

CHEMISTRY

GRADUATE DIRECTOR: NANCY S. GOROFF

DEPARTMENT CHAIR: BENJAMIN S. HSIAO

❖ Grants, Fellowships, and Awards

- Buannic, Lucienne.** (2010) Student travel grant award, \$1,000. *The Electrochemical Society, Battery Division*. Pennington, NJ.
- Carr, Amber.** (2010) Graduate Student Award in Supercomputing. *American Chemical Society*, Washington, D.C.
- Das, Manisha.** (2009) Travel Award, \$1,217. *Ajinomoto*, Salt Lake City, UT.
- Das, Manisha.** (2009) Travel Award, \$1,376. *Ajinomoto*, Washington, D.C.
- Ding, Fang-Yu.** (2009) American Chemical Society (ACS) Computers in Chemistry Division's Chemical Computing Group (CCG) Excellence Award, \$1,150. *Chemical Computing Group Inc.*, Montreal, QB.
- Dufour, Antoine.** (2009) Poster Award, \$200. *Gordon Conference*, Les Diablerets, Switzerland.
- Liu, Li.** (2010) ASBMB graduate/postdoctoral travel award, \$1250. *The American Society for Biochemistry and Molecular Biology*, Bethesda, MD.
- Liu, Nina.** (2010) ASBMB 2010 Graduate/Postdoctoral travel fellowship, \$1,250. *The American Society For Biochemistry and Molecular Biology (ASBMB)*, Anaheim, CA.
- Morgan, Kellie.** (2009) NSF IGERT 3MT Fellowship, \$30,000. *Stony Brook University*, Stony Brook, NY.
- Neckles, Carla.** (2009-2011) Bridge to the Doctorate Fellowship. *Stony Brook University*, Stony Brook, NY.
- Neckles, Carla.** (2009) SUNY Chancellor's Award for Student Excellence. *University at Albany*, Albany, NY.
- Neckles, Carla.** (2009) President's Award for Leadership. *University at Albany*, Albany, NY.
- Neckles, Carla.** (2009) Third Place Winner for Alliance for Graduate Education and the Professoriate Conference. *University at Albany*, Albany, NY.
- Song, Airon.** (2009) Sigma Xi Travel Award, \$200. *Sigma Xi, the Scientific Research Society*, Stony Brook, NY.

❖ Jointly Authored Publications/Research Reports/Reviews

- Banerjee, D., Kim, S. J., Parise, J. B.** (2009) Lithium based metal-Organic Framework with Exceptional Stability. *Cryst. Growth Des.* 9(5): 2500.
- Banerjee, D., Borkowski, L. A., Kim, S. J., Parise, J. B.** (2009) Synthesis and Structural Characterization of Lithium Based Metal-Organic Frameworks. *Cryst. Growth Des.* 9(11): 4922.
- Banerjee, D., Kim, S. J., Borkowski, L. A., Xu, W., Parise, J. B.** (2010) Solvothermal Synthesis and Structural Characterization of Ultra light Metal Coordination Network. *Cryst. Growth Des.* 10(2): 709.

