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REVIEWER EXPERIENCE for the scientific journals:

- Energy and Fuels (ACS)
- Waste and Biomass Valorization (Springer)
- Chemical Engineering Journal (Elsevier)

PUBLICATIONS

1. Non-pharmaceutical interventions for type 2 diabetes: nutrition, botanicals, antioxidants, minerals, and other dietary supplements. J. L. Evans and M.-K. Bahng, Chapter 16. In Carbohydrate metabolism and diabetes mellitus (EndoText.org), Ed. by I. D. Goldfine and R. J. Rushakoff (2014)
2. Application of an FT-IR imaging tool for measuring temperature or reaction profiles in pyrolyzed wood, M.-K. Bahng, B. Donohoe, and M.R. Nimlos, *Energy Fuels* **25**, 370 (2011)
3. Current technologies for analysis of biomass thermochemical processing: A review, M.-K. Bahng, C. Mukarakate, D. J. Robichaud, and M. R. Nimlos, *Anal. Chim. Acta* **651**, 117 (2009)–***cited over 300 times***
4. Determination of the rate constants for the radical-radical reactions NH_2 ($X\ ^2B_1$) + NH ($X^3\Sigma^-$) and NH_2 ($X\ ^2B_1$) + H (^2S) at 293 K, M.-K. Bahng and R. G. Macdonald, *J. Phys. Chem. A* **113**, 2415 (2009)
5. Determination of the rate constant for the NH_2 ($X\ ^2B_1$) + NH_2 ($X\ ^2B_1$) reaction at low pressure and 293 K, M.-K. Bahng and R. G. Macdonald, *J. Phys. Chem. A* **112**, 13432 (2008)
6. Determination of the rate constant for the OH ($X^2\Pi$) + OH ($X^2\Pi$) → O (^3P) + H_2O reaction over the temperature range 293–373 K, M.-K. Bahng and R. G. Macdonald, *J. Phys. Chem. A* **111**, 3850 (2007)
7. Infrared-vacuum ultraviolet pulsed field ionization-photoelectron study of $C_2H_4^+$ using a high-resolution infrared laser, X. Xing, B. Reed, M.-K. Bahng, and C.Y. Ng, *J. Phys. Chem. A* **112**, 2572 (2008)
8. Infrared-vacuum ultraviolet-pulsed field ionization-photoelectron study of CH_3I^+ using a high-resolution infrared laser, X. Xing, B. Reed, M.-K. Bahng, S.-J. Baek, P. Wang, and C.Y. Ng, *J. Chem. Phys*. **128**, 104306 (2008)
9. Rovibrationally selected and resolved pulsed field ionization-photoelectron study of propyne: Ionization energy and spin-orbit interaction in propyne cation, X. Xing, M.-K. Bahng, B. Reed, C.S. Lam, K.-C. Lau, and C.Y. Ng, *J. Chem. Phys*. **128**, 94311 (2008)

10. Rotationally resolved infrared-vacuum ultraviolet-pulsed field ionization-photoelectron depletion method for infrared spectroscopic studies of neutral molecules, X. Xing, P. Wang, H.-K. Woo, M.-K. Bahng, S.-J. Baek, and C.Y. Ng, *Chem. Phys. Lett.* **455**, 321 (2008)
11. High-resolution infrared-vacuum ultraviolet photoion and pulsed field ionization-photoelectron methods for spectroscopic studies of neutrals and cations, X. Xi, B. Reed, M.-K. Bahng, P. Wang, H.-K. Woo, S.-J. Baek, C.S. Lam, and C.Y. Ng, *Chin. J. Chem. Phys*. **21**, 193 (2008)
12. Assignment of rovibrational transitions of propyne in the region of 2934–2952 cm^{-1} measured by two-color IR–vacuum ultraviolet laser photoion-photoelectron methods, X. Xing, B. Reed, K.-C. Lau, S.-J. Baek, M.-K. Bahng, and C.Y. Ng, *J. Chem. Phys*. **127**, 44313 (2007)
13. Rovibrationally selected and resolved state-to-state photoionization of ethylene using the infrared-vacuum ultraviolet pulsed field ionization-photoelectron method, X. Xing, M.-K. Bahng, P. Wang, K.-C. Lau, S.-J. Baek and C. Y. Ng, *J. Chem. Phys*. **125**, 133304 (2006)
14. A combined VUV synchrotron pulsed field ionization-photoelectron and IR-VUV laser photoion depletion study of ammonia, M.-K. Bahng, X. Xing, S. J. Baek, X. Qian, and C. Y. Ng, *J. Phys. Chem. A* **110**, 8488 (2006)
15. A two-color infrared-vacuum ultraviolet laser pulsed field ionization photoelectron study of NH_3, M.-K. Bahng, X. Xing, S. J. Baek and C. Y. Ng, *J. Chem. Phys*. **123**, 84311 (2005)
16. Interaction of indolicidin with lipid model membranes : FTIR-ATR spectroscopic study, M. K. Bahng, N. J. Cho, J. S. Park, and K. Kim, *Langmuir* **14**, 463 (1998)

