

LIST OF PUBLICATIONS, REPORTS AND PRESENTATIONS

REFEREED JOURNAL PUBLICATIONS:

1. [Absolute rate constant for the disproportionation of the formyl radicals from 295 to 475 K.](#) VEYRET B., P.B. ROUSSEL, and R. LESCLAUX. *Chem. Phys. Lett.* 10(5), 389-92, 1984.
2. [Mechanism of the chain process forming hydrogen in the photooxidation of formaldehyde.](#) VEYRET B., P.B. ROUSSEL, and R. LESCLAUX. *Int. J. Chem. Kinet.* 16(2), 1599-608, 1984.
3. [Gas-phase reactivity of the formyl radical with unsaturated hydrocarbons: an experimental and theoretical study.](#) LESCLAUX R., P.B. ROUSSEL, B. VEYRET, and C. POUCHANT. *J. Am. Chem. Soc.* 108(14), 3872-9, 1986.
4. Kinetic studies of NH₂ and HCO reactions with unsaturated hydrocarbons, by flash photolysis and laser resonance absorption. LESCLAUX R., P.B. ROUSSEL, and B. VEYRET. *Ber. Buns. Gesel. Physik. Chem.* 89(3), 330-5, 1985.
5. [The photolysis of CO at 193 nm in the liquid and gas phases.](#) ROUSSEL P. B. and R. A. BACK. *The J. of Photochem. and Photobiol. A*, 6(2), 159-68, 1989.
6. [Photochemistry of CO-H₂ mixtures irradiated at 193.3 nm.](#) ROUSSEL P. B. and R. A. BACK. *The J. of Photochem. and Photobiol. A*, 52, 235-9, 1990.
7. [Ultraviolet Absorption Spectra of the CH₂Cl and CHCl₂ Radicals and the Kinetics of their Self-recombination Reactions from 273 to 686 K.](#) ROUSSEL P.B., P. D. LIGHTFOOT, F. CARALP, V. CATOIRE and R. LESCLAUX. *J. Chem. Soc. Faraday Trans.*, 87(15), 2367-77, 1991.
8. [Flash Photolysis Study of the CH₃O₂ + CH₃O₂ and CH₃O₂ + HO₂ Reactions between 600 and 719 K: Unimolecular Decomposition of Methylhydroperoxide.](#) LIGHTFOOT P. D., P. B. ROUSSEL, F. CARALP and R. LESCLAUX. *J. Chem. Soc., Faraday Trans.*, 87, 3213 – 3220, 1991.
9. [A Flash Photolysis Study of the Spectra and Self-reactions of Neopentylperoxy and t-Butylperoxy Radicals.](#) P.D. LIGHTFOOT, P. ROUSSEL and R. LESCLAUX. *J. Chem. Soc. Faraday Trans.*, 86(17), 2927-36, 1990.
10. Ozone Concentrations In and Around the Greater Toronto Area. LIN X., P.B. ROUSSEL, O. MELO and P.M. SELORIO. *Ontario Hydro Research Review* 7: 27-39, 1992.
11. [The role of Toronto Urban Emissions in regional Ozone Episodes.](#) LIN X., P.B. ROUSSEL, O. MELO and P.M. SELORIO. *Atmospheric Environment* 29(5): 565-577, 1995.
12. [Observation of Ozone and Precursors Levels at two Sites Around Toronto, Ontario, During SONTOS 92.](#) ROUSSEL P.B., X. LIN, F. CAMACHO, S. LASZLO, R. TAYLOR, O. MELO, P.B. SHEPSON, D.R. HASTIE and H. NIKI. *Atmospheric Environment*, 30(12), 2125-2132, 1996.
13. [The Southern Ontario Oxidant Study \(SONTOS\): Overview and Case Studies for 1992.](#) REID N.W., H. NIKI, D. HASTIE, P. SHEPSON, P. ROUSSEL, O. MELO, G. MACKAY, J. DRUMMOND, H. SCHIFF, L. POISSANT and W. MOROZ. *Atmospheric Environment*, 30(12), 2125-2132, 1996.
14. [Multivariate analysis of a 1992 SONTOS data subset.](#) POISSANT L., J.W. BOTTENHEIM, N.W. REID, H. NIKI, D. HASTIE, P. SHEPSON, P. ROUSSEL, O. MELO, G. MACKAY and H. SCHIFF. *Atmospheric Environment*, 30(12), 2133-2144, 1996.
15. [Impact of Toronto Urban Emission on Ozone Levels Downwind.](#) LIN X., P.B. ROUSSEL, S. LASZLO, R. TAYLOR, O.T. MELO, P.B. SHEPSON, D.R. HASTIE and H. NIKI. *Atmospheric Environment*, 30(12), 2177-2193, 1996.
16. [Summertime NO_x, NO_y, and Ozone at a Site in Rural Ontario: Results from SONTOS.](#) HASTIE D.R., P.B. SHEPSON, N.W. REID, P.B. ROUSSEL and O.T. MELO. *Atmospheric Environment*, 30(12), 2157-2165, 1996.
17. Measurements of Alkyl and Multifunctional Organic Nitrates at Hastings, Ont. During the Southern Ontario Oxidant Study (SONTOS) 1992OS.

