

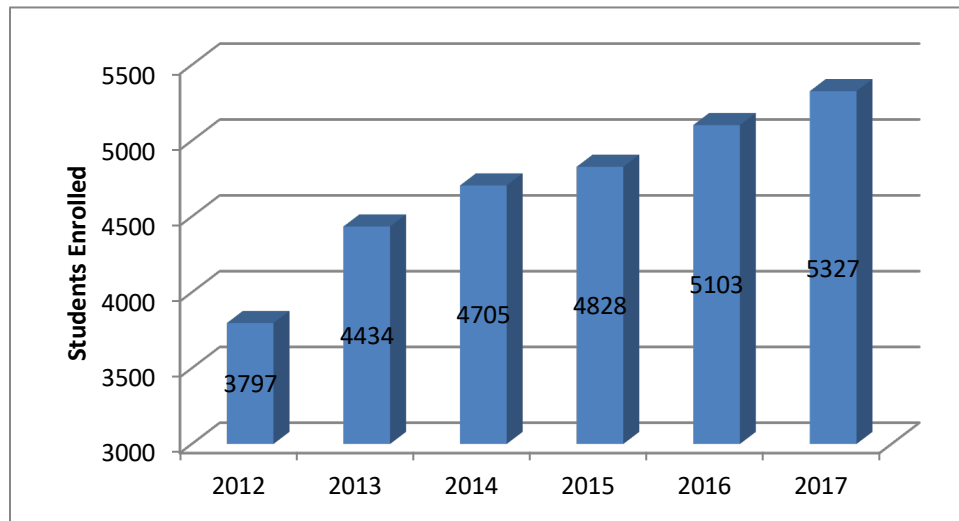
# **Department of Chemistry**

## Summary

As a part of the Ray P. Authement College of Sciences, the UL Lafayette Department of Chemistry consists of ten tenured/tenure-track faculty, four instructors, two adjunct faculty, and three staff members. As an ACS certified department, the Department (for the fall semester of 2017) has 73 chemistry majors enrolled in a Bachelor of Science (B.S.) program, as well as 67 pre-pharmacy majors. In addition, we offer minors in chemistry and forensics.

### Enrollments

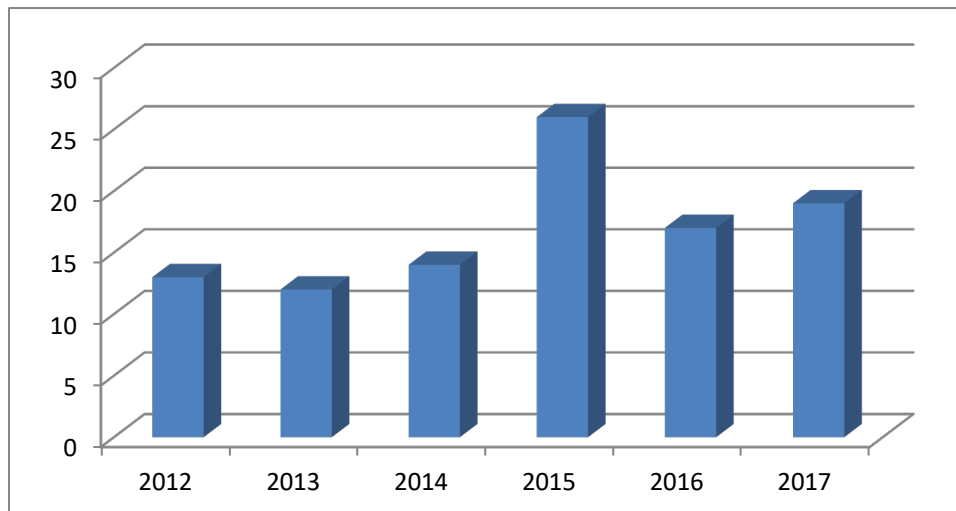
On average, we graduate 15-20 chemistry majors per year. Annual enrollments in departmental course offerings have increased dramatically, notably in the recent past, from 3,797 students in 2012 to 5,327 students in 2017, or a 40% increase over the past six years. This amounts to significant increases in faculty teaching loads, as course offerings are expanded to accommodate increasing demands.



Students enrolled in chemistry classes by calendar year, 2012 – 2017

### Peer-Reviewed Journal Publications

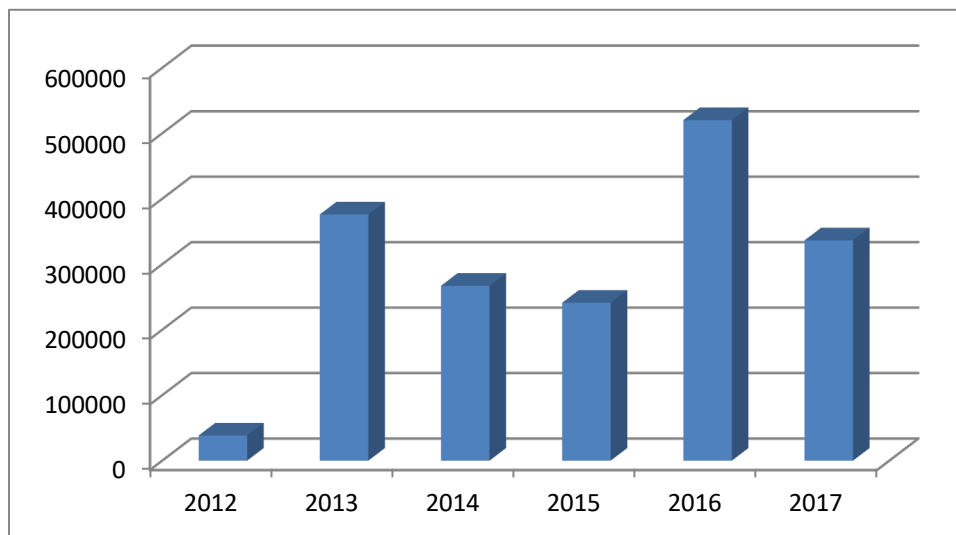
After one retirement, our faculty currently has ten research-active members (Junk, Gallo, Knierim, Louka, Massoud, Srivastava, Taylor, Wang, Xu, Yan). Between 2012 and 2017, the Department of Chemistry produced 95 peer-reviewed publications, most of which appeared in prestigious journals. This amounts to 1.58 publications per research active faculty per year over the past six years. It should be noted that, in the absence of a graduate program, virtually all research was accomplished with the active participation of undergraduate students.



**Peer-reviewed publications by calendar year, 2012 – 2017**

### External Funding

Between 2012 and 2017, members the faculty of the Department of Chemistry served as Principal Investigators (Project Directors) for \$1.77 M in external funding. Most were multi-year awards; the graph below reflects starting years. It is noteworthy that a significant percentage of successful proposals resulted from intra- and interdepartmental collaboration, reflecting team effort. In addition, significant funding was secured by faculty members co-authoring proposals with PI's external to the Department of Chemistry. For example, an award of \$1,010,901, co-authored by Dr. F. R. Louka in 2012, is noteworthy in this respect.



**Funding by calendar year, 2012 – 2017, reflecting starting dates of external awards by chemistry faculty acting as Lead-PI's**

## Presentations

Between 2013 and 2017, the faculty of the Department of Chemistry has given 80 presentations, or 1.27 presentations per research active faculty member per year. Many of these presentations were given to international audiences, 27 were by invitation.

## Noted Accomplishments

Three of our faculty (Louka, Xu, Massoud) have held, or are still holding, Distinguished Professorships. In addition, members of our faculty serve as editors of fifteen prestigious journals.

## Editorship

- **Y. Wang**, Editorial board member for the Journal of Bioanalysis & Biomedicine, 2017-pres.
- **F.R. Louka**, member of the Editorial Board, International Journal of Chromatography & Separation Techniques, 2017-pres.
- **F.R. Louka**, member of the Editorial Board Journal of Medicinal Chemistry and Drug Design (JMCDD), 2017- pres.
- **S.S. Massoud**, Invited as Guest Editor for “Crystals” (<http://www.mdpi.com/journal/crystals>) special issue “Advances in Antitumor by Coordination Compounds”, 2017
- **W. Xu**, Journal of Materials, 2016.
- **W. Xu**, Journal Editorial Board Computational Biology and Bioinformatics, 2015.
- **W. Xu**, Journal Editorial Board [Journal of Biological Medicine](#), 2015.
- **W. Xu**, Journal of Molecular and Translational Medicine, 2015.
- **S.S. Massoud**, Editor for an e-book series entitled "Material Science: Current and Future Developments" by Bentham Science Publishers, 2015.
- **S.S. Massoud**, Editorial Board of Magnetochemistry Journal, 2015.
- **S.S. Massoud**, Editorial Board of Journal of Advances in Chemistry, 2014.
- **S.S. Massoud**, Editorial Board of Journal of Modern Chemistry and Applications (JMCA), 2014.
- **S.S. Massoud**, Editorial Board of Dataset Papers in Materials Science, 2012- pres.
- **W. Xu**, Computational Biology and Bioinformatics (<http://www.sciencepublishinggroup.com/journal/news.aspx?journalid=112>), 2012-pres.
- **W. Xu**, Journal of Materials (<http://www.hindawi.com/journals/jmat/>), 2012-pres.
- **W. Xu**, Journal of Biological Medicine (<http://www.biomedbest.com/journals/editer.php?id=11>), 2012-present.
- **S.S. Massoud**, Member, Editorial Board, Dataset Papers in Materials Science, 2011-pres.
- **R.S. Srivastava**, Editor, Inorganic Journal of Chemistry, 2006 - pres.
- **R.S. Srivastava**, Editor, Electronic Journal of Chemistry, 2004 - pres.

