Canada T1A 8J9

*Citizenship:* Canadian

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<b>EDUCATION</b>	1993-1996	Ph.D., Forest Meteorology, U. of Guelph
	1991-1993	M.Sc., Agrometeorology (with distinctions), U. of Guelph
	1986-1990	B.Sc.(Agr.), Soil Science (with honours), U.B.C.
	1984-1986	International Baccalaureate (I.B.) Diploma
	1973-1984	French Immersion

### ACADEMIC AWARDS

<b>Post- doctoral</b>	2005	NASA Group Achievement Award (INTEX-A mission)
	2001-present	Comer Foundation Abrupt Climate Change Fellowship
	1998	NASA Group Achievement Award (SONEX mission)
	1997-1999	NSERC Postdoctoral Fellowship
	1997	NSERC Visiting Fellowship in a Canadian Government Laboratory
<b>Ph.D.</b>	1996	Campbell Scientific Student Paper Award
	1995	W. Brad Drowley Memorial Scholarship Award
	1995	Air and Waste Management Association Graduate Scholarship
	1995	NOAA/AMS/DOE Travel Scholarship
	1994	Davidson Travel Grant
	1994	Latornell Travel Grant
	1993-1995	NSERC PGS2 Graduate Research Scholarship
	1993-1994	Mary Edmund Williams Scholarship
<b>M.Sc.</b>	1993	H. S. Armstrong Excellence in Research Award (Sigma Xi Outstanding M.Sc. Thesis)
	1991-1993	NSERC PGS1 Graduate Research Scholarship
	1992	Soden Scholarship in Agriculture
	1991	Soden Scholarship in Agriculture
<b>B.Sc.</b>	1990	C. A. Rowles Alumni Scholarship
	1990	D. G. Laird Prize in Soil Science
	1990	Dean Blythe Eagles Medal
	1989	Rhona Clare Gillis Scholarship
	1988	Rhona Clare Gillis Scholarship
	1988	NSERC Undergraduate Research Grant
<b>I.B.</b>	1986	B.C. Provincial Scholarship
	1986	Federal/Provincial French Scholarship
	1986	Churchill Citizenship Award

## PROFESSIONAL APPOINTMENTS

2005-present	Associate Research Specialist, Atmospheric Chemistry (UC-Irvine)
1999-2005	Assistant Research Specialist, Atmospheric Chemistry (UC-Irvine)
1997-1999	Visiting Postgraduate Researcher, Atmospheric Chemistry (UC-Irvine)
1997	Research Assistant, Micrometeorology (University of Guelph)
1992-1993	Part-time Weather Records Officer (Atmospheric Environment Service)
1990	Research Technician, Backlog Reforestation Project (University of BC)
1989, 1988	Field Research Assistant, Backlog Reforestation Project (University of BC)
1986-1990	Part-time Library Assistant (University of BC)

## FIELD EXPERIENCE

2003	Visiting Scientist, The Hong Kong Polytechnic University, Hong Kong
2001	Transport and Chemical Evolution over the Pacific (TRACE-P), Japan
1999	Pacific Exploratory Mission – Tropics B (PEM-Tropics B), Central Pacific
1997-present	Global Methane Monitoring, Alaska, Mexico, South Pacific, New Zealand
1997	Subsonic Assessment – Ozone and Nitrogen Experiment (SONEX), Ireland
1995	Camp Borden Tower Site Flux Study, Ontario
1993-1994	Boreal Ecosystem-Atmosphere Study (BOREAS), Saskatchewan
1992	International Rice Research Institute (IRRI) Methane Flux Study, Philippines
1988-1990	Backlog Reforestation Project, British Columbia