- Cao, Ping** and Raleigh, Daniel P. (2010) Ester to Amide Switch Peptide Provide a Simple Method for Preparing Monomeric Islet Amyloid Polypeptide under Physiologically Relevant Conditions and Facilitate Investigations of Amyloid Formation. *Journal of the American Chemical Society* 132: 4052-4053.
- Cao, Ping**, Meng, Fanling, Abedini, Andisheh, and Raleigh, Daniel. (2010) The ability of Rodent Islet Amyloid Polypeptide To inhibit Amyloid Formation by Human Islet Amyloid Polypeptide Has Important Implications for the Mechanism of Amyloid Formation and the Design of Inhibitors. *Biochemistry* 49: 872-881.
- Chiou, W.H., Lin, G.H., Hsu, C.C., **Chaterpaul, S. J.**, Ojima, I. (2009) Efficient Syntheses of Crispine A and Harmicine by Rh-Catalyzed Cyclohydrocarbonylation. *Organic Letters* 11(12): 2659-2662.
- Ojima, I, Kaloko, J.J., **Chaterpaul, S. J.**, Lin, C.F., Teng, Y.H.G. (2010) Asymmetric Carbometallation and Carbocyclizations. In I. Ojima (Ed.), *Catalytic Asymmetric Synthesis*. Hoboken, New Jersey: John Wiley & Sons.
- Ojima, Iwao, **Das, Manisha**, Zuniga, Edison. (2009) Novel Taxoid Based Tumor-Targeting Drug Conjugates. *Chemistry Today/Chimica Oggi* 27(6): 54-56.
- Galiano*, Luis, **Ding***, **Fangyu**, Veloro, Angelo M., Blackburn, Mandy E., Simmerling, Carlos and Fanucci, Gail E. (2009) Drug Pressure Selected Mutations in HIV-1 Protease Alter Flap Conformations. *J. Am. Chem. Soc.* 131(2): 430-431. (*The first two authors contributed equally to this project).
- Hammond, K. D., Gharibeh, M., Tompsett, G. A., **Dogan, Fulya**, Brown, A. V., Grey, C. P., Auerbach, S. M., Conner, W. C. (2010) Optimizing the Synthesis of Nitrogen-Substituted Zeolites. *Chemistry of Materials* 22: 130-142.
- Dogan, Fulya**, Hammond, K. D., Tompsett, G. A., Huo, H., Conner, W. C., Auerbach, S. M., Grey, C. P. (2009) Searching for Microporous, Strongly Basic Catalysts: Experimental and Calculated ²⁹Si NMR Spectra of Heavily Nitrogen-Doped Y Zeolites, *J. Am. Chem. Soc.* 131: 11062-11079.
- Dufour, A.**, Sampson, N., Kuscu, C., Zucker, S., Cao, J. (In Press) Roles of Matrix Metalloproteinase-9 (MMP-9) dimers in cell migration: design of inhibitory peptides. *Journal of Biological Chemistry*.
- Zucker, S., Schmidt, C., **Dufour, A.**, Kaplab, R., Park, H., Jiang, W. (2009) ProMMP-2:TIMP-1 complexes identified in plasma of healthy individuals. *Connective Tissue Research* 50(4): 223-231.
- Kerber, R.C., **Fernando, M.S.** (In Press) α -Oxocarboxylic Acids. *Journal of Chemical Education*.
- Dogan, Fulya, Hammond, K. D., Tompsett, G. A., **Huo, H.**, Conner, W. C., Auerbach, S. M., Grey, C. P. (2009) Searching for Microporous, Strongly Basic Catalysts: Experimental and Calculated ²⁹Si NMR Spectra of Heavily Nitrogen-Doped Y Zeolites. *J. Am. Chem. Soc.* 131: 11062-11079.
- Ojima, I., **Kaloko, J.J.**, Chaterpaul, S.J., Lin, C.F., Teng, Y.H.G. (2010) Asymmetric Carbometallation and Carbocyclizations. In I. Ojima (Ed.), *Catalytic Asymmetric Synthesis*. Hoboken, New Jersey; John Wiley & Sons.
- Bhattacharyya, R., **Key, Baris**, Chen, H., Best, A. S., Hollenkamp, A. F., and Grey, C. P. (2010) *In situ* NMR Observation of the Formation of Metallic Microstructures in Lithium Batteries. *Nature Materials* 9: 504-510.
- Key, Baris**, Bhattacharyya, R., Morcrette, M., Seznec, V., Tarascon, J. M., and Grey, C. P. (2009) Real-Time NMR Investigations of Structural Changes in Silicon Electrodes for Lithium-Ion Batteries. *Journal of the American Chemical Society* 131: 9239-9249.
- Jiang, M., **Key, Baris**, Meng, Y. S., and Grey, C. P. (2009) Electrochemical and Structural Study of the Layered, "Li-Excess" Lithium-Ion Battery Electrode Material Li Li_{1/9}Ni_{1/3}Mn_{5/9}O₂. *Chemistry of Materials* 21: 2733-2745.

