

**Chemistry Department Publications (2002 – present)**  
**(53 Total)**

**2013**

“Laser-Induced Fluorescence Decay of 2-Methyl-, 2-Methoxy-, and 2-Ethyl-naphthalene on  $\alpha$ -Alumina during Temperature Programmed Desorption”, Bradly B. Baer<sup>‡\*</sup>, Shanan Lau<sup>\*</sup>, Hannah E. Ryan<sup>\*</sup>, K.A. Martin<sup>‡</sup>, A.M. Nishimura<sup>‡</sup>, *Journal of Spectroscopy*, (2013) 959126

**2012**

“An unprecedented iron-catalyzed cross-coupling of primary and secondary alkyl Grignard reagents with non-activated aryl chlorides”, Marc C. Perry<sup>\*</sup>, Amber N. Gillett, Tyler C. Law, *Tetrahedron Letters*, 53 (2012) 4436-4439

“Effect of Water on the Excimer Fluorescence Decay Rate Constant of Naphthalene on Alumina”, Hannah E. Ryan<sup>\*</sup>, Shanan Lau<sup>\*</sup>, Bradly B. Baer<sup>‡\*</sup>, K.A. Martin<sup>‡</sup>, A.M. Nishimura<sup>‡</sup>, *Journal of Undergraduate Chemistry Research*, **2012**, 11(3), 90

“The Effect of Substitution on the Fluorescence Property on  $\alpha$ -Alumina and its Application to Energy Transfer and Excimer Formation”. Rachel K. Teranishi, Laura M. Selby, Samantha R. Gardner, Seth W. Simonds, Michael S. Douglas, K.A. Martin and A.M. Nishimura, “, in *Naphthalene: Structure, Properties and Applications*, Nadya Gotsiridze-Columbus, ed., Nova Science Publishers, Inc., Hauppauge, NY (2011)

**2011**

“Simulating the Performance of a Catalytic Microsensor for Quantifying Ethanol in Inert and Reactive Environments”, Nair, H., Gatt, J.E., Zhang, R., Thomsen<sup>\*</sup>, J.M., Bordley<sup>\*</sup>, J.A., Choung, S.Y., Baertsch, C.D., *Industrial Engineering Chemistry Research*, 50 (2011) 10972-00981

“Effect of Desorption of Alkanes on the Fluorescence of Methyl-naphthalene on  $\text{Al}_2\text{O}_3$ ”, Rachel K. Teranishi<sup>\*</sup>, Laura M. Selby<sup>\*</sup>, Samantha R. Gardner<sup>\*</sup>, Seth W. Simonds<sup>‡\*</sup>, Michael S. Douglas<sup>‡\*</sup>, K.A. Martin<sup>‡</sup>, A.M. Nishimura<sup>‡</sup>, *Journal of Undergraduate Chemistry Research*, **2011**, 10(4), 139.

“ODMR Linewidth of 2-Indanone”, Samantha R. Gardner<sup>\*</sup>, K.A. Martin<sup>‡</sup>, A.M. Nishimura<sup>‡</sup>, *Journal of Undergraduate Chemistry Research*, **2011**, 10(4), 153.

“Evidence of resonance energy transfer in molecular bilayers on  $\text{Al}_2\text{O}_3$  (0001)”, Samantha R. Gardner, Seth W. Simonds, K.A. Martin, A.M. Nishimura, *Journal of Undergraduate Chemistry Research*, **2011**, 10(3), 95.

“Evidence of resonance energy transfer in molecular bilayers on  $\text{Al}_2\text{O}_3$  (0001)”, Samantha R. Gardner, Seth W. Simonds, K.A. Martin, A.M. Nishimura, *Journal of Luminescence*, **2011**, 131, 1661-1663.

“Observation of Resonance Energy Transfer in Naphthalene-Phenanthrene Molecular Bilayers on  $\text{Al}_2\text{O}_3$  (0001)”, Seth W. Simonds<sup>‡\*</sup>, Samantha R. Gardner<sup>\*</sup>, K.A. Martin<sup>‡</sup> and A.M. Nishimura<sup>‡</sup>, *Journal of Undergraduate Chemistry Research*, **2011**, 10(1), 1.

“Observation of Resonance Energy Transfer in Dichlorobenzene-Fluorenone Bilayer on  $\text{Al}_2\text{O}_3$  (0001)”, Laura M. Selby\*, Michael S. Douglas†\*, K.A. Martin‡ and A.M. Nishimura†, *Journal of Undergraduate Chemistry Research*, **2011**, 10(1), 5.