## PUBLICATIONS

### Refereed Publications

1. Simpson, I. J., G. W. Thurtell, G. E. Kidd, M. Lin, T. H. Demetriades-Shah, I. D. Flitcroft, E. T. Kanemasu, D. Nie, K. F. Bronson, and H. U. Neue, Tunable diode laser measurements of methane emissions from an irrigated rice paddy field in the Philippines, *J. Geophys. Res.* 100, 7283-7290, 1995.
2. Wagner-Riddle, C., G. W. Thurtell, G. E. Kidd, G. C. Edwards, and I. J. Simpson, Micrometeorological measurements of trace gas fluxes from agricultural and natural ecosystems, *Infrared Physics & Technol.* 37, 51-58, 1996.
3. Simpson, I. J., G. C. Edwards, G. W. Thurtell, G. den Hartog, H. H. Neumann, and R. M. Staebler, Micrometeorological measurements of methane and nitrous oxide exchange above a boreal aspen forest, *J. Geophys. Res.* 102 (D24), 29,331-29,341, 1997.
4. Simpson, I. J., G. W. Thurtell, H. H. Neumann, G. den Hartog, and G. C. Edwards, The validity of similarity theory in the roughness sublayer above forests, *Boundary-Layer Meteorol.* 88, 69-99, 1998.
5. Simpson, I. J., G. C. Edwards, and G. W. Thurtell, Variations in methane and nitrous oxide mixing ratios at the southern boundary of a Canadian boreal forest, *Atmos. Environ.* 33, 1141-1150, 1999.
6. Lenschow, D. H., I. R. Paluch, A. R. Bandy, D. C. Thornton, D. R. Blake and I. Simpson, Use of a mixed-layer model to estimate dimethyl sulfide flux and application to other trace gas fluxes, *J. Geophys. Res.* 104 (N13), 16275-16295, 1999.

7. Blake, N. J., D. R. Blake, O. W. Wingenter, B. C. Sive, L. M. McKenzie, J. P. Lopez, I. J. Simpson, H. E. Fuelberg, G. W. Sachse, B. E. Anderson, G. L. Gregory, M. A. Carroll, G. M. Albercook, and F. S. Rowland, Influence of southern hemispheric biomass burning on mid-tropospheric distributions of nonmethane hydrocarbons and selected halocarbons over the remote South Pacific, *J. Geophys. Res.* 104 (D13), 16,213-16,232, 1999.
8. Simpson, I. J., B. C. Sive, D. R. Blake, N. J. Blake, T.-Y. Chen, J. P. Lopez, B. E. Anderson, G. W. Sachse, S. A. Vay, H. E. Fuelberg, Y. Kondo, A. M. Thompson, and F. S. Rowland. Nonmethane hydrocarbon measurements in the North Atlantic Flight Corridor during SONEX, *J. Geophys. Res.* 105 (D3), 3785-3793, 2000.
9. Elliott, S., E. Decker, F. A. Smith, D. R. Blake, I. J. Simpson, and F. S. Rowland, Cities in the Earth System, *Environ. Sci. & Policy*, Editorial, 2000.
10. Elliott, S., I. J. Simpson, D. R. Blake, J. E. Bossert, J. Chow, J. A. Colina, M. Dubey, R. A. Duce, S. Edgerton, J. Gaffney, M. Gupta, F. Guzman, P. A. Matson, L. A. McNair, E. Ortiz, W. Riley, F. S. Rowland, M. E. Ruiz, A. G. Russell, F. A. Smith, G. Sosa, G. Streit and J. Watson, Mexico City and the biogeochemistry of global urbanization, *Environ. Sci. & Policy*, 3, 145-156, 2000.
11. Blake, N. J., D. R. Blake, I. J. Simpson, J. P. Lopez, N. A. C. Johnston, A. L. Swanson, A. S. Katzenstein, S. Meinardi, B. C. Sive, J. J. Colman, E. Atlas, F. Flocke, S. A. Vay, M. A. Avery and F. S. Rowland, Large scale latitudinal and vertical distributions of NMHCs and selected halocarbons in the troposphere over the Pacific Ocean during the March-April 1999 Pacific Exploratory Expedition (PEM-Tropics B), *J. Geophys. Res.*, 106 (D23), 32,627-32,644, 2001.
12. Chen, T.-Y., I. J. Simpson, D. R. Blake, and F. S. Rowland, Impact of the leakage of liquefied petroleum gas (LPG) on Santiago air quality, *Geophys. Res. Lett.* 28, 2193-2196, 2001. *Selected as a GRL highlight; featured in New Scientist.*
13. Simpson, I. J., J. J. Colman, A. L. Swanson, A. R. Bandy, D. C. Thornton, D. R. Blake and F. S. Rowland, Aircraft measurements of dimethyl sulfide (DMS) using a whole air sampling technique, *J. Atmos. Chem.* 39, 191-213, 2001.
14. Simpson, I. J., D. R. Blake, F. S. Rowland, and T.-Y. Chen, Implications of the recent fluctuations in the growth rate of tropospheric methane, *Geophys. Res. Lett.* 29 (10), 672-675, 2002.
15. Barletta, B., S. Meinardi, I. J. Simpson, H. A. Khwaja, D. R. Blake, and F. S. Rowland, Mixing ratios of volatile organic compounds (VOCs) in the atmosphere of Karachi, Pakistan, *Atmos. Environ.* 36 (N21), 3429-3443, 2002.
16. Simpson, I. J., S. Meinardi, D. R. Blake, N. J. Blake, F. S. Rowland, E. Atlas, and F. Flocke, A biomass burning source of C<sub>1</sub>-C<sub>4</sub> alkyl nitrates, *Geophys. Res. Lett.* 29 (24), 2168, 10.1029/2002GL016290, 2002. **Highlighted in EOS.**
17. Simpson, I. J., N. J. Blake, D. R. Blake, E. Atlas, F. Flocke, J. H. Crawford, H. E. Fuelberg, C. M. Kiley, S. Meinardi, and F. S. Rowland, Production and evolution of selected C<sub>2</sub>-C<sub>5</sub> alkyl nitrates in tropospheric air influenced by Asian outflow, *J. Geophys. Res.* 108 (D20), 8808, doi:10.1029/2002JD002830, 2003.
18. Choi, Y., S. Elliott, I. J. Simpson, D. R. Blake, J. J. Colman, M. K. Dubey, S. Meinardi, F. S. Rowland, T. Shirai, and F. A. Smith, Survey of BIBLE-B whole air data by Principal Component Analysis (PCA), *J. Geophys. Res.* 10.1029/2002JD002841, 2003.