- Yamakawa, N., Jiang, M., **Key, Baris**, and Grey, C. P. (2009) Identifying the Local Structures Formed during Lithiation of the Conversion Material, Iron Fluoride, in a Li Ion Battery: A Solid-State NMR, X-ray Diffraction, and Pair Distribution Function Analysis Study. *Journal of the American Chemical Society* 131, 10525-10536.
- Ojima, I., Kaloko, J.J., Chaterpaul, S.J., **Lin, C.F.**, Teng, Y.H.G. (2010) Asymmetric Carbometallation and Carbocyclizations. In I. Ojima (Ed.), *Catalytic Asymmetric Synthesis*. Hoboken, New Jersey; John Wiley & Sons.
- Liu, L.**, Xu, Y., Shea, C., Fowler, J.S., Hooker, J.M. and Tonge, P.J. (2010) Radiosynthesis and Bioimaging of the Tuberculosis Chemotherapeutics Isoniazid, Rifampicin and Pyrazinamide in Baboons. *J. Med. Chem.* 53(7): 2882-2891.
- Kinnings S. L., **Liu, N.**, Buchmeier N., Tonge P. J., Lei X., Bourne P. E. (2009) Drug Discovery Using Chemical Systems Biology: Repositioning the Safe Medicine Comtan to Treat Multi-Drug and Extensively Drug Resistant Tuberculosis. *PLoS Computational Biology* 5(7): e1000423.
- Luckner S. R., **Liu, N.**, am Ende, C.W.A., Tonge P.J., Kisker, C. (In Press) A slow, tight-binding inhibitor of InhA, the enoyl-ACP reductase from *Mycobacterium tuberculosis*. *The Journal of Biological Chemistry*.
- Cao, Ping, **Meng, Fanling**, Abedini, Andisheh, and Raleigh, Daniel. (2010) The ability of Rodent Islet Amyloid Polypeptide To inhibit Amyloid Formation by Human Islet Amyloid Polypeptide Has Important Implications for the Mechanism of Amyloid Formation and the Design of Inhibitors. *Biochemistry* 49: 872-881.
- Meng, Wenli**, Shan, Bing, Tang, Yuefeng, Raleigh, Daniel P. (2009) Native like structure in the unfolded state of the villin headpiece helical subdomain, an ultrafast folding protein. *Protein Science* 18(8): 1692-701.
- Patete, J.M.**, Petrofsky, J. M., Stepan, J., Waheed, A., Serafin, J. M. (2009) Hofmeister Effect on the Interfacial Free Energy of Aliphatic and Aromatic Surfaces Studied by Chemical Force Microscopy. *Journal of Physical Chemistry B* 113(2): 583-588.
- Feyngenson, M., Kou, A., Kreno, L. E., Tiano, A. L., **Patete, J.M.**, Zhang, F., Kim, M. S., Solovyov, V., Wong, S. S., Aronson, M. C. (2010) Properties of highly crystalline NiO and Ni nanoparticles prepared by high-temperature oxidation and reduction. *Physical Review B: Condensed Matter and Materials Physics* 81(1): 014420/1-014420/9.
- Song, Airong**, Parker, Kathlyn A., Sampson, Nicole S., (2009) Synthesis of copolymers by alternating ROMP (AROMP). *J. Am. Chem. Soc.* 131: 3444-3445.
- Ojima, I., Kaloko, J.J., Chaterpaul, S.J., Lin, C.F., **Teng, Y.H.G.** (2010) Asymmetric Carbometallation and Carbocyclizations. In I. Ojima (Ed.), *Catalytic Asymmetric Synthesis*. Hoboken, New Jersey; John Wiley & Sons.
- Santulli, A. C., Xu, W., Parise, J.B., Wu, L., Aronson, M.C., Zhang, F., Nam, C.-Y., Black, C. T., **Tiano, A.L.**, Wong, S. S. (2008) Synthesis and characterization of V₂O₃ nanorods. *Physical Chemistry Chemical Physics* 11: 3718-3726.
- Feyngenson, M., Kou, A., Kreno, L. E., **Tiano, A.L.**, Patete, J. M., Zhang, F., Kim, M. S., Solovyov, V., Wong, S. S., Aronson, M. C. (2010) Properties of highly crystalline NiO and Ni nanoparticles prepared by high-temperature oxidation and reduction. *Physical Review B: Condensed Matter and Materials Physics* 81(1): 014420/1-014420/9.
- Zeng, D.**, Cabana, J., Yoon, W., Grey, C. P. (2010) Investigation of the Structural Changes of Li[Ni_yMn_yCo_(1-2y)]O₂ (y = 0.05) upon Electrochemical Lithium Deintercalation. *Chem. Mater.* 22(3): 1209-1219.
- Feyngenson, M., Kou, A., Kreno, L. E., Tiano, A. L., Patete, J. M., **Zhang, F.**, Kim, M. S., Solovyov, V., Wong, S. S., Aronson, M. C. (2010) Properties of highly crystalline NiO and Ni nanoparticles prepared by high-temperature oxidation and reduction. *Physical Review B* 81: 014420.