## Publications, Presentations

### Journal Papers Published

2017

1. **S.S. Massoud**, R.C. Fischer, F.A. Mautner, S.D. Kettenmann, N.J. Kulak. Development of Efficient Artificial Nucleases for DNA Cleavage Based Pyridyl Tripod Cobalt(II) Complexes. *Biolog. Inorg. Chem.* 2017,**22**, S247-S247.
2. **F.R. Louka**, **S.S. Massoud**, T.K. Haq, M. Koikawa, M. Mikuriya, M. Omote, R.C. Fischer, F.A. Mautner. Synthesis, Structural Characterization and Magnetic Properties of One-dimensional Cu(II)-azido Coordination Polymers. *Polyhedron* **138**, 2017,177-184. DOI: 10.1016/j.poly.2017.09.004.
3. F.A. Mautner, M.Traber, R.C. Fischer, **S.S. Massoud**, R.Vicente. Synthesis, Crystal Structures, Spectral and Magnetic Properties of 1-D Polymeric Dicyanamido Metal(II) Complexes. *Polyhedron***138**, 2017, 13-20. DOI.org/10.1016/j.poly.2017.09.004
4. F.A. Mautner, C. Berger, R.C. Fischer, **S.S. Massoud**, R.Vicente. Synthesis, Structural Characterization and Magnetic Properties of Polymeric Azido Mn(II) Complexes Based on Methylpyridine-N-oxide Co-ligands. *Polyhedron* **134**, 2017,126-134. DOI.org/10.1016/j.poly.2017.06.025.
5. F.A. Mautner, C. Berger, C. Gspan, B. Sudy, R.C. Fischer, **S.S. Massoud**. Pyridyl and Triazole Ligands Directing the Assembling of Zinc(II) into Coordination Polymers with Different Dimensionality Through Azides. *Polyhedron* 130, 2017,136-144. DOI: 10.1016/j.poly.2017.04.012
6. **S.S. Massoud**, G.F. Williams, **F.R. Louka**, M.M. Henary, R. Herchel, Z. Trávníček, R.C. Fischer, F.A. Mautner. Croconato-bridged Copper(II) Complexes. Synthesis, Structure and Magnetic Characterization. *New J. Chem.* 41, 2017, 3846-3856. Doi: 10.1039/C6NJ03943J
7. F.A. Mautner, R.C. Fischer, L.G. Rashmawi, **F.R. Louka**, **S.S. Massoud**. Structural Characterization of Metal(II) Thiocyanato Complexes Derived from Bis(2-(1-H-pyrazol-1-yl)ethyl)amine. *Polyhedron*, 124, 2017,237-242. Doi: 10.1016/j.poly.2017.01.001.
8. G. Sanford, K. E. Walker, F. R. Fronczek and **T. Junk**. Novel organotellurium heterocycles derived from bis(2-Aminophenyl) ditelluride. *J. Heterocycl. Chem.* 54, 2017, 575–579. doi: 10.1002/jhet.2624.
9. Y. Liu, N. Tzeng, Y. C. Liu, **T. Junk**. Normal mode analysis of isotopic shifts in Raman spectrum of TNT-d5. *J. Mol. Struct.* 1143, 2017, 438-443.
10. H. Ge, L. Fang, X. Huang, J. Wang, W. Chen, Y.Liu, Y. Zhang, X. Wang, **W. Xu**, Q. He, and Y. Wang. Translating Divergent Environmental Stresses into a Common Proteome Response through Hik33 in a Model Cyanobacterium. *Molecular and Cellular Proteomics* 16(7), 2017,1258-1274
11. Y. Sun, J.-R. Chao, **W. Xu**, A. Pourpak, K. Boyd, S. Moshiah, A. Fu, H.-R. Shao, S. Pounds and S. Morris. MLF1 is a proapoptotic antagonist of HOP complex-mediated survival. *BBA-Molecular Cell Research* 1864(4), 2017,719-727.
12. L. Fang, H. Ge, X. Huang, Y. Liu, M. Lu, J. Wang, W. Chen, **W. Xu** and Y.Wang. Trophic Mode-Dependent Proteomic Analysis Reveals Functional Significance of

- Light-Independent Chlorophyll Synthesis in *Synechocystis* sp. PCC 6803. *Molecular Plant* 10, 2017, 73–85.
13. J. Gossett, **R.S. Srivastava**. Rhenium-catalyzed deoxydehydration of renewable biomass using sacrificial alcohol as reductant. *Tetrahedron Lett.* 58, 2017, 3760-3763. doi.org/10.1016/j.tetlet.2017.08.028
  14. J. Robertson and R.S. Srivastava. Mo-catalyzed deoxygenation of epoxides to alkenes. *Mol. Cat.* 438, 2017, 175, doi.org/10.1016/j.mcat.2017.03.020.
  15. K.M. Satbhai, **F.R. Louka**, P.L. Klerks. Individual and combined effects of petroleum hydrocarbons phenanthrene and dibenzothiophene on reproductive behavior in the amphipod *Hyaella Azteca*. *Journal Water, Air & Soil Pollution* 228, 2017, 91. DOI 10.1007/s11270-017-3276-x.
  16. **F.R. Louka**, S.Y. Osman, T. Terracina, N. Khamidullina. Assessing Ecofriendly Wastes in Removal of Pyrene as a Model of Oil Spills. *International Journal of Chromatography and Separation Techniques* 1, 2017, J102-106.
  17. X. Zhang, R. Zhao, **W. Wu**, C. Li, L. Shen, H. Ni, G. Yan, G. Diao, and M. Chen, Petal-like MoS<sub>2</sub> Nanosheets Space-Confined in Hollow Mesoporous Carbon Spheres for Enhanced Lithium Storage Performance. *ACS Nano*, 11 (8), 2017, 8429–8436.
  18. **E.R. Taylor**. Quarantine: Erring On the Side of Public Safety. *J. Homeland Sec. & Emerg. Management*, 14(1), 2017, DOI: 10.1515/jhsem-2016-0081, 6 pp., Article # 20160081.
  19. **Y. Wang**. Smart Polymeric Nanoparticles: Combining Targeted Delivery, Imaging and Therapy into One Nanomedicine Platform. *Journal of Bioanalysis & Biomedicine* 9, 2017, 269-271.

## 2016

1. F.A. Mautner, R.C. Fischer, D.H. Tran, A.R. Acevedo, **S.S. Massoud**. Metal(II) Complexes of Compartmental Polynuclear Schiff Bases Containing Phenolate and Alkoxy Groups. *Crystals* 6, 19 (2016) (invited). <http://www.mdpi.com/2073-4352/6/8/91/pdf>
2. **S.S. Massoud**, C.C. Ledet, **T. Junk**, S. Bosch, P. Comba, R. Herchel, J. Hošek, Z. Trávníček, R.C. Fischer, F.A. Mautner. Dinuclear Metal(II)-acetato Complexes Based on Bicompartamental 4-Chlorophenol: Synthesis, Structure, Magnetic Properties, DNA Interaction and Phosphodiester Hydrolysis. *Dalton Trans.* 45, 12933-12950 (2016) DOI: 10.1039/C6DT02596J
3. R. Herchel, Z. Dvořák, Z. Trávníček, M. Mikuriya, **F.R. Louka**, F.A. Mautner, **S.S. Massoud**. Cobalt(II) and Copper(II) Covalently and Non-covalently Dichlorido-bridged Complexes of an Unsymmetrical Tripodal pyrazolyl-pyridyl Amine Ligand: Structures, Magnetism and Cytotoxicity. *Inorg. Chim. Acta* 451 (2016), 102-110. <http://dx.doi.org/10.1016/j.ica.2016.06.030>
4. F.A. Mautner, C. Berger, E. Domian, R.C. Fischer, **S.S. Massoud**. “Synthesis and Characterization of Polymeric azido Zn(II) and Ni(II) Complexes Based on 3-Hydroxypyridine Co-ligand. *J. Mol. Struct.* 1122, 234-238 (2016).
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- Synthesis, Characterization and Luminescent Properties". *Inorg. Chim. Acta* **448**, 34-41 (2016). <http://dx.doi.org/10.1016/j.ica.2016.04.016>
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  9. F.A. Mautner, C. Berger, R.C. Fischer, **S.S. Massoud**. Synthesis, Characterization and Luminescence Properties of Zinc(II) and Cadmium(II) Pseudohalide Complexes Derived from Quinoline-N-oxide. *Inorg. Chim. Acta* **439**, 69-76 (2016).
  10. G. Sanford, K.E. Walker, F.R. Fronczek, **T. Junk**. Novel organotellurium heterocycles derived from bis(2-Aminophenyl) Ditelluride. *J. Heterocycl. Chem.* (2016), online: 25 APR 2016 | DOI: 10.1002/jhet.2624.
  11. **Y. Wang**, P. Kryszewski, K. Matyjaszewski, S. Harrisson. Radical Generation and Termination in SARA ATRP of Methyl Acrylate: Effect of Solvent, Ligand, and Chain Length. *Macromolecules* **49**, 2977-2984 (2016).
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  14. S. Murru, C.S. Lott, B. McGough, **R.S. Srivastava**. Fe-Catalyzed Synthesis of Substituted N-Aryl Oxazolidines and N-Aryl Amino Alcohols." *Organic & Biomolecular Chem.* **14**, 3681 (2016). DOI: 10.1039/C6OB00185H
  15. R. Hill, **W. Xu**, M. Yoshimura. Role of an Adonolyl Cyclase Isoform in Ethanol's Effect on cAMP Regulated Gene Expression in NIH 3T3 Cells. *Biochem. and Biophys. Rep.* **8**, 162-167 (2016).
  16. J.-Z. Liu, **W. Xu**, A. Christoserdov, R.K. Bajpaj. Glycerol Dehydratases: Biological Structures, Catalytic Mechanisms and Industrial Applications in 1,3-Propanediol Production by Naturally Occurring and Genetically Engineered Bacterial Strains. *Appl. Biochem Biotechnol.* **179**, 6, 1073-1100 (2016).
  17. A. Odoux, D. Jindal, T.C. Tamas, B.W.H. Lim, D. Pollard, **W. Xu**. Experimental and Molecular Dynamics Studies Showed the CBP KIX Mutation affects the Stability of CBP:c-Myb Complex. *Computational Biol. Chem.* **62**, 47-59 (2016).