19. Sinha, P., P. V. Hobbs, R. J. Yokelson, I. T. Bertschi, T. S. Blake, I. J. Simpson, S. Gao, T. W. Kirchstetter, and T. Novakov, Emissions of trace gases and aerosols from biomass burning in southern Africa, *J. Geophys. Res.* 108, 10.1029/2002JD002325, 2003.
20. Meinardi, S., I. J. Simpson, N. J. Blake, D. R. Blake, and F. S. Rowland, Dimethyl disulfide (DMDS) and dimethyl sulfide (DMS) emissions from biomass burning in Australia, *Geophys. Res. Lett.* 10.1029/2003GL016967, 2003.
21. Blake, N. J., D. R. Blake, I. J. Simpson, S. Meinardi, A. L. Swanson, J. P. Lopez, A. S. Katzenstein, B. Barletta, T. Shirai, E. Atlas, G. Sachse, M. Avery, S. Vay, H. Fuelberg, C. M. Kiley, and F. S. Rowland, NMHCs and halocarbons in Asian continental outflow during TRACE-P: Comparison to PEM-West B, *J. Geophys. Res.* 108 (D20), 8806, doi: 10.1029/2002JD003367, 2003.
22. Simpson, I. J., O. W. Wingenter, D. J. Westberg, H. E. Fuelberg, C. M. Kiley, J. H. Crawford, S. Meinardi, D. R. Blake, and F. S. Rowland, Airborne measurements of cirrus-activated C<sub>2</sub>Cl<sub>4</sub> depletion in the upper troposphere with evidence against Cl reactions, *Geophys. Res. Lett.* 30 (20), 2025, doi:10.1029/2003GL017598, 2003.
23. Cantrell, C. A., G. D. Edwards, S. Stephens, R. L. Mauldin, M. A. Zondlo, E. Kosciuch, F. L. Eisele, R. E. Shetter, B. L. Lefer, S. Hall, F. Flocke, A. Weinheimer, A. Fried, E. Apel, Y. Kondo, D. R. Blake, N. J. Blake, I. J. Simpson, A. R. Bandy, D. C. Thornton, B. G. Heikes, H. B. Singh, W. H. Brune, H. Harder, M. Martinez, D. J. Jacob, M. A. Avery, J. D. Barrick, G. W. Sachse, J. R. Olson, J. H. Crawford, A. D. Clarke, Peroxy radical behavior during TRACE-P as measured aboard the NASA P-3B aircraft, 10.1029/2003JD003674, 2003.
24. Katzenstein, A. S., L. A. Doezema, I. J. Simpson, D. R. Blake, and F. S. Rowland, Extensive regional atmospheric hydrocarbon pollution in the southwestern United States, *Proc. Nat. Acad. Sciences*, 100, 11,975-11,979, 2003. *Press release issued; covered by the L.A. Times, Dallas Morning News, etc.*
25. Blake, N. J., Streets, D., J.-H. Woo, I. J. Simpson, J. Green, S. Meinardi, K. Kita, E. Atlas, H. E. Fuelberg, G. Sachse, M. A. Avery, S. Vay, R. W. Talbot, J. E. Dibb, A. R. Bandy, D. C. Thornton, F. S. Rowland, and D. R. Blake, Carbonyl sulfide (OCS) and carbon disulfide (CS<sub>2</sub>): Large scale distributions and emissions from Asia during TRACE-P, *J. Geophys. Res.*, 10.1029/2003JD004259, 2003.
26. Wang, T., C. H. Wong, T. F. Cheung, D. R. Blake, K. Baumann, R. Arimoto, Jie Tang, G. A. Ding, X. M. Yu, Y. S. Li, and I. J. Simpson, Relationships of trace gases and aerosols and the emission characteristics at Lin'an, a rural site in eastern China during spring 2001, *J. Geophys. Res.*, 109, D19, 10.1029/2003JD004119, 2004.
27. Simpson, I. J., S. Meinardi, N. J. Blake, F. S. Rowland, and D. R. Blake, Long-term decrease in the global atmospheric burden of tetrachloroethene (C<sub>2</sub>Cl<sub>4</sub>), *Geophys. Res. Lett.*, 10.1029/2003GL019351, 2004.
28. Guo, H., Wang, T., Simpson, I. J., Blake, D. R., Yu, X. M., Kwok, Y. H., Li, Y. S., Source contributions to ambient CO and VOCs at a rural site in eastern China, *Atmos. Environ.*, 38, 4551-4560, 2004.
29. Wang, T., H. Guo, D. R. Blake, Y. H. Kwok, I. J. Simpson, and Y. S. Li, Measurements of trace gases in the inflow of South China Sea background air and outflow of regional pollution at Tai O, Southern China, *J. Atmos. Chem.*, 52, 295-317, 2005.
30. Simpson, I. J., T. Wang, H. Guo, Y. H. Kwok, F. Flocke, E. Atlas, S. Meinardi, F. S. Rowland, and D. R. Blake, Long-term atmospheric measurements of C<sub>1</sub>-C<sub>5</sub> alkyl nitrates in the Pearl River Delta region of southeast China, *Atmos. Environ.*, 40 (9), 1619-1632, 2006.