Ojima, Iwao, Das, Manisha, **Zuniga, Edison**. (2009) Novel Taxoid Based Tumor-Targeting Drug Conjugates. *Chemistry Today/Chimica Oggi* 27(6): 54-56.

❖ **Abstracts, Conferences/Colloquia, Presentations, Symposiums, Workshops**

Banerjee, D., Kim, S.J., Rosina, K., Wu, H., Borkowski, L.A., Finkelstein, J., Li, J., Grey, C. P., Parise, J. B. (2010) Ultra-Light Metal Organic Frameworks. *239th ACS National Meeting*. San Francisco, CA. (abstract)

Kumar, Kunal, Zanardi, Ilaria, **Berger, William T.**, Ruzsicska, Bela, Slayden, Richard A., Ojima, Iwao. (2009) SAR study and optimization of novel benzimidazoles for antituberculosis drug discovery, targeting FtsZ. *238th ACS National Meeting*. Washington, D.C.

Buannic, Lucienne, Blanc, Frédéric, Holmes, Lesley, Grey, C. P. (2009) NMR study of vacancy trapping in perovskite materials for use in Intermediate Temperature Solid Oxide Fuel Cells. *17th Conference on Solid State Ionic*. Toronto, ON.

Buannic, Lucienne, Blanc, Frédéric, Holmes, Lesley, Grey, C. P. (2009) NMR study of electrolyte materials for Intermediate Temperature Solid Oxide Fuel Cells: hydrated yttrium substituted barium zirconate. *17th Conference on Solid State Ionic*. Toronto, ON.

Buannic, Lucienne, Blanc, Frédéric, Grey, Clare P. (2010) Solid State NMR Studies of Doped BaSnO₃ and BaZrO₃ Protonic Conductors: Defect Trapping and Ionic Mobility. *217th ECS Meeting*. Vancouver, BC.

Buannic, Lucienne (2009) Workshop. *Spring School on Thermal Conductivity and Related Transport Properties of Oxides*. University of Florida, Gainesville, FL.

Cao, Ping, Meng, Fanling, Abedini, Andisheh, and Raleigh, Daniel. (2009) The ability of Rodent Islet Amyloid Polypeptide To inhibit Amyloid Formation by Human Islet Amyloid Polypeptide Has Important Implications for the Mechanism of Amyloid Formation and the Design of Inhibitors. *American Chemical Society Meeting*. Washington, D.C. (poster)

Carr, Amber. (2010) Examining the Effect of Self-guided Langevin Dynamics on the Thermodynamic Stability and Kinetics of Peptide Folding. *American Chemical Society National Meeting*. San Francisco, CA.

Chaterpaul, S. J. Ojima, I. (2009) Highly efficient Pd-catalyzed intramolecular asymmetric double allylic substitution reaction toward the synthesis of Huperzine-A. *238th American Chemical Society National Meeting*, Washington, D.C.