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1. J.P. Myers, F.R. Fronczek and **T. Junk**. The first crystal structures of six- and seven-membered tellurium- and nitrogen-containing (Te-N) heterocycles: 2H-1,4-benzo-

- tellurazin-3(4H)-one and 2,3-dihydro-1,5-benzotellurazepin-4(5H)-one. *Acta Cryst*, **C72** (2015), 1-5.
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  3. **E.R. Taylor**. The Thermodynamics of Time Travel. *Univl. J. Chem.* **3(2)** (2015), 60-64.
  4. **E.R. Taylor**. Human Deep-Space Travel and Colonization–Technical Issues. *New Space* **3(3)** (2015), 154-164.
  5. **E.R. Taylor**. Communicable Disease and Homeland Security: An Assessment of the U.S. 2014 Ebola Incident. *J. Homeland Sec. & Emerg. Management*, **12(3)** (2015), 17 pp. DOI 10:1515/jhssem-2015-0044.
  6. F.A. Mautner, R.C. Fischer, M. Mikuriya, S. Tomohara, M.D. Deniger, **S.S. Massoud**. Structural Characterization of  $\mu_{1,2}$ - and  $\mu_{1,3}$ -bridged-squarato 1D Metal(II) Coordination Polymers *Polyhedron*, **102** (2015), 82-87.
  7. **S.S. Massoud**, **T. Junk**, R. Herchel, Z. Travnicek, M. Mikuriya, R.C. Fischer, F.A. Mautner. Structural Characterization of Ferromagnetic Bridged-Acetato and-Dichlorido Copper(II) Complexes Based on Bicompartamental 4-*t*-Butylphenol. *Inorg. Chem. Commun*, **60** (2015), 1-3.
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  9. **S.S. Massoud**, M. Spell, C. Ledet, **T. Junk**, R. Herchel, R.C. Fischer, Z. Travnicek, F.A. Mautner. Magnetic and Structural Properties of Dinuclear Singly Bridged-Phenoxido Metal(II) Complexes. *Dalton Transactions*, **44** (2015), 2110-2121.
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  11. F.A. Mautner, M. Mikuriya, Y. Naka, **F.R. Louka**, **S. S. Massoud**. Bonding  $\mu_{1,3}$ - (*trans*) vs  $\mu_{1,2}$ - (*cis*) in Squarato-bridging Dinuclear Copper(II) Complexes Derived from Pyridyl Amine Ligands. *Polyhedron*, **85** (2015), 110-116.
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  13. F.A. Mautner, M. Scherzer, C. Berger, R.C. Fischer, R. Vicente, **S. S. Massoud**. Synthesis and Characterization of Five New Thiocyanato- and Cyanato-metal(II) Complexes with 4-Azidopyridine as Co-ligand. *Polyhedron*, **85** (2015), 20-26.
  14. S. Murru, C.S. Lott, F.R. Fronczek, **R.S. Srivastava**. Fe-Catalyzed Direct  $\alpha$  C-H Amination of Carbonyl Compounds. *Org. Lett.*, **17** (2015), 2122-2125.
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  16. H.R. Rizvi, M.J. Khattak, **A.A. Gallo**. Rheological and mechanistic characteristics of Bone Glue modified asphalt binders. *Construction and Building Materials*, **88** (2015) 64-73.



17. **H. Yan**, M. Cummings, F. Camino, **W. Xu**, M. Lu, X. Tong, N. Shirato, D. Rosenmann, V. Rose, E. Nazaretski. Fabrication and Characterization of CNT-based Smart Tips for Synchrotron Assisted STM. *Journal of Nanomaterials*, (2015), Article ID 492657.
18. Y. Sun, A. Fu, **W. Xu**, J.-R. Chao, S. Moshiah, S.W. Morris. Myeloid Leukemia Factor 1 interfered with Bcl-X<sub>L</sub> to promote apoptosis and its function was regulated by 14-3-3. *Journal of Physiology and Biochemistry*, **71** (2015), 807-821.
19. Y. Wei, **W. Xu**. Application of Traditional Chinese Medicine in Cancer Treatment. *Jacobs Journal of Molecular and Translational Medicine*, (2015), 1(1):006.
20. X.-J. Xie, F.-N. Hsu, X. Gao, **W. Xu**, J.-Q. Ni, Y. Xing, L. Huang, H.-C. Hsiao, H. Zheng, C. Wang, Y. Zheng, A.M. Xiaoli, F. Yang, S.E. Bondos, J.-Y. Ji. CDK8-Cyclin C. Mediates Nutritional Regulation of Developmental Transitions through the Ecdysone Receptor in *Drosophila*. *PLOS Biology*, **13**(7) (2015), e1002207.
21. L. Gao, H. Ge, X. Huang, K. Liu, Y. Zhang, **W. Xu**, Y. Wang. <http://www.sciencedirect.com/science/article/pii/S092547731400032X> - af005. Systematically Ranking the Tightness of Membrane Association for Peripheral Membrane Proteins. *Molecular and Cellular Proteomics*, **14** (2015), 340-353.
22. F.A. Mautner, M. Mikuriya, N. Naka, **F.R. Louka**, **S.S. Massoud**. Bonding  $\mu_{1,3}$ - (trans) vs.  $\mu_{1,2}$ - (cis) in squarato-bridging dinuclear copper(II) complexes derived from pyridyl amine ligands. *Polyhedron*, **85** (2015), 110–116. <http://dx.doi:10.1016/j.poly.2014.08.040>.
23. **S.S. Massoud**, **F. R. Louka**, R. N. David, M.J. Dartez, Q.L. Nguyn, N.J. Labry, R.C. Fischer, F.A. Mautner. Five-coordinate metal(II) complexes based pyrazolyl ligands. *Polyhedron*, **90** (2015), 258–265.
24. **S.S. Massoud**, **F.R. Louka**, M.A. Abu-Elhassan, R. Vicente, F.A. Mautner. Magneto-structural properties of carbonato-bridged copper(II) complexes. Fixation of atmospheric CO<sub>2</sub>. *New J. Chem.* **39** (2015), 5944-5952.
25. **S.S. Massoud**, **F.R. Louka**, F.A. Mautner. Polynuclear and Polymeric Squarato-Bridged Coordination Compounds. *Cryst. Eng. Comm*, **17** (2015), 7604-7617.
26. **S.S. Massoud**, **T. Junk**, **F.R. Louka**, R. Herchel, Z. Travnick, R. Fischer, F.A. Mautner. Synthesis, structure and magnetic characterization of dinuclear copper(II) complexes bridged by bicompartmental phenolate. *RSC Adv*, **5** (2015), 87139-87150.

## 2014

27. **F.R. Louka**, **S.S. Massoud**, **R. Perkins**, **W. Xu**, A.L. Roux, Q. Dutercq, R.C. Fischer, F.A. Mautner, H. Handa, Y. Hiraoka, G.L. Kreft, T. Bortolotto, H. Terenzi. Efficient hydrolytic cleavage of plasmid DNA by chloro-cobalt(II) complexes based on sterically hindered pyridyl tripod tetraamine ligands: Synthesis, crystal structure and DNA cleavage. *Dalton Transactions*, **43** (2014) 10086-10103.
28. **S.S. Massoud**, **T. Junk**, M. Mikuriya, N. Naka, F.A. Mautner. Synthesis, Structure and Magnetic Characterization of Dinuclear Copper(II) Complexes of 2,6-bis[bis(pyridine-2-ylmethyl)aminomethyl]-4-methylpyridine. *Inorg. Chem. Commun.*, **50** (2014), 48-50.
29. **S.S. Massoud**, M. Spell, Z.K. Haq, F.A. Mautner. *fac*-Cobalt(III)-azido Complexes Derived from Substituted Pyridyl Based Tridentate Amines. *Transition Metal Chem.*, **39** (2014), 585-591.

30. **S.S. Massoud, R.S. Perkins, F.R. Louka, W. Xu, W.;** A. Le Roux, Q. Dutercq, C. Roland, R.C. Fischer, F.A. Mautner, M. Handa, Y. Hiraoka, G.L. Kreft, T. Bortolotto, H. Terenzi. Efficient Hydrolytic Cleavage of Plasmid DNA by Chloro-cobalt(II) Complexes Based on Sterically Hindered Pyridyl Tripod Tetraamine Ligands: Synthesis, Crystal Structure and DNA Cleavage Activity. *Dalton Trans.*, **43** (2014), 10086-10103.
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40. L. Gao, C. Shen, L. Liao, X. Huang, K. Liu, W. Wang, L. Guo, W. Jin, F. Huang, **W. Xu,** Y. Wang. Functional proteomic discovery of Slr0110 as a central regulator of carbohydrate metabolism in *Synechocystis* sp. PCC 6803. *Molecular and Cellular Proteomics*, **13** (2014), 204-219.
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42. **S.S. Massoud, E. Taylor,** Y. Liu, J. Grebowicz, R. Vicente, R. Lalancette, U. Mukhopadhyay, I. Bernal, S.F. Watkins. Synthesis, Structure, Thermal, Magnetic Properties and Quantum Mechanical Calculations of Bridged [Bis(di(2-pyridylmethyl)amine)-(μ<sub>2</sub>-1,2-bis(4-pyridyl)ethane)-tetraperchlorato-dicopper(II)]

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## 2013

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53. **S.S. Massoud**, A.E. Guilbeau, H.T. Luong, R. Vicente, J.H. Albering, R.C. Fischer, F.A. Mautner. Mononuclear, Dinuclear and Polymeric 1-D Thiocyanato- And Dicyanamido-Copper(Ii) Complexes Based On Tridentate Coligands. *Polyhedron*, **54** (2013), 26-33.
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## 2012