PRESENTATIONS

1. Oral presentation, "Fast pyrolysis of poplar using a captive sample reactor: Effects of inorganic salts on primary pyrolysis products", C. Mukarakate, D. Robichaud, B. Donohoe, M. Jarvis, K. Mino, M.-K. Bahng, M. Nimlos, The 243rd ACS National Meeting & Exposition, San Diego, CA (Mar. 25- 29, 2012)
2. Poster presentation, "Microscopic Analysis of Heat and Mass Transport in Biomass Pyrolysis and Gasification", B. Donohoe, C. Makarakate, M.-K. Bahng, M. Jarvis, T. Haas and M.R. Nimlos, The 2011 International Conference on Thermochemical Conversion Science, Chicago, IL (Sept. 28-30, 2011)
3. Oral presentation, "Studies on heat transfer effects in the pyrolysis of thick wood particles using FT-IR imaging", M.-K. Bahng, M. Jarvis, T. Haas, M.R. Nimlos and B.S. Donohoe, The 240th ACS National Meeting & Exposition, Boston, MA (Aug. 22-26, 2010)
4. Oral presentation (by R.G. Macdonald), "Study of the Radical-Radical Reactions, $NH_2(X^2B_1)$ + $O(^3P)$ and $NH_2(X^2B_1)$ + $OH(X^2\Pi)$ at 293 K", M.-K. Bahng and R.G. Macdonald, The 21st International Symposium on Gas Kinetics (GK2010), Leuven, Belgium (July 18-23, 2010)

5. Poster presentation, "Thermal decomposition pathways of cellulose model compounds", M.-K. Bahng, H.-H. Carstensen, G.B. Ellison, and M.R. Nimlos, The 2009 International Conference on Thermochemical Conversion Science, Chicago, IL (Sept. 16-18, 2009)
6. Oral presentation, "Thermal degradation pathways of levoglucosan as an intermediate in cellulose pyrolysis", M.-K. Bahng, H.-H. Carstensen, A.K. Vasiliou, G.B. Ellison, and M.R. Nimlos, The 237th ACS National Meeting & Exposition, Salt Lake City, UT (Mar. 22-26, 2009)
7. Poster presentation, "Thermal decomposition pathways of levoglucosan", M.-K. Bahng, H.-H. Carstensen, A.K. Vasiliou, G.B. Ellison, and M.R. Nimlos, The 2008 Energy Initiative Research Symposium, Boulder, CO (Nov. 17, 2008)
8. Poster presentation (by R.G. Macdonald), "Determination of the recombination rate constant for NH_2 (X^2B_1) + NH_2 (X^2B_1) → products in CF_4, N_2 and Ar at 293 K", M.-K. Bahng and R.G. Macdonald, The 32nd International Symposium on Combustion, McGill University, Montréal, Canada (Aug 3-8, 2008)
9. Poster presentation, "The kinetics of the NH_2 ($X\ ^2B_1$) + NH_2 ($X\ ^2B_1$) reaction at 293 K", M.-K. Bahng and R. G. Macdonald, The XXI Dynamics of Molecular Collisions meeting, Santa Fe, NM (Jul 8-13, 2007)
10. Poster presentation, "Time-resolved near infrared absorption spectroscopic study of the OH + OH reaction", M.-K. Bahng and R. G. Macdonald, The 232th ACS National Meeting, San Francisco, CA (Sept 10-14, 2006)
11. Poster presentation, "Vacuum ultraviolet and infrared-vacuum ultraviolet pulsed field ionization-photoelectron studies of NH_3^+", M.-K. Bahng, X. Xing, and C. Y. Ng, The 230th ACS National Meeting, Washington, DC (Aug 28-Sept 1, 2005)
12. Poster presentation (by X. Xing), "Infrared-vacuum ultraviolet double resonance photoionization and pulsed field ionization-photoelectron spectroscopy of ethylene", X. Xing, P. Wang, M.-K. Bahng, K.-C. Lau, S.-J. Baek and C. Y. Ng, The 4th Gordon Conference on Photoions, Photoionization and Photodetachment, Buellton, California (Jan 29 - Feb 3, 2006)
13. Poster presentation (by C. Chang), "State-selected ion-molecule reaction dynamics studies by vacuum ultraviolet laser pulsed field ionization-photoion method", C. Chang, Y. Hou, C. Houchins, M.-K. Bahng, C. Y. Ng and R. Dressler, Air Force Office of Scientific Research (AFOSR) Contractor's Meeting on Molecular Dynamics/ Theoretical Chemistry Abstract, Monterey, CA (May 2005)
14. Poster presentation, "Interaction of indolicidin with lipid model membranes: FTIR-ATR spectroscopic study", M. K. Bahng, N. J. Cho, J. S. Park, and K. Kim; Department of Chemistry and center for Molecular Catalysis, Seoul National University, The 7th University of Tokyo - Seoul National University Joint Symposium; *Frontiers in Physical Chemistry Research* (May 1997)

15. Poster presentation, "Effect of amino acids on the structure of the phospholipid monolayer at the air-water interface studied by infrared reflection-absorption spectroscopy", M. K. Bahng, M. J. Whang, and K. Kim, The 79th Annual Meeting of the Korean Chemical Society (Apr 1997)
16. Poster presentation, "Interaction of indolicidin with lipid model membranes: FTIR-ATR spectroscopic study", M. K. Bahng and K. Kim, The 78th Annual Meeting of The Korean Chemical Society (Sep 1996)
17. Oral presentation, "FTIR-ATR spectroscopic study of interaction of lipid model membranes", M. K. Bahng and K. Kim, Speaker of the Seminar at the Research Institute of Molecular Science (Nov 25, 1996)