Das, Manisha, Khetpal, Sahil, Kuznetsova, Larisa V., Wong, Stanislaus S., Ojima, Iwao. (2010) Functionalized SWNT as a versatile platform for tumor-targeted therapy. *239th ACS National Meeting*, San Francisco, CA.

Das, Manisha, Ojima, I. (2009) Synthesis and biological evaluation of novel taxoid for PET studies. *Annual ICB&DD Symposium*, Stony Brook, Ny. *Chemistry Research Day*, Stony Brook, NY.

Dervisoglu, Riza, Lee, Y., Middlemiss, D.S., Morgan, D., Grey, C.P. (2009) Cluster expansion and Monte Carlo simulation of Ga doped Ba₂In₂O₅, a fast anionic conductor. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY.

Ding, Fangyu. (2009) Drug Pressure Selected Mutations in HIV-1 Protease Alter Flap Conformations. *The Fall 2009 ACS National Meeting*. Washington, D.C. (poster)

Dogan, Fulya, Bhattacharyya, Rangeet, Huo, Hua, Hammond, Karl D., Auerbach, Scott M., Grey, Clare P. (2009) Synthesis and Characterization of Amine Substituted Zeolite Y. *50th Experimental Nuclear Magnetic Resonance Conference*. Pacific Grove, CA.

Dufour, Antoine, Kuscu, Cem, Sampson, Nicole, Zucker, Stanley, and Cao, Jian. (2010) Roles of MMP-9 Homodimer and Heterodimer in Cell Migration. *Gordon Conference on Molecular Scissors*. Les Diablerets, Switzerland.

- Dufour, Antoine**, Sampson, Nicole, Zucker, Stanley, and Cao, Jian. (2009) Critical roles of MMP-9 dimers in cell migration. *3rd edition of Institute of Chemical Biology and Drug Discovery Symposium (ICB&DD)*. Stony Brook University, Stony Brook, NY.
- Dufour, Antoine**, Cao, Jian, and Sampson, Nicole. (2009) The role of Hemopexin Domain of Matrix Metalloproteinase-9 in Cell Migration. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY.
- Dufour, Antoine**. (2010) Critical roles of MMP-9 dimers in cell migration. *Department of Chemistry*. Scripps Florida, Jupiter, FL. (invited speaker)
- Dufour, Antoine**. (2009) The biochemical and biological roles of MMP-9 dimers. *Department of Cancer Prevention Gastroenterology*. Stony Brook University, Stony Brook, NY. (invited speaker)
- Gao, Jin**, and Sampson, Nicole S. (2009) Functional characterization of *Rv3409c* from *M. tuberculosis* and L1334, the unique lipid isolated from *M.smegmatis choD* mutant. *ICB&DD Symposium*. Stony Brook University, Stony Brook, NY. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY.
- Dogan, Fulya, Bhattacharyya, Rangeet, **Huo, Hua**, Hammond, Karl D., Auerbach, Scott M., Grey, Clare P. (2009) Synthesis and Characterization of Amine Substituted Zeolite Y. *50th Experimental Nuclear Magnetic Resonance Conference*. Pacific Grove, CA.