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56. C. Nune, **W. Xu**, R.D.K. Misra. The Impact of Grafted Modification of Silicone Surfaces With Quantum-Sized Materials on Protein Adsorption and Bacterial Adhesion. *J Biomed Mater Res Part A*, **100a** (2012), 3197–3204.
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58. S. Murru, **A.A. Gallo**, **R.S. Srivastava**. Direct Synthesis of Beta-Alkyl N-Aryl Aza Baylis- Hillman Adducts Via Nitroso-Ene Reaction. *Journal of Organic Chemistry*, **77(16)** (2012), 7119-7123.
59. **S.S. Massoud**, R. Vicente, P.R. Fontenot, **A.A. Gallo**, M. Mikuriya, J. H. Albering, F.A. Mautner. Polynuclear Croconato-Bridged- Copper (Ii) Complexes Derived from Tri- And Tetra-Dentate Amines. *Polyhedron*, **46** (2012), 66-73.
60. **F.R. Louka**; A.D. Stewart, E. Regel, F.A. Mautner; S. Demeshko, F. Meyer, **S.S. Massoud**. Squarato-Metal(Ii) Complexes: Part 5. Polynuclear Copper(Ii) Complexes Bridged By Squarate And Croconate Dianions, *Inorg. Chem. Commun.*, **22** (2012), 60-64.
61. **S.S. Massoud**, M.C. Lemieux, L.L. Le Quan, R. Vicente, J.H. Albering, F.A. Mautner. Dicyanamido-Metal(Ii) Complexes. Part 6: 1-D Polymeric Copper(Ii) Complexes Bridging by Dicyanamide. Effect of Copper(Ii) Salt on the Nature of the Polymeric Product.” *Inorg. Chim. Acta*, **388** (2012), 71-77.
62. **F.R. Louka**, L.T. Nguyen, J.H. Albering, F.A. Mautner; **S.S. Massoud**, Unprecedented Formation of a Doubly Bridged M-Peroxo-M-Pyrazolyldicarboxylato-Dicobalt(Iii) Complex. *Inorg. Chem. Commun.*, **15** (2012), 269-271.
63. **S.S. Massoud**, L. Le Quan, K. Gatterer, J.H. Albering, R.C. Fischer, F.A. Mautner. Structural Characterization of Five-Coordinate Copper(Ii), Nickel(Ii), and Cobalt(Ii) Thiocyanato Complexes Derived From Bis(2-(3,5-Dimethyl-1-Pyrazolyl)Ethyl)Amine. *Polyhedron*, **31** (2012), 601-606.
64. S.N. Shukla, P. Gaur, R. Mehrotra, **R.S. Srivastava**. Experiences During Synthesis of a Dinucleating Spacer Incorporating 2-Chloropyridine Units Through Sandmayer Reaction. *E-Journal Of Chemistry*, 9(2), (2012), 593-597.
65. S. Murru, K.M. Nicholas, **R.S. Srivastava**. Ruthenium (Ii) Sulfoxide-Catalyzed Hydrogenolysis of Glycols and Epoxides. *J. Mol. Catalysis A*, (2012), 460-464.
66. S. Stanowski, K.M. Nicholas, **R.S. Srivastava**. [Cp\*Ru(Co)<sub>2</sub>]<sub>2</sub>-Catalyzed Hydrodeoxygenation and Hydrocracking of Diols And Epoxides. *Organometallics*, 31 (2012), 515-518.
67. R.P. Mason, R.F. Jacob, R. Kubant, R. Jacoby, **F.R. Louka**, J. Corbalan, T. Malinski. Effects of Angiotensin Receptor Blockers On Endothelial Nitric Oxide Release -The Role of Enos Variants. *Br. J. Clin. Pharmacol*, (2012), Doi: 10.1111/J.1365-2125.2012.04189
68. **W. Xu**, L. Xue, Y. Sun, A. Henry, J.M. Battle, M. Micault, and S.W. Morris. Bcl10 Is an Essential Regulator for *A20* Gene Expression. *Journal of Physiology and Biochemistry*, **69** (2013) 821-834.

## Book Chapters

69. **T. Junk**, Book Chapter “Recent Advances in the Preparation and Characterization of Te, N-Containing Heterocycles”, in “Tellurium: Properties, Uses and Research”, Ed. D. Grey, Nova Science Publishers, ISBN 978-1-53610-555-1, pp. 107-136, 2016.
70. **W. Xu** and **Y. Wang**. Chapter Title: Function and Structure of Cyanobacterial Photosystem I. Book Series: Advances in Photosynthesis and Respiration. Book Title: Photosynthesis: Structures, Mechanisms, and Applications. Editors: Mohammad Mahdi Najafpour, Gary F. Moore, Harvey J.M. Hou, Suleyman I. Allakhverdiev. Publisher: Springer International Publishing, Hardcover ISBN: 978-3-319-48871-4, eBook ISBN: 978-3-319-48873-8, DOI: 10.1007/978-3-319-48873-8, 2017.
71. **W. Xu** and **Y. Wang**, Chapter: Structure and Function of Cyanobacterial Photosystem in Photosynthesis: Structures, Mechanisms, and Applications, Series: Advances in Photosynthesis and Respiration. Eds., M.M. Najafpour, G.F. Moore, H.J.M. Hou, S.I. Allakhverdiev. Springer, 2015.

## Conference Papers Published

72. **F.R. Louka T. Junk** and **S.S. Massoud**. DNA Cleavage by Bicompartmental Dinuclear Metal(II) Complexes. *J. Biol. Inorg. Chem.* 22 (Suppl.): S1-S278, **2017**.
73. **S.S. Massoud**, Recent Developments of the Fixation of Atmospheric CO<sub>2</sub> by Transition Metals and Lanthanide Complexes. Invited plenary lecture. *The 2<sup>nd</sup> International Conference on Past and Present Research Systems of Green Chemistry, Orlando, FL USA*, September 14-16 (2015).
74. **S.S. Massoud, F.R. Louka, R. Perkins**, F.A. Mautner, H. Terenzi. Cobalt(II) Complexes as Efficient Artificial Nucleases for Hydrolytic Cleavage of DNA. *249<sup>th</sup> ACS Nat. Meeting, Denver, CO*, March 22-26, INOR 807 (2015).
75. **F.R. Louka**, F.A. Mautner, **S.S. Massoud**. Carbonato-bridged Copper(II) Complexes formed via Fixation of Atmospheric CO<sub>2</sub>. *249<sup>th</sup> ACS Nat. Meeting, Denver, CO*, March 22-26, INOR 230 (2015).
76. A. Jefferson, **R.S. Srivastava**. Re-catalyzed deoxydehydration of diols to olefins using hydroaromatic as reducing agent. The 6<sup>th</sup> Joint Great Lakes/Central Regional Meeting of the American Chemical Society. Grand Rapids, MI, May 27-30, Paper ID:51 (2015).
77. S. Murru, **R.S. Srivastava**. Synthesis of Organo Nitrogen Compounds and N-Heterocycles via Allylic C-H Amination. ID 2125317, 249<sup>th</sup> ACS National Meeting, 22-26<sup>th</sup> March, Denver, CO (2015).
78. S. Murru, C. S. Lott, B. McGough, **R.S. Srivastava**. Fe-Catalyzed Synthesis of 3-Aryl-4-Propenyl Oxazolidines and N-Aryl Aminoalcohols” (2015). ACS Joint Southeastern/Southwest Regional Meeting, Paper # 305; Nov 4 -7, Memphis, TN (2015).
79. E. Nazaretski, **H. Yan**, K. Lauer, X. Huang, W. Xu, S. Kalbfleisch, H. Yan, L. Li, N. Bouet, J. Zhou, D. Shu, R. Conley, and Y. S. Chu. Nm-scale spatial resolution x-ray imaging with MLL nanofocusing optics: Instrumentational requirements and

- challenges. 23rd International Congress on X-ray Optics and Microanalysis (ICXOM23 conference), NY (2015).
80. Kascak, P.L. Klerks, **F.R. Louka**, K.M. Satbhai, A. Graziano, S. Osman. The interaction between benthic bioturbators and microbes on the fate of hydrocarbons in sediment – 1, sediment characteristics and PAH levels. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Houston, TX, Feb. 2 (2015).
  81. P. Morandi, S. Osman, P.L. Klerks, **F.R. Louka**. Investigating the effect of bioturbators vs. ecofriendly adsorbents on pyrene concentrations. Society of Environmental Toxicology and Chemistry (SETAC) South Central Regional Annual Meeting Lafayette, LA, May 28 – 30 (2015).
  82. **F.R. Louka**, S. Osman, P. Morandi, P.L. Klerks. Comparing the effect of ecofriendly adsorbents and bioturbators on the concentration pyrene. International Conference of Green Chemistry, Orlando, FL, September 14 – 16 (2015).
  83. H.R. Rizvi, M.J. Khattak, **A.A. Gallo**. Bone Glue modified asphalt: A step toward energy conservation and environment friendly modified asphalt. Hindawi Pub Corp. Volume 2014, Article ID 807043, 5 pages: <http://dx.doi.org/10.1155/2014/807043>
  84. S. Murru, **R.S. Srivastava**, Copper-Catalyzed Asymmetric Allylic Amination: A Novel Method for Chiral N-Aryl Allyl Amines, Abstracts of Papers, 244th ACS National Meeting & Exposition. Philadelphia, Pa, United States, August 19-23, (2012), Inor-336.