## **2010**

“Synthesis of a New Humic Acid Model, 2,4,6,6-Tetrachloro-2-methylcyclohex-4-ene-1,3-dione and Investigation of its Reactions with Monochloramine in Ether and in Methanol” Heasley, Victor L., Mitrovich, Kristin M., Sator Lisa C., Fisher, Audra M., Kerk, Amber R.E. and Shellhamer, Dale F., *Research Journal of Chemistry and Environment*, **2010**, 14(4), 52.

“Perturbation in the Formation of Excimers in Methylanththalenes on  $\text{Al}_2\text{O}_3$  (0001)” Michael S. Douglas†\*, Laura M. Selby\*, K.A. Martin‡ and A.M. Nishimura†, *Journal of Undergraduate Chemistry Research*, **2010**, 9(4), 117.

“Energy Transfer in Mixed Excimers and Exciplexes on a Dielectric Surface” Christine L. Binkley\*, Nicole C. Freyschlag†\*, Melissa L. Gross\*, Wendi A. Hale\*, Taylor C. Judkins\*, K.A. Martin‡ and A.M. Nishimura†, *Journal of Undergraduate Chemistry Research*, **2010**, 9(4), 122.

“1-Methylanththalene Excimers on a Dielectric Surface” Laura M. Selby\*, Michael S. Douglas†\*, K.A. Martin‡ and A.M. Nishimura†, *Journal of Undergraduate Chemistry Research*, **2010**, 9(4), 128.

“Reaction of chlorosulfonyl isocyanate with fluorosubstituted alkenes: Evidence for a concerted pathway” Shellhamer, Dale F.; Davenport\*, Kevyn J.; Hassler\*, Danielle M.; Hickie\*, Kelli R.; Thorpe\*, Jacob J.; Vandenbroek\*, David J.; Heasley, Victor L.; Boatz, Jerry A.; Reingold, Arnold L. and Moore, Curtis E., *Journal of Organic Chemistry*, **2010**, 75, 7913.

“Reaction of halogens and interhalogens with 1,1,2-trifluorobut-1-en-4-ol and 3-butene-1-ol: A study on the rearrangement of trifluorosubstituted 3-membered halonium ions” Shellhamer, Dale F.; Davenport\*, Kevyn J.; Jones\*, Rachel N.; Thorpe\*, Jacob J.; Weiss\*, Ryan J. and Heasley, Victor L., *Trends in Organic Chemistry*, **2010**, 14, 73-76.

## **2009**

“An Unexpected Lactam from the Reaction of Pentachlororesorcinol (PCR) with Ammonia in Ether” Victor L. Heasley\*, Luke A. Tatum, Kristin E. Mitrovich, Jeffrey L. Boerneke and Dale F. Shellhamer, *Research Journal of Chemistry and Environment*, **2009**, Vol. 13(3), 29-32.

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“Disubstitutional Effect on Naphthalene Fluorophores on  $\text{Al}_2\text{O}_3$ (0001)” Christine L. Binkley\*, Nicole C. Freyschlag\*†, Melissa L. Gross\*, Wendi Hale\*, Taylor C. Judkins\*, K.A. Martin† and A.M. Nishimura, *Journal of Undergraduate Chemistry Research*, **2009**, 8(3), 107.

## **2008**

“Thermally Induced Surface Dynamics of Dichloronaphthalene Excimers on  $\text{Al}_2\text{O}_3$  (0001)” N.C. Freyschlag\*, M.L. Gross\*, W.A. Hale\*, R.D. Valladares\*, M.N. Masuno, K.A. Martin, and A.M. Nishimura, *Journal of Undergraduate Chemistry Research*, **2008**, Vol. 7(4), 122, ISSN# 1541-6003.

“Formation of Methoxynaphthalene-Naphthalene Exciplex on  $\text{Al}_2\text{O}_3$  (0001)” C.L. Binkley\*, T.C. Judkins\*, K.A. Martin and A.M. Nishimura, *Journal of Undergraduate Chemistry Research*, **2008**, Vol. 7(4), 133, ISSN# 1541-6003.

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“Rearrangement of 3-Membered 1,1,2-Trifluorobromonium and Iodonium Ions and Comparison of Trifluorochloronium to Fluorocarbenium Ions” D. F. Shellhamer, K. J. Davenport, H. K. Forberg, M. P. Herrick, R. N. Jones, S.J. Rodriguez, S. Sanabria, N.N. Trager, R. J. Weiss, V. L. Heasley and J. A. Boatz, *J. Org. Chem.* **2008**, 73, 4532.