- Key, Baris**, Bhattacharyya, Rangeet, Morcrette, Mathieu, Sez nec, Vincent, Tarascon, Jean-Marie, Grey, Clare P. (2009) *In-situ* and *ex-situ* Solid State NMR and Pair Distribution Function Studies to Investigate The Local Structure of the Amorphous Phase(s) in Silicon Anodes. *216th Electrochemical Society Meeting*, Vienna, Austria . *Advanced Photon Source Users Meeting*. Argonne, IL.
- Key, Baris**, Bhattacharyya, Rangeet, Grey, Clare P., Best, Adam S., Lane, George H., Hollenkamp, Anthony F. (2009) *In-situ* and *ex-situ* ⁷Li Solid State NMR Studies on Lithium symmetrical cells with Ionic Liquid electrolytes. *216th Electrochemical Society Meeting*. Vienna, Austria.
- Kim, Gunwoo** (2009) Solid-state NMR Studies of CsH₂PO₄, An Ionic Conductor for Intermediate-Temperature Solid Oxide Fuel Cells (IT-SOFCs). *Workshop - Modeling of Fuel Cell Electrocatalysts*. University of California, Santa Barbara, Santa Barbara, CA. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY.
- Kumar, Kunal**, Zanardi, Ilaria, Berger, William T., Ruzsicska, Bela, Slayden, Richard A., Ojima, Iwao. (2009) SAR study and optimization of novel benzimidazoles for antituberculosis drug discovery, targeting FtsZ. *238th ACS National Meeting*. Washington, D.C.
- Lee, Siyeon** and Sampson, Nicole. (2009) Development of photoaffinity based ROMP polymer for identifying receptors on egg surface. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY. *ICB & DD symposium*. Stony Brook University, Stony Brook, NY.
- Lin, Chi-Feng**. (2009) Application of Chiral Biphenol-Based Bidentate Diphosphonite and Monophosphoramidite Ligands to Pd-Catalyzed Intramolecular Asymmetric Allylic Amination Reactions. *ACS Fall 2009 National Meeting & Exposition*. Washington, D.C.
- Liu, Li**. (2010) Imaging the Distribution of Carbon-11 Labeled Rifampicin, Isoniazid and Pyrazinamide in Baboons using PET. *The American Society for Biochemistry and Molecular Biology*. Anaheim, CA.
- Liu, Li**. (2010) Radiosynthesis and bioimaging of the tuberculosis chemotherapeutics isoniazid, rifampicin and pyrazinamide in baboons. *The Society of Nuclear Medicine*. Salt Lake City, UT.
- Cao, Ping, **Meng, Fanling**, Abedini, Andisheh, and Raleigh, Daniel. (2009) The ability of Rodent Islet Amyloid Polypeptide To inhibit Amyloid Formation by Human Islet Amyloid Polypeptide Has Important Implications for the Mechanism of Amyloid Formation and the Design of Inhibitors. *American Chemical Society Meeting*. Washington, D.C. (poster)