### Colloquia and Seminar Talks

1. H.Yan, “Research activities in Yan’s energy and environment Surface Lab (YeeS Lab)”, 2017 Faculty Retreat-IMRI, Lafayette, LA, October 26, 2017 (Invited talk).
2. **F.R. Louka**. Comparing the effect of ecofriendly adsorbents and bioturbators on the concentration pyrene. Invited talk by the International Conference of Green Chemistry, Orlando, FL. September 14 – 16 (2015).
3. **W. Xu**. Invited talk on undergraduate student research. LS-LAMP/UBMS Program. University of Louisiana at Lafayette, February, 27 (2014)
4. **E.R. Taylor**. How not to Burn Brownies. Smart Festival (UL Lafayette Sponsored), Lafayette, La, October 25 (2013).
5. **A.A. Gallo**. Biodiesel Synthesis from Alligator Fat. Beifang University of Nationalities, Yinchuan China, June (2013).
6. **S.S. Massoud**. Development of Efficient Artificial Nucleases for Dna Cleavage. Mononuclear Cobalt(Ii) Complexes Based Pyridyl Tripod Amines. Kumamoto University, Kumamoto-Japan, October 14 (2013).
7. **S.S. Massoud**. Metal-Ion Binding Properties In Nucleoside Monophosphates and Their Constituents. Shimane University, Matsue-Japan, October 16 (2013).
8. **S.S. Massoud**. Metal-Ion Binding Properties in Nucleoside Monophosphates and Their Constituents. Okayama University of Science Okayama-Japan, October 17 (2013).
9. **S.S. Massoud**. Metal-Ion Binding Properties in Nucleoside Monophosphates and Their Constituents. Kwansei Gakuen University, Sanda-Japan, October 18 (2013).
10. **S.S. Massoud**. DNA Cleavage by Cobalt(Ii) And Copper(Ii) Complexes Derived From Pyridyl Based Ligands. Factors Affecting Dna Cleavage. Kwansei Gakuen University, Sanda-Japan, October 8 (2012).

11. **S.S. Massoud.** DNA Cleavage by Cobalt(I) and Copper(I) Complexes Derived From Pyridyl Based Ligands. Factors Affecting Dna Cleavage. Okayama University of Science, Okayama-Japan, October 11 (2012).
12. **S.S. Massoud.** DNA Cleavage by Cobalt(I) and Copper(I) Complexes Derived From Pyridyl Based Ligands. Factors Affecting Dna Cleavage, Shimane University, Matsue-Japan, October 13 (2012).

### Invited Conference and Workshop Talks

1. **S.S. Massoud.** Development of Efficient Artificial Nucleases for DNA Cleavage by Metal(II) Complexes Invited Speaker at Alexandria University, Alexandria-Egypt, September 23-27 (2017).
2. **S.S. Massoud.** Development of Efficient Artificial Nucleases for DNA Cleavage Based on Pyridyl Tripod Cobalt(II) Complexes Invited Speaker at the 18th International Conference on Biological Inorganic Chemistry, ICBIC-18, Florianopolis – Brazil, July 31-August 5 (2017).
3. **Y. Wang,** Controlled polymer synthesis towards higher level of perfection, invited by Prof. John Pojman, department of chemistry, Louisiana State University, USA, 2017.
4. **S.S. Masoud.** Development of Efficient Artificial Nucleases for DNA Cleavage by Metal(II) Complexes Invited Speaker at Louisiana State University, Baton Rouge, February (2017).
5. **F.R. Louka,** T. Malinski. Assessing nano-sensors in determination of the degree of endothelial dysfunction and lifespan of the cardiovascular system. World Congress and Expo on Nanotechnology and Nanoengineering, Dubai, UAE, March 25-29, 2017 (Invited speaker, Chair of a session).
6. **H. Yan,** “STEM-my journey, my research, and you?” LS-LAMP, Lafayette, LA, October 26, 2017 (Invited talk).
7. **H. Yan,** “Research activities in Yan’s energy and environment Surface Lab (YeeS Lab)”, 2017 Faculty Retreat-IMRI, Lafayette, LA, October 26, 2017 (Invited talk)
8. **W. Xu.** Function and Structure of CBP and NCOA. Beifang University of Nationality, Yinchuan, China, June 23 (2016).
9. **R.S. Srivastava.** Metal-catalyzed asymmetric allylic amination. Keynote speaker. International Conference on Industrial Chemistry, New Orleans, LA, June 27-28 (2016).
10. **R.S. Srivastava.** Metal-catalyzed asymmetric C-H amination of alkenes. 27th International Conference on Organometallic Chemistry (ICOMC), Melbourne, Australia, July 17-22 (2016).
11. **S.S. Massoud,** Keynote lecturer at the International Conference of Polymer Chemistry, Atlanta, GA, USA, November 14-16 (2016).
12. **S.S. Massoud.** Artificial nucleases for efficient DNA cleavage by mono- and di-nuclear metal(II) complexes. The 6th International Conference on Nuclei Acid-Protein Chemical and Structural Biology for Novel Drug Discovery, Chingdu-China, p 44-45, May 26-28 (2016).
13. **S.S. Massoud.** Recent Developments of the Fixation of Atmospheric CO<sub>2</sub> by Transition Metals and Lanthanide Complexes. *2<sup>nd</sup> International Conference on Past and Present Research Systems of Green Chemistry.* Orlando, FL USA, September 14-16, 2015.

14. **W. Xu.** Invited talk: Function and Structure of c-Myb and CBP. Ningxia Medical School, Yinchuan, China July 1 (2015).
15. **W. Xu.** Invited talk: Function and Structure of Cyanobacterial Photosystem I Complex. Beifang University of Nationality, Yinchuan, China, June 28-July 3 (2015).
16. **W. Xu.** Poster Presentation: Proteins from Fundamentals to Function. Gordon Research Conferences. Holderness, NH, June 14-19 (2015).
17. **S.S. Massoud, F.R. Louka,** F.A. Mautner, Y. Naka, M. Mikuriya. Squarato-Bridging Copper(II) Complexes Derived from Polypyridyl Amine Ligands. 2014 Symposium on Coordination Compounds as Molecular Magnetic Materials. Kwansei Gakuin University – School of Science and Technology, Sanda, Japan, October 11, p-19 (2014).
18. M. Mikuriyaa, Y. Naka, **T. Junk, S.S. Massoud,** F.A. Mautner. Dinuclear Copper(II) Complexes of 2,6-Bis[bis(pyridine-2-ylmethyl)aminomethyl]-4-methylphenol. 2014 Symposium on Coordination Compounds as Molecular Magnetic Materials, Kwansei Gakuin University – School of Science and Technology, Sanda, Japan, October 11, p-42 (2014).
19. **S. S. Massoud.** *Kumamoto Seminar on Complex-based Supramolecule. Kumamoto University – Graduate School of Science and Technology, Kumamoto, Japan, (invited).* Development of Efficient Artificial Nucleases for DNA Cleavage. Mononuclear Cobalt(II) Complexes Based Pyridyl Tripod Amines. October 9, p-20 (2013).
20. **W. Xu.** Bioinformatics and Computational Biochemistry, Bioinformatics and Genetic Evolution. Beifang University of Nationality, Yinchuan, China, May 30-31 (2012).
21. **W. Xu.** Biochemical function and structure of B-cell Leukemia/Lymphoma 10 (Bcl10). Conference: 86th Annual Meeting of Louisiana Academy of Sciences. Louisiana State University at Alexandria, Louisiana, March 3 (2012).
22. **W. Xu.** Effect of Adenylyl Cyclase Isoform Specificity on CREB Activation by Ethanol Stimulation. Louisiana Biomedical Research Network 10th Annual Meeting, Baton Rouge, Louisiana, January 27-29 (2012).
23. **W. Xu.** Development of algorithm for 3-D structural comparison with case study of protein kinases. Industry Advisory Board Meeting, NSF Center for Visual & Decision Informatics, The Hub CityView. Philadelphia, PA 19103, November 13-15 (2012).
24. **W. Xu.** Biochemistry research and education. Beifang University of Nationality, Yinchuan, China, June 3-8 (2013).
25. **S.S. Massoud,** F.A. Mautner. *2013 Symposium on Coordination Compounds as Molecular Magnetic Materials. Kwansei Gakuin University – School of Science and Technology, Sanda, Japan, (invited).* 1D and 2D Cadmium Polymers with Alternative Bridged Azido Bonding Modes, October 20, p-20 (2013).
26. **W. Xu.** Biochemistry research and education. Beifang University of Nationality, Yinchuan, China, June 3-8 (2013).
27. **S.S. Massoud.** R. Vicente, F.A. Mautner. *2012 Symposium on Coordination Compounds as Molecular Magnetic Materials. Kwansei Gakuin University – School of Science and Technology, Sanda, Japan, (invited lecture).* Azido-Metal(II) Complexes, Diverse Coordination of Bis(2-(3,5-dimethylpyrazolyl)-ethyl)amine with Divalent Metal Ions. October 6, p-18 (2012).