“Formation of Molecular Clusters by Thermally Induced Persolation of Water Through Dimethylnaphthalene and Dimethoxynaphthalene Adlayers on  $\text{Al}_2\text{O}_3$ ,” M. L. Goss, M. C. Boatz, S. M. Ryland, R. D. Valladares, B. M. Murray, M. N. Masumo, K. A. Martin and A. M. Nishimura, *Journal of Undergraduate Chem. Research*, **2008**, 7(1), 6.

“Formation of Naphthalene-Dichloronaphthalene Exciplexes on  $\text{Al}_2\text{O}_3$  (0001)” N.C. Freyschlag\*<sup>‡</sup>, M.L. Gross\*, W.A. Hale\*, R.D. Valladares\*, M.N. Masuno, K.A. Martin<sup>‡</sup> and A.M. Nishimura<sup>†</sup>, *Journal of Undergraduate Chemistry Research*, **2008**, 7(3), 83.

## **2007**

“Reactions of 2,4,6-Trichlororesorcinol and Pentachlororesorcinol and Monochloroamine in Methanol: Investigation of Products and Mechanisms” V.L. Heasley, M.B. Alexander, P.E. Baker, J.L. Boerneke, R.H. DeBoard, J.T. Gardner, E.E. Herman, S.T. Michaelson, E.W. Miller, A.M. Ramirez, R.E. Renfrow, N.R. Royer, L.C. Sator, S.A. Wood and D.F. Shellhamer, *Res. J. Chem. Environ.*, **2007**, 11, 22.

“Synthesis of Several Unexpected Compounds from 2,2,4,4,5-Pentachloro-5-cyclohexene-1,3,dione (A humic acid Model), Monochloramine, Ammonia and other Reagents”, V.L. Heasley, AM Ramirez, PE Baker, JL Boerneke, RH DeBoard, TL Hartge, DC Madrid, GA Sigmund and DF Shellhamer. (2007) *Letters in Organic Chemistry* 4, October, 2007.

“Synthesis of Anhydrous, Monohydrate and Multihydrate 2,4,6-Trichlororesorcinol”, V.L. Heasley, R.E. Renfrow, L.C. Sator, J.L. Boerneke and D.F. Shellhamer, *Res. J. Chem. Environ.* 2007, 11,13.

## **2006**

“Wavelength-Resolved Temperature Programmed Desorption of 1,4-Disubstituted Naphthalenes on  $\text{Al}_2\text{O}_3$  (0001)” G.H. Allen, S.M. Ryland, K.A. Martin, and A.M. Nishimura, *Journal of Undergraduate Chemistry Research*, Vol. 4, pg. 165 2006

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“Use of fluorescence to probe the surface dynamics during disorder-to-disorder transition and cluster formation in dihalonaphthalene-water thin films”. D.R. Hoss, A.J. Bishop\*, M.A. Evans, K.E. Howard, A.D. Louie, K.A. Martin and A.M. Nishimura *Thin Solid Films* 515, 1370-76 (2006).

“The Chemistry of Interhalogen Monofluorides,” Dale F. Shellhamer\* and Victor L. Heasley, *Advances in Organic Synthesis*, 2006, Vol. 2, Bentham Science Publishers, p. 43.

“Correlation of Calculated Halonium Ion Structures with Product Distributions from Fluorine Substituted Terminal Alkenes,” Dale F. Shellhamer, David C. Gleason\*, Sean J. Rodriguez\*, Victor L. Heasley, Jerry A. Boatz and Jeffrey J. Lehman, *Tetrahedron* 62, 11608-11617 (2006).

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## **2005**

“Dynamics of Disorder-to-Order Transition in Bilayers: Formation of van der Waals Molecular Clusters by Percolation of Water Through a p-Dihalobenzene Adlayer on  $\text{Al}_2\text{O}_3$ (0001)” B.J. Haddock, S.L. Cowell, J.S. Brigham, T.S. LeDoux, J.G. Andre', C.A. Moore, E. Herndon, E.J. Neethling, C. Osborn, A.J. Bishop, L. Meiling, K.A. Martin and A.M. Nishimura, *Encyclopedia of Surface and Colloid Science*, A.T. Hubbard and P. Somasundaran editors. Marcel Dekker (2005) N.Y. pp. 1-21.

“Optical Studies of the Disorder-to-Order Transition in 1,4-Dichloronaphthalene Adlayer on  $\text{Al}_2\text{O}_3$ (0001)”, J.S. Brigham, D.R. Hoss, A.J. Bishop, K.A. Martin, A.M. Nishimura *J. Undergrad. Chem. Res.* 4(3) 101-105. (2005)

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## **2004**

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## **2003**

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## **2002**

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