2. Visit of the TVA Air Quality Monitoring and Experimental Facilities in Muscle Shoals, Alabama, October 30-November 3, 1991. ROUSSEL P.B.. *Ontario Hydro Report No. G91-2-K*.
3. Atmospheric Mercury: A Review of the Literature and Identification of Information Needs. EDWARDS G.C., T. JARV., W.P. MORTIMER, P.B. ROUSSEL. Ontario Hydro Report No. 92-150-K.
4. The "SONTOS 92" Oxidants Study: Design and Set-Up of Two Air Quality Monitoring Stations in the Windsor Quebec City Corridor and Preliminary Results from an Intensive Field Campaign During the Summer 1992. ROUSSEL P.B. AND S. LASZLO. Ontario Hydro Report No. 93-137-K.
5. A Study of the Atmospheric Transport, Transformation and Deposition of Mercury. LUI P.Y., P.E. RASMUSSEN, P.B. ROUSSEL and X. LIN. CEA Report No. 9237 G 950. Feb. 1994.
6. The "SONTOS 93" Oxidants Study - Overview and Data Report. ROUSSEL P.B. AND S. LASZLO. Ontario Hydro Technologies Report No. A-F-94-60-K.
7. Oxidants and Mercury Monitoring in South Western Ontario and in the Vicinity of a Coal-fired Generating Station: The 1994 Monitoring Campaign. ROUSSEL P.B. and S. LASZLO. Ontario Hydro Technologies Report No. A-F-95-50-CON.
8. Mercury Speciation in Ambient Air. ROUSSEL P.B., S. LASZLO. Ontario Hydro Technologies Report No. A-F-95-49-CON.

PRESENTATIONS:

1. "A Flash Photolysis Study of the $\text{CH}_3\text{O}_2 + \text{CH}_3\text{O}_2$ and $\text{CH}_3\text{O}_2 + \text{HO}_2$ Reactions at 600 - 719 K: The Unimolecular Decomposition of Methylhydroperoxide". LIGHTFOOT P.D., P.B. ROUSSEL AND R. LESCLAUX. *Twenty-third International Symposium on Combustion, Orléans, France, 22nd-27th July 1990 (Poster)*.
2. "A Flash Photolysis Study of the Self-Reactions and UV Spectra of the Neopentylperoxy and t-Butylperoxy Radicals". LIGHTFOOT P.D., P.B. ROUSSEL AND R. LESCLAUX. *11 th International Symposium on Gas Kinetics, Assisi, Italy, 2-7 September 1990 (Poster)*.
3. "A Flash Photolysis Study of the UV Spectra and Self-Recombination Reactions of CH_2Cl and CHCl_2 ". LIGHTFOOT P.D., P.B. ROUSSEL, F. CARALP, R. LESCLAUX. *11 th International Symposium on Gas Kinetics, Assisi, Italy, 2-7 September 1990 (Poster)*.
4. "The U.V. Spectrum and Self-reaction of Neopentylperoxy Radicals". LIGHTFOOT P.D., R. LESCLAUX, B. VEYRET, P.B. ROUSSEL AND A. JEMI-ALADE. *Workshop of the "RO₂" Group of the Eurotrac subprogram LACTOZ, Mainz, RFA. 26 April 1990*.
5. "A Reactive Plume Model for Oxidants Transport and Photochemistry". ROUSSEL P.B.. *Invited talk at the Tennessee Valley Authority, Muscle Shoals, AL. USA. Sept. 1991*.
6. Publications #11 to 17: *Presented at the "Regional Photochemical Measurement and Modeling Studies" AWMA International Specialty Conference, San Diego, CA, 7-12 Nov. 1993*.
7. Publication #18: *Presented at the "Mercury as a Global Pollutant" International Conference, Whistler, B.C., July 10-14, 1994*.
8. "Lake-breeze Circulations Resulting in Elevated Ozone Concentrations at Hastings". *Paper presented at the 78th Canadian Chemical Society Conference and Exhibition*.