## Contributed Presentations

### 2017

1. K.E. Walker, N.L. Silar, F.R. Froczek and **T. Junk** (presenter). Synthesis of Organotellurium Precursors for Supramolecular Frameworks. 90<sup>th</sup> meeting of the Louisiana Academy of Sciences, Ruston, LA, March 11 (2017).
2. **F.R. Louka** (presenter), **T. Junk** and **S.S. Massoud**. DNA Cleavage by Bicompartamental Dinuclear Metal(II) Complexes”, International Conference on Biological Inorganic Chemistry, Florianópolis, Brazil, July 31 – Aug. 5 (2017).
3. K.E. Walker, N.L. Silar, F.R. Froczek and **T. Junk** (presenter). Advances in the Synthesis of Organotellurium Heterocycles: Towards Novel Supramolecular Frameworks. 73<sup>rd</sup> Annual Southwest Regional Meeting of the American Chemical Society, Lubbock, TX, October 29 – November 1 (2017).
4. **R.S. Srivastava**. Transition metal-catalyzed C-H amination of alkenes. 18th Tetrahedron Symposium, Budapest, Hungary, June 26-30 (2017).
5. **F.R. Louka**, T. Malinski. Endothelial Cells Dysfunction and Cardiovascular System Life Span. International Conference on Chemistry Progress for Sustainable Development (ICCPD 2017), Alexandria, Egypt, September 23-27, and Swedish Institute, Alexandria, Egypt (2017).
6. **H. Yan**, Gordon Research Conference-Nanoporous materials and their applications, Proctor Academy, Andover, NH, August 2017.
7. N. Barbier, J. LaCoste, **H. Yan**, “Spectroscopic studies on CTAB-lysozyme-Vitamin C”, 253<sup>th</sup> American Chemical Society National meeting, San Francisco, CA, April 2017

### 2016

1. S. Murru, **R.S. Srivastava**. Pd-catalyzed synthesis of 2-acylindolines via intramolecular Heck-coupling and C-H oxidation. ACS Southwest Regional Meeting (SWRM) Galveston, TX, November 10-13 (2016).
2. A. Odoux, D. Jindal, T.C. Tamas, B.W.H. Lim, D. Pollard, **W. Xu**. Experimental and molecular dynamics studies showed the CBP KIX mutation affects the stability of CBP:c-Myb complex. 90<sup>th</sup> Annual Meeting of Louisiana Academy Alexandria, LA, April 23 (2016).
3. L. Luo, A. Chistoserdov, S. Savikhin, J.H. Golbeck, **W. Xu**. A hydrogen bond to the A0 chlorophyll a molecule of Photosystem I influences the spectral properties of A0. South Central Branch American Society of Microbiology 2016 Annual Conference, Lafayette, La, October 28-29 (2016).
4. **A.A. Gallo**, J. Davis. Selective reduction of carbonyl and nitro groups by fruits and vegetables. The 89<sup>th</sup> meeting of the Louisiana Academy of Sciences, Alexandria, LA, April 23 (2016).
5. K. Martin, **A.A. Gallo**, **T. Junk**. Development of a Supercritical Flow Reactor and its Application for Biodiesel Preparation. The 89<sup>th</sup> meeting of the Louisiana Academy of Sciences, Alexandria, LA, April 23 (2016).

6. **A.A. Gallo, T. Junk.** Biodiesel from alligator fat using supercritical methanol via laboratory scale flow reactor. International Conference on Industrial Chemistry, New Orleans, LA, June 27-28 (2016).
7. P.L. Klerks, S. Osman, M. E. Hoag, F. Fazal-Ur-Rehman, A. Kascak, **F.R. Louka.** Sediment Bioturbation Affects the Fate of Pyrene in Laboratory Mesocosms. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Tampa, FL, Feb. 2 (2016).
8. **F.R. Louka,** S. Osman, A.M. Cazan, P. Morandi, M. Hoag, P.L. Klerks. Investigating pyrene levels in water and sediment samples in presence of bioturbators. 251<sup>th</sup> American Chemical Society National Meeting, San Diego, CA, March 13-17 (2016).
9. **F.R. Louka,** S. Osman, A. Shaik, T. Carme. Investigating the efficiency of economical adsorbents in removal of polycyclic aromatic hydrocarbons. International Conference of Green Chemistry, Las Vegas, Nevada, September 19-21 (2016).
10. **F.R. Louka,** A. Shaik, T. Terracina, N. Khamidullina. Effective Ecofriendly Adsorbents For Removal of Individual Polycyclic Aromatic Hydrocarbons. Honors meeting, Lafayette, Louisiana, November 18 (2016).
11. P.L. Klerks, A. Cazan, A. Kascak, A. Shaik, N. Adhikary, A. Chistoserdov, **F.R. Louka.** Effects of razor clams and ghost shrimp on the distribution and fate of hydrocarbons in nearshore environments. Society of Environmental Toxicology and Chemistry (SETAC) World Congress / SETAC North America 37th Annual Meeting, Orlando, FL, Nov 6-10, (2016).

## 2015

12. F.R. Fronczek, Y. Liu, **T. Junk.** Tellurium-containing heterocycles: Tellurazoles, tellurazinones, tellurazepinones. 88<sup>th</sup> Meeting of the Louisiana Academy of Sciences, Thibodeaux, LA, Mar 14 (2015).
13. G. Sanford, K.E. Walker, F.R. Fronczek, **T. Junk.** Organotellurium Chemistry: Synthesis and Characterization of Te, N-Containing Heterocycles. 71<sup>st</sup> Southwest Regional Meeting of the American Chemical Society, Memphis, TN, Nov.4-7 (2015).
14. P.L. Klerks, A.M. Cazan, A. Kascak, S. Osman, Y.M. Hoag, P. Morandi, **F. R. Louka.** The interplay between biota and pollutants: Ghost shrimp affect environmental conditions and aromatic hydrocarbon distribution in laboratory mesocosms Society of Environmental Toxicology and Chemistry (SETAC) Meeting. Salt Lake City, UT, Nov 1-5 (2015).
15. **F.R. Louka,** F. A. Mautner, **S. S. Massoud.** Carbonato-bridged copper(II) complexes formed via fixation of atmospheric CO<sub>2</sub>. 249<sup>th</sup> American Chemical Society National Meeting, Denver, CO, March 22-26, (2015).

## 2014

16. C. Dupont, P. Spiller, R. Bajpai, **A.A. Gallo, T. Junk.** Biodiesel from alligator fat. A comparison between supercritical and conventional transesterification conditions. ENFL paper # 289. 247<sup>th</sup> ACS National Meeting, Dallas, TX, March 16-20 (2014).
17. P. Spiller, **T. Junk, A.A. Gallo.** Biodiesel from alligator fat. Louisiana Academy of Sciences, Alexandria, LA, March 12 (2014).
18. **F.R. Louka,** P.L. Klerks, N. Deb Adhikary, A. Kascak, D.L. Felder, A. Oguma, G. Ducharme, A. Chistoserdov. The interaction between sediment bioturbators and sediment microbes on the distribution and degradation of oil in sediment. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, Jan. 26-30 (2014).

19. **F.R. Louka**, K.M. Satbhai, P.L. Klerks, P. L. Effects of petroleum hydrocarbons and their interactions on mate guarding behavior in the amphipod *Hyaella Azteca* South Central Society of Environmental Toxicology and Chemistry (SC-SETAC). San Marcos, TX, May 30 - June 1 (2014).
20. **F.R. Louka**, A. Chistoserdov, N. Deb Adhikary, A. Kascak, K.M. Satbhai, C. Louviere, P.L. Klerks. Effect of bioturbators on the degradation and distribution of polycyclic aromatic hydrocarbons in sediment. 248th American Chemical Society National Meeting. San Francisco, CA. August 10-14, (2014).
21. **F.R. Louka**, **S.S. Massoud**, F.A. Mautner, Y. Naka, M. Mikuriya. Squarato-Bridging Copper(II) Complexes Derived from Polypyridyl Amine Ligands Symposium on Coordination Compounds as Molecular Magnetic Materials. Kwansai Gakuin University – School of Science and Technology, Sanda, Japan, October 11, (2014).
22. **F.R. Louka**, A. Kascak, N. Deb Adhikary, A. Chistoserdov, P.L. Klerks. The effect of bioturbation by the Ghost shrimp *Lepidophthalmus louisianensis* on hydrocarbon degradation and distribution. SETAC North America 35th Annual Meeting, Vancouver, Canada. November 9-13 (2014).
23. **S.S. Massoud**. Efficient Hydrolytic Cleavage of Plasmid DNA by Chloro-cobalt(II) Complexes. Kwansai Gakuin University – School of Science and Technology, Sanda, Japan, October 10 (2014).
24. S. Murru, **R.S. Srivastava**. Iron-Catalyzed Selective Allylic C-H Amination of Substituted 1,3-Dienes. Paper ID: 19103. 247th ACS National Meeting. Dallas, TX, 16-20th Mar (2014).
25. **W. Xu**. Ethanol Adenylyl Cyclase Pathway. NIH Workshop on Protein 3-D Structure and Function. Pittsburgh, Pennsylvania May 19-23 (2014).

## 2013

26. J.P. Myers P.R. Albuquerque, **T. Junk**. Unusual halogen exchange reactions in near-critical water. Poster presentation, 68th Southwest Regional Meeting of the American Chemical Society. Baton Rouge, LA, Nov. 4-7 (2013).
27. **A.A. Gallo**, M. Dartez, F.A. Mautner, **S.S. Massoud**. Dinuclear Copper (II) Complexes of Imidazole-4,5-Dicarboxylate. Poster presentation, Southwest ACS meeting. Waco, TX, Nov. 16-19 (2013).
28. C. Dupont, **A.A. Gallo**, R. Bajpai, **T. Junk**. Biodiesel from alligator fat using supercritical solvent conditions. Poster presentation, Southwest ACS meeting. Waco, TX, Nov. 16-19 (2013).
29. S. Murru, **A.A. Gallo**, **R.S. Srivastava**. Novel synthesis of beta-alkyl N-aryl Aza Baylis-Hillman adducts. Poster presentation, Louisiana Academy of Sciences, Grambling LA, March (2013).
30. **T. Junk**, E. Rallon, M. Spell, F.A. Mautner, **S.S. Massoud**. Binucleating Phenolic Compounds. SWRM Regional ACS Meeting. Waco, TX, November 16-19 (2013).
31. **F.R. Louka**, Q.L. Nguyen, F.A. Mautner, **S.S. Massoud**. Cadmium(II) Polymers Bridged Azide with Different Dimensionality. GEN INORG SWRM 465, SWRM Regional ACS Meeting. Waco, TX, November 16-19 (2013).
32. **A.A. Gallo**, M.J. Dartez, F.A. Mautner, **S.S. Massoud**. Dinuclear Copper(II) Complexes of Imidazole-4,5-Dicarboxylate. GEN INORG SWRM 466. SWRM Regional ACS Meeting. Waco, TX, November 16-19 (2013).