31. Guo H., T. Wang T., D. R. Blake, I. J. Simpson, Y. H. Kwok and Y. S. Li, Regional and local contributions to ambient non-methane volatile organic compounds at a polluted rural/coastal site in Pearl River Delta, China, *Atmos. Environ.*, 40 (13), 2345-2359, 2006.
32. Simpson, I. J., F. S. Rowland, S. Meinardi, and D. R. Blake, Influence of biomass burning during recent fluctuations in the slow growth of tropospheric methane, *Geophys. Res. Lett.*, 33, L22808, 10.1029/2006GL027330, 2006. *Press release issued; covered by the CBC, BBC, Discovery Channel, New York Times, Orange County Register, Scientific American, New Scientist, SciDev.net, etc.*
33. Barletta, B., S. Meinardi, I. J. Simpson, F. S. Rowland, C. Y. Chan, X. M. Wang, S. C. Zhou, L. Y. Chan, and D. R. Blake, Ambient halocarbon mixing ratios in 45 Chinese cities, *Atmos. Environ.*, 40, 7706-7719, 2006.
34. Guo H, K. L. So, I. J. Simpson, B. Barletta, S. Meinardi, and D. R. Blake, C<sub>1</sub>-C<sub>8</sub> volatile organic compounds in the atmosphere of Hong Kong: Overview of atmospheric processing and source apportionment, *Atmos. Environ.*, 41 (7), 1456-1472, 2007.
35. Simpson, I. J., N. J. Blake, D. R. Blake, S Meinardi, M. P. Sulbaek Andersen, and F. S. Rowland, Strong evidence for negligible methyl chloroform (CH<sub>3</sub>CCl<sub>3</sub>) emissions from biomass burning, *Geophys. Res. Lett.*, 34, L10805, doi:10.1029/2007GL029383, 2007.
36. Simpson, I. J., F. Flocke, E. Atlas, F. S. Rowland, S. Meinardi, T. Wang, H. Guo, Y. H. Kwok, and D. R. Blake, Reply to “Comment on ‘Long-term atmospheric measurements of C<sub>1</sub>-C<sub>5</sub> alkyl nitrates in the Pearl River Delta region of southeast China’ ” by Archibald *et al.*, *Atmos Environ.*, 2007, in press.