- Meng, Wenli.** (2009) NMR Characterization of Villin Headpiece Helical Subdomain in 8M Urea Reveals the Presence of Secondary Structure in the Denatured State. *The 23rd Annual Symposium of The Protein Society*. Boston, MA.
- Neckles, Carla.** (2010) KasA from the FASII Pathway in *Mycobacterium tuberculosis*. *CUNY/SUNY AGEF Conference in Science and Engineering*. CUNY Graduate Center, New York, NY.
- Neckles, Carla.** (2009) Separation and Determination of Pharmacologically Active Ingredients in Nature Made Standardized Ginkgo Biloba Extract Using GC/MS. *Second Annual Forensic Research Colloquium*. University at Albany, Albany, NY.
- Neckles, Carla.** (2008/2009) Purification and Characterization of Myocilin Protein from Bovine Aqueous Humor, and Recombinant Human Myocilin Expressed in *E. coli*. *McNair Research Conference*. University at Buffalo, Buffalo, NY. *Alliance for Graduate Education and the Professoriate Conference*. University at Albany, Albany, NY.
- Patete, J.M.,** Serafin, J. M., Wong, S. S. (2009) Methods for controlling gold nanocrystal assembly on a surface. *238th ACS National Meeting*. Washington, D.C.
- Rosina, Kenneth J.,** Jiang, Meng, Best, Adam, Grey, Clare P. (2009) Coating Effects on $\text{Li}[\text{Li}_{1/9}\text{Ni}_{1/3}\text{Mn}_{5/9}]\text{O}_2$ Cathodes for Rechargeable Lithium Ion Batteries. *17th International Conference on Solid State Ionics*. Toronto, ON.
- Rosina, Kenneth J.** (2010) Coating Effects on $\text{Li}[\text{Li}_{1/9}\text{Ni}_{1/3}\text{Mn}_{5/9}]\text{O}_2$ Cathodes for Rechargeable Lithium Ion Batteries. *Chemistry Research Day*, Stony Brook University, Stony Brook, NY.
- Song, Airon,** Walker, Stephen, Parker, Kathlyn A., Sampson, Nicole S. (2009) Antimicrobial studies of amphiphilic polymers synthesized using AROMP of 1-substituted cyclobutene carboxylic esters and cyclohexene derivatives. *Gordon Research Conference "Bioorganic Chemistry"*. Andover, NH. *ICB&DD Symposium*. Stony Brook, NY.
- Su, Chiao-Yung.** (2009) Mapping out the site of protein-lipid interactions on cholesterol oxidase. *ICB&DD Symposium*. Stony Brook University, Stony Brook, NY. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY.
- Tan, Li** (2009) Investigation of Anti-Backbiting in Alternating Ring-Opening Metathesis Polymerization. *ICB&DD Symposium*. Stony Brook University, Stony Brook, NY. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY.
- Thomas, Suzanne** (2009) Investigating the Enzymatic Activities Encoded by the Cholesterol Metabolizing *igr* operon in *Mycobacterium tuberculosis*. *ICB&DD Symposium*. Stony Brook University, Stony Brook, NY. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY.
- Wu, Linghui** (2009) Investigate mouse acrosome reaction with chemically synthetic glycopolymers. *ICB&DD Symposium*. Stony Brook University, Stony Brook, NY. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY.
- Yeo, Jung-Eun,** Gillet, Ludovic C. J., Schäfer, Orlando; (2009) Sequence-dependent repair efficiency of dG-AAF and dG-AF substrates by human nucleotide excision repair. *3rd ASM (American Society of Microbiology) Conferences; DNA repair and Mutagenesis*. Whistler, BC. *3rd ICB&DD Annual Symposium*. Stony Brook, NY.
- Zeng, D.,** Cabana, J., Indris, S., Yoon, W.-S., Robert, R., Clarke S. J., and Grey, Clare P. (2009) Study of Reversible Lithium Intercalation into Copper Based Oxysulfides. *17th International Conference on Solid State Ionics*. Toronto, ON. *216th ECS Meeting*. Vienna, Austria.
- Zeng, D.,** Cabana, J., Yoon, W.-S., and Grey, C. P. (2009) Study of the delithiation processes in layered $\text{Li}[\text{Ni}_y\text{Mn}_y\text{Co}_{(1-2y)}]\text{O}_2$ ($y=0.2, 0.3$). *216th ECS Meeting*. Vienna, Austria.
- Zeng, D.,** Cabana, J., Yoon, W.-S., and Grey, C. P. (2009) Study of the structural changes in $\text{Li}[\text{Ni}_y\text{Mn}_y\text{Co}_{(1-2y)}]\text{O}_2$ ($y=0.05$) upon lithium deintercalation. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY.

Zhu, Yunxu, Lu, Zhouguang, Grey, Clare. (2009) NMR Studies on Olivine Materials. *Chemistry Research Day*. Stony Brook University, Stony Brook, NY.

❖ **Internship Appointments**

Das, Manisha. (2009) Intellectual Property Intern. *Forest Laboratories Inc*, Commack, NY..

❖ **Post-Doctorates Obtained and Professional Appointments**

Chaterpaul, Stephen. (2009-10) Adjunct Instructor of Chemistry. Department of Chemistry, *Hofstra University*, Hempstead, NY.

Dufour, Antoine. (2010) Post-Doctoral Fellowship. Centre for Blood Research, *University of British Columbia*, Vancouver, BC.

Song, Airong. (2010) Post-Doctoral Appointment. Bioengineering Department, *University of California at San Diego*, San Diego, CA.

❖ **Patents**

Dufour, Antoine and Jian Cao. (Submitted Patent STONYB- 16639) *Compositions and methods for inhibiting MMP-9-mediated cell migration*. This invention was made with government support under grant 5R01CA11355301A1, awarded by the National Institutes of Health (NIH). The government has certain rights in the invention. Stony Brook University also has rights in this invention.