33. **S.S. Massoud**. Development of Efficient Artificial Nucleases for DNA Cleavage. Mononuclear Cobalt(II) Complexes Based Pyridyl Tripod Amines, p-20, (invited lecture). *Kumamoto Seminar on Complex-based Supramolecule*. Kumamoto University – Graduate School of Science and Technology, Kumamoto, Japan, October 9 (2013).
34. **S.S. Massoud**, F.A. Mautner. 1D and 2D Cadmium Polymers with Alternative Bridged Azido Bonding Modes (invited lecture). *2013 Symposium on Coordination Compounds as Molecular Magnetic Materials*. Kwansai Gakuin University – School of Science and Technology, Sanda, Japan, October 20, p-20, (2013).
35. **R.S. Srivastava**. Metal catalyzed group transfer reactions: Allylic amination vs. hetero Diels-Alder reaction of 1,3-butadienes. Smolenice, Slovakia, June 2-7 (2013).
36. **P.L. Klerks**, A. Oguma, E. Blankson, C. Curtis, M. Goodwin, **F.R. Louka**, A. Chistoserdov. The effect of sediment bioturbators on the hydrocarbon distribution in hydrocarbon-dosed mesocosms. *The Society of Environmental Toxicology and Chemistry North America 34th Annual Meeting*. Nashville, TN, 17-21 November (2013).

## 2012

37. **A.A. Gallo**, R. Bajpai, S. Ayalasangajula. Recovery of lipids and biodiesel production from alligator fat. Oral presentation and abstracted. Louisiana Academy of Sciences, Alexandria, LA, March (2012).
38. **A.A. Gallo**, C. Andrepont, K. Pujol, F.A. Mautner, J. Albering, R. Vicente, **S.S. Massoud**. Copper (I) complexes bridges by polycarboxylate anions. Poster presentation, Southwest ACS meeting. Baton Rouge, LA, November (2012).
39. **F.R. Louka**, R. Vicente, J.H. Albering, R.C. Fischer, M. Scherzer, F.A. Mautner, **S.S. Massoud**. Metal Ions Direct the Geometrical and Nuclearity of Azido-Metal(II)-bis(2-(3,5-dimethylpyrazol-1-yl)ethyl)amine Complexes. SWRM Regional ACS Meeting, GEN INORG SWRM 249, Baton Rouge, LA, November 4-7 (2012).
40. **A.A. Gallo**, C. Andrepont, F.A. Mautner; J.H. Albering, R. Vicente, **S.S. Massoud**. Copper(II) Complexes Bridged by Polycarboxylate Anions. SWRM Regional ACS Meeting. GEN INORG SWRM, Baton Rouge, LA, November 4-7 (2012).
41. **S.S. Massoud**, R. Vicente, F.A. Mautner. Azido-Metal(II) Complexes. Diverse Coordination of Bis(2-(3,5-dimethylpyrazolyl)-ethyl)amine with Divalent Metal Ions (invited lecture). *2012 Symposium on Coordination Compounds as Molecular Magnetic Materials*, Kwansai Gakuin University – School of Science and Technology, Sanda, Japan, October 6, p-18 (2012).
42. **R.S. Srivastava**, S. Murru, K.M. Nicholas. Ruthenium(II) Sulfoxides-Catalyzed Hydrogenolysis of Glycols and epoxides. Baton Rouge, LA, November 4-7 (2012).
43. **R.S. Srivastava**, S. Murru. Copper-catalyzed asymmetric allylic amination: A novel method for chiral N-aryl allyl amines, Philadelphia, PA, August 19-23 (2012).

## Patents

- **W. Xu**, Method and System for Comparing Proteins in Three Dimensions. U.S. Non-Provisional Patent Application No. 15/725,663, October 5<sup>th</sup> (2017).
- **R.S. Srivastava** and S. Murru. Method of Producing Chiral N-substituted Allyl Amine Compounds. *US Patent* 1,418,540 (2016).

## Journal Referees

- A.A. Gallo, *New Journal of Chemistry*, 2017.
- A.A. Gallo, *Asian Journal of Organic Chemistry*, 2017.
- Y. Wang, *Bioanalysis & Biomedicine*, 2017.
- F.R. Louka, *Environments*, 2017.
- F.R. Louka, *Advances in Chemistry*, 2017.
- F.R. Louka, *International Journal of Chromatography and Separation Techniques*, 2017.
- Wu Xu, *Inorganica Chimica Acta*, 2017.
- Wu Xu, *EMBO Journal*, 2017.
- Wu Xu, *International Journal of Biochemistry and Biophysics*, 2017.
- Wu Xu, *Frontiers in Science, Technology, Engineering and Mathematics*, 2017.
- Wu Xu, *International Journal of Genetics and Genomics*, 2017.
- S.S. Massoud, *Dalton Transactions*, 2017.
- S.S. Massoud, *New J. Chemistry*, 2017.
- S.S. Massoud, *Inorgan. Chem.*, 2017.
- S.S. Massoud, *Inorganics*, 2017.
- S.S. Massoud, *J. Coordination Chem.*, 2017.
- S.S. Massoud, *Inorg. Chem. Commun.*, 2017.
- S.S. Massoud, *Inorg. Chim. Acta*, 2017.
- S.S. Massoud, *Transition Metal Chem.*, 2017.
- S.S. Massoud, *Crystals*, 2017.
- S.S. Massoud, *Commun. Inorg. Synthesis*, 2017
- R.S. Srivastava: *Journal of Organic Chemistry*, 2017.
- R.S. Srivastava: *Transition Metal Chemistry*, 2017.
- R.S. Srivastava: *Asian Journal of Organic Chemistry*, 2017.
- T. Junk: *Heteroatom Chemistry*, 2017.
- T. Junk: *Current Catalysis*, 2017.
- S. S. Massoud: *Chem A Eur. J.*, 2016.
- S. S. Massoud: *Crystals*, 2016.
- S.S. Massoud: *J. Mol. Struct.*, 2016
- S.S. Massoud: *J. Cluster Chem.*, 2016
- T. Junk: *Journal of Thermal Analysis and Calorimetry (JTAC)*, 2015.
- S.S. Massoud: *Inorg. Chem.*, 2015.
- S.S. Massoud: *Dalton Transactions*, 2015.
- S.S. Massoud: *RSC Advances*, 2015.
- S.S. Massoud: *J. Inorg. Biochem.*, 2015.
- S.S. Massoud: *New J. Chemistry*, 2015.
- S.S. Massoud: *Zeitschrift für anorganische und allgemeine Chemie (ZAAC)*, 2015.
- S.S. Massoud: *Comments in Inorg. Chem.*, 2015.
- S.S. Massoud: *Inorg. Chem. Commun.*, 2015.
- S.S. Massoud: *Inorg. Chim. Acta*, 2015.
- S.S. Massoud: *Polyhedron*, 2015.
- S.S. Massoud: *Spectroscopic Letters*, 2015.

- **S.S. Massoud:** *Chemical Papers*, 2015.
- **R. S. Srivastava:** *JACS*, 2015.
- **R. S. Srivastava:** *Organometallics*, 2015.
- **R. S. Srivastava:** *Organic & Bimolecular Chemistry*, 2015.
- **R. S. Srivastava:** *Catalysis Science & Technology*, 2015.
- **Hui Yan:** *Applied Catalysis*, 2015.
- **August A. Gallo:** *Universal Journal of Chemistry*, 2015.
- **August A. Gallo:** *Chemosphere*, 2015.
- **S.S. Massoud:** *European J. Medicinal Chem.*, 2014.
- **S.S. Massoud:** *J. Chem. Soc., Pakistan*, 2014.
- **S.S. Massoud:** *J. Nanoparticle Research*, 2014.
- **S.S. Massoud:** *Phosphorus, Sulfur, and Silicon and the Related Elements*, 2014.
- **S.S. Massoud:** *RSC Advances*, 2014.
- **S.S. Massoud:** *Zeitschrift für Anorganische und Allgemeine Chemie*, 2014.
- **S.S. Massoud:** *Australian J. Chem.*, 2014.
- **S.S. Massoud:** *Inorg. Chim. Acta*, 2014.
- **S.S. Massoud:** *International J. Inorganic Chem.*, 2014.
- **S.S. Massoud:** *Arabian J. Chemistry*, 2014.
- **F.R. Louka:** *Advances in Chemistry*, 2014.
- **W. Xu:** *Journal of Plant Physiology*, 2014.
- **W. Xu:** *Chemical Research in Toxicology*, 2014.
- **W. Xu:** *Frontiers in Genetics*, 2014.
- **W. Xu:** *Cell Physiol Biochem*, 2014.
- **W. Xu:** *International J. of Biochemistry and Biophysics*, 2014.
- **W. Xu:** *Bioorganic & Medicinal Chemistry Letters*, 2014.
- **T. Junk:** *Heteroatom Chemistry*, 2014.
- **T. Junk:** *Thermal Analysis and Calorimetry*, 2014.
- **T. Junk:** *Moroccan Journal of Chemistry*, 2014.
- **W. Xu:** *Inorganica Chimica Acta*, 2013.
- **W. Xu:** *Inorganica Chimica Acta*, 2013.
- **W. Xu:** *Optical Materials*, 2013.
- **W. Xu:** *PLoS ONE*, 2013.
- **T. Junk:** *Phosphorus, Sulfur, and Silicon and the Related Elements*, 2013.
- **S.S. Massoud:** *Inorg. Chem.* 2013.
- **S.S. Massoud:** *RSC Advances* 2013.
- **S.S. Massoud:** *J. Electroanalytical* 2013.
- **S.S. Massoud:** *Polyhedron* 2013.
- **R.S. Srivastava:** *Applied Catalysis A*, 2013.
- **R.S. Srivastava:** *European Journal of Medicinal Chemistry*, 2013.
- **R.S. Srivastava:** *ChemMedChem*, 2013.
- **W. Xu:** *Inorganica Chimica Acta*, 2012.
- **W. Xu:** *Biology*, 2012.
- **W. Xu:** *Chinese Journal of Chemistry*, 2012.
- **W. Xu:** *PLoS ONE*, 2012.