### **Theses and Reports**

- Simpson, I. J., *Trace Gas Exchange and the Validity of Similarity Theory in the Roughness Sublayer above Forests*, Ph.D. thesis, University of Guelph, 1996.
- Simpson, I. J., *Measurement of Methane Fluxes from an Irrigated Rice Paddy Field in the Philippines using a Tunable Diode Laser*, M.Sc. thesis, University of Guelph, 1993.
- Black, T. A., M. D. Novak, R. S. Adams, R. L. Fleming, N. R. Eldridge and I. J. Simpson, *Site Preparation Treatments to Minimize Seedling Temperature and Moisture Stress in Backlog Areas of the Southern Interior*, Final Report to the Forest Resource Development Agreement (FRDA), Ministry of Forests, B.C, 1990.
- Simpson, I. J., *Investigations into the Decagon Devices SC-10A Thermocouple Psychrometer Sample Changer*, B.Sc. thesis, University of British Columbia, 1990.

### **Conference Presentations**

- Simpson, I. J. (speaker and poster presenter), F. S. Rowland, S. Meinardi, and D. R. Blake, Recent changes in global tropospheric methane (CH<sub>4</sub>) concentrations, *2007 Gordon Conference on Atmospheric Chemistry*, Big Sky, Montana, Aug. 26-31, 2007.
- Simpson, I. J. (speaker and poster presenter), F. S. Rowland, S. Meinardi and D. R. Blake, Global tropospheric methane (CH<sub>4</sub>), *2007 Abrupt Climate Change Roundtable*, Palisades, New York, May 2-5, 2007.

- Rowland, F. S., Simpson, I. J. (poster presenter), S. Meinardi and D. R. Blake, Twenty-eight years of global tropospheric trace gas monitoring, *Fall 2005 Symposium of the American Geophysical Union*, San Francisco, CA, Dec. 5-9, 2005.
- Simpson, I. J. (poster presenter), and F. S. Rowland, Impact of recent source and sink changes on global methane levels, *2005 Abrupt Climate Change Roundtable*, Palisades, New York, Oct. 19-22, 2005.
- Simpson, I. J. (poster presenter), T. Wang, H. Guo, Y. H. Kwok, F. Flocke, E. Atlas, S. Meinardi, F. S. Rowland and D. R. Blake, Relationships between alkyl nitrates and ozone in polluted urban environments, *2005 Gordon Conference on Atmospheric Chemistry*, Big Sky, Montana, Sept. 4-9, 2005.
- Simpson, I. J. (speaker), Y. Choi, D. R. Blake, and F. S. Rowland, A Principal Component Analysis of TRACE-P whole air data (nonmethane hydrocarbons, halocarbons, alkyl nitrates and sulfur compounds), *Fall 2002 Symposium of the American Geophysical Union*, San Francisco, CA, Dec. 6-10, 2002.
- Simpson, I. J. (invited speaker), T.-Y. Chen, D. R. Blake and F. S. Rowland, Air pollution in Santiago, Chile: The impact of Liquefied Petroleum Gas (LPG) leakage, *222<sup>nd</sup> American Chemical Society National Meeting*, Chicago, IL, Aug. 26-30, 2001.
- Simpson, I. J. (speaker), T.-Y. Chen, D. R. Blake and F. S. Rowland, Recent changes in the growth rate of tropospheric methane, *24<sup>th</sup> Conference on Agricultural and Forest Meteorology*, Davis, CA, Aug. 14-18, 2000.
- Simpson, I. J. (speaker), G. W. Thurtell, H. H. Neumann, G. den Hartog and G. C. Edwards, The validity of similarity theory in the roughness sublayer above forests, *23<sup>rd</sup> Conference on Agricultural and Forest Meteorology*, Albuquerque, NM, Nov. 2-6, 1998.
- Simpson, I. J. (speaker), D. R. Blake, and F. S. Rowland. Whole air sampling from the DC-8 aircraft during SONEX, *Spring 1998 Symposium of the American Geophysical Union*, Boston, MD, May 26-29, 1998.
- Simpson, I. J. (speaker), G. W. Thurtell, G. C. Edwards, G. E. Kidd, G. den Hartog, H. H. Neumann and R. M. Staebler, Micrometeorological measurements of methane and nitrous oxide exchange above a boreal aspen stand, *22<sup>nd</sup> Conference on Agricultural and Forest Meteorology*, Atlanta, GA, Jan. 27-Feb. 2, 1996.
- Simpson, I. J. (invited speaker), From rice paddies to boreal forests: Tunable diode laser measurements of trace gas exchange, Presented to the Atmospheric Environment Service, Downsview, Ontario, October, 1995.
- Simpson, I. J. (speaker), G. W. Thurtell, G. E. Kidd, M. Lin, T. H. Demetriades-Shah, I. D. Flitcroft, E. T. Kanemasu, D. Nie, K. F. Bronson and H. U. Neue, Tunable diode laser measurements of methane fluxes from an irrigated rice paddy field in the Philippines, *21<sup>st</sup> Conference on Agricultural and Forest Meteorology*, San Diego, CA, March 7-11, 1994.

## MEMBERSHIPS

American Geophysical Union  
 Amnesty International  
 South Alberta Pipes and Drums  
 Honorary Member, Ukrainian Scouts (PLAST)

## COMMUNITY SERVICE

1987-present	Amnesty International
2002-2004	Canadian National Institute for the Blind
2000-2002	Guelph Correctional Center (literacy tutor)
1998	Children Having a Need for Compassion and Encouragement
1997	Development and Peace
1992-1997	Victoria Order of Nurses
1992	Guelph Food Bank
1985-1990	Vancouver General Hospital

**LANGUAGES:** English and French, with some knowledge in Spanish

### **INTERESTS AND HOBBIES**

Bagpiping, hiking, yoga, weightlifting, drawing, traveling (crossed Africa in 1990-91)

### **REFERENCES**

Professor Donald R. Blake  
Department of Chemistry  
University of California – Irvine  
Irvine, CA U.S.A. 92697-2025  
drblake@uci.edu

Professor F. Sherwood Rowland  
Department of Chemistry  
University of California – Irvine  
Irvine, CA U.S.A. 92697-2025  
rowland@uci.edu