- **S.S. Massoud:** *Inorg. Chem.* 2012.
- **S.S. Massoud:** *Organometallic Chem.* 2012
- **S.S. Massoud:** *Inorg. Chim. Acta* 2012.
- **S.S. Massoud:** *RSC Advances* 2012.
- **S.S. Massoud:** *New J. Chem.* 2012.
- **S.S. Massoud:** *Phosphorus, Sulfur, and Silicon and the Related Elements* 2012.
- **S.S. Massoud:** *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 2012.
- **R.S. Srivastava:** *Spectra. Chim. Acta A*, 2012.
- **R.S. Srivastava:** *Electronic Journal of Chemistry*, 2012.
- **R.S. Srivastava:** *Electronic Journal of Chemistry*, 2012.
- **R.S. Srivastava:** *RSC Advances*, 2012.

## Other

### Organized Special Sessions and Conferences

- **Salah S. Massoud:** Chair of the *Coordination Chemistry Session* of the 249<sup>th</sup> *ACS National Meeting*, Denver, CO, March 23-26 (2015).
- **K. Knierim:** Vice-Chair of Mechanisms of Pitting Corrosion symposium at the NACE Corrosion 2013 conference, Orlando, FL, March (2013).
- **K. Knierim:** Chair of Mechanisms of Pitting Corrosion symposium at the NACE Corrosion 2012 conference. Salt Lake City, UT, March (2012).
- **S.S. Massoud:** Organizer, *Bioinorganic Sessions in SWRM-Regional Meeting*. Baton Rouge, November 4-7 (2012).
- **A.A. Gallo:** Chair of the chemistry division of the Louisiana Academy of Sciences, (2000-pres).

### Undergraduate – Notable Figures

- **S.S. Massoud**, supervised 18 undergraduate students in Chemistry 362/462 (2015).
- **F.R. Louka**, supervised 70 undergraduate students in Chemistry 362/462- undergraduate research (2008-2015).
- S.Y. Osman, student, and winner of the American Chemical Society (ACS) Outstanding Undergraduate Analytical Chemist Award, supervisor **F.R. Louka** (2015).
- **A.A. Gallo**, supervised over 40 undergraduate students during the period 2008-2013 in Chemistry 362/462- undergraduate research.
- **S.S. Massoud**, supervised over 34 undergraduate students during the period 2008-2013 in Chemistry 362/462- undergraduate research.
- **F.R. Louka**, supervised 14 undergraduate students during the period 2008-2013 in Chemistry 362/462- undergraduate research.

### Awards and Honors

- **F.R. Louka**, Outstanding Faculty of Universities of Louisiana System (2017).
- **F.R. Louka**, Awardee of Royal Society of Chemistry Books for contents. Organization and presentation in ICBIC 18th, Florianópolis, Brazil (2017).

- **H. Yan**, Achievement in Sponsored Research Award, University of Louisiana at Lafayette (2017).
- **F.R. Louka**, Outstanding Teaching Award, Ray Authement College of Sciences (2016).
- **S.S. Massoud**, Outstanding Contribution in Reviewing Papers for *Inorganica Chimica Acta*, Elsevier (2015)
- **F.R. Louka**, Marvin and Warren Boudreaux / BoRSF Professorship in Chemistry Awardee (2015)
- **S.S. Massoud**, Boudreaux/BORSF Professorship (2002-2017).
- **F.R. Louka**, Marvin and Warren Boudreaux / BoRSF Professorship in Chemistry #4. (2015- present)
- **F.R. Louka**, Undergraduate Research Mentoring award 2014.
- **R.S. Srivastava**, Distinguished Professor Award, R.A.P. College of Sciences, 2013.
- **W. Xu**, Candidacy on the Fulbright Specialists Roster, the J. William Fulbright Foreign Scholarship Board, the U.S. Department of State's Bureau of Education and Cultural Affairs, and the Council for International Exchange of Scholars, 2012-2017.
- **F.R. Louka**, Summer Research Award Summer, 2012.
- **F.R. Louka**, Marvin and Warren Boudreaux / BoRSF Professorship in Chemistry #4. 2012- present.
- **W. Xu**, Boudreaux/BORSF Professorship, 2008-2014
- **R.S. Srivastava**, Boudreaux/BoR Distinguished Professor, 2001-present.
- **W. Xu**, Boudreaux/BORSF Professorship, 2017-2020.

### Other Professional Activities

#### 2017

- **K.D. Knierim**, Secretary of Faculty Senate (2017).
- **K.D. Knierim**, Director of Louisiana Region 2 Science Olympiad (2017).
- **T. Junk**, ChemDraw chemical structure drawing software for student use and training,, STEP Fund of University of Louisiana at Lafayette, \$4,460 (2017).
- **W. Xu** and **Y. Wang**, Purchase of an Incubator and a shaker for Biochemistry Laboratory Courses. STEP Funds of University of Louisiana at Lafayette, \$8,768.30 (2017).
- **W. Xu** and **H. Yan**, Purchase of Fluorescence Gel Documentation for Chemistry Laboratory Courses. STEP Fund of University of Louisiana at Lafayette, \$13,986 (2017).
- **H. Yan** and **F.R. Louka**, Bringing Rotary Evaporators for Sample Preparation to Analytical Chemistry Laboratory Courses. STEP Fund of University of Louisiana at Lafayette, \$ 8700 (2017).
- **H. Yan**, Improving Precision and Accuracy in Analytical Chemistry Laboratory Courses. STEP Fund of University of Louisiana at Lafayette, \$5,138 (2017).
- **A.A. Gallo**, Acquisition of a Polarimeter for Chemistry Laboratories, STEP Fund of University of Louisiana at Lafayette, \$525 (2017).
- **R.L. Simon**, **Y. Wang**, Maker Lab for Montgomery Hall. STEP Fund of University of Louisiana at Lafayette, \$3650 (2017).
- **R.L. Simon**, White Boards for Montgomery Hall. STEP Fund of University of Louisiana at Lafayette, \$6372 (2017).



## 2016

- **F.R. Louka**. Economical Micro-scale Vacuum Assisted DigiFILTER Assembly in Chemistry Labs. STEP Technology grant, \$13,901.
- **F.R. Louka**. Economical Micro scale Equipment in Chemistry Labs. STEP Technology grant, \$16,843.
- **W. Xu**. Structural and Functional Studies of Photosystem I to Enhance Undergraduate Education through Research. UL Undergraduate Research Mini-Grant, \$2,000.
- **R.L. Simon (PI), A.A. Gallo**. Organic Chemistry Laboratory Equipment Grant. STEP Technology Fund, \$3666.
- **R.L. Simon (PI)**. Purchase of Chemistry Laboratory and Demonstration Equipment”, STEP Technology grant, \$501.64
- **T. Junk, A.A. Gallo**, Purchase of an Attenuated Total Reflectance (ATR) Tool for Chemistry to Conduct Infrared Spectroscopy on Solids, UL STEP Fund, \$5,602.
- **K.D. Kierim**, director of regional Science Olympiad.
- **A.D. Leonard**, classified the entire Library of EZTest questions (more than 2000 questions from Carey, *Organic Chemistry* 10<sup>th</sup> ed. McGraw Hill, 2017), by Bloom’s Taxonomy, difficulty level, topic, and subtopic.

## 2015

- **A.D. Leonard**, classified the entire Library of EZTest questions (more than 2000 questions from Carey, *Organic Chemistry* 10<sup>th</sup> ed. McGraw Hill, 2017), by Bloom’s Taxonomy, difficulty level, topic, and subtopic.
- **A.D. Leonard**, C.S. Langley, J. Roy. Achieving A Successful Online STEM Class. Presentation at Student Retention Summit, University of Louisiana at Lafayette. March 2015.
- **T. Junk**, Raman Spectroscopy in Chemistry Labs, UL STEP program, \$10,655.
- **W. Xu**, judge for Junior Division of Biochemistry Louisiana Region VI Science and Engineering Fair.
- **W. Xu**, judge for High School Senior Division on Protein Modeling. Louisiana Region II 26<sup>th</sup> Annual Science Olympiad.
- **W. Xu**, Judge for the Graduate Student Research & Project Symposium. University of Louisiana at Lafayette.
- **F.R. Louka (PI)**. Applying New Techniques in Analytical Chemistry Laboratories: UL Instructor Mini-grant, \$700.

## 2014

- **Wellman, D.L., Xu, W. (co-PI) Gallo, A. (co-PI)**. Installation of a Smart Classroom. UL STEP program, \$30,000, 2014.
- **W. Xu**, hosted Darren Jindal, a student from Stanford University, and two visiting professors from China: L. Huang and Y. Wei.
- **R.S. Srivastava**, served as Graduate faculty representative on the committee of C. U. Chukwunonye, M.S. candidate, Department of Physics.
- **A.D. Leonard**, classified the entire library of 2000+ questions from Smith, General, Organic, and Biological Chemistry, 2nd ed. for the McGraw Hill Connect Online Homework System by Bloom’s Taxonomy, difficulty level, topic, and subtopic.

- **F.R. Louka** (PI). Enhancement of Instrumental Analysis Laboratory Techniques: UL Instructor Mini-grant, \$849 (2014).
- **A.A. Gallo**, served as Chemistry Section Chair of the Louisiana Academy of Sciences.
- **K. Knierim**, served as director of the regional Science Olympiad.
- **K. Knierim**, was elected secretary of the faculty senate.

## 2013

- **W. Xu**, Judge for the Graduate Student Research & Project Symposium, University of Louisiana at Lafayette, 2013.
- **E.R. Taylor**, interviewed by Lynda Edwards, Daily Advertiser, 10 Sept 2013, concerning use of chemical weapons by Syria, article appeared in print, 11 Sept 2013.
- **E.R. Taylor**, interviewed by Jim Hummel, KATC TV for segment on ammonium nitrate and its hazards to communities, aired at 22:00 hr news, 4 Nov 2013.
- **E.R. Taylor**, served as Acting Dept. Head, Summer Semesters, Summer 2008-2013.
- **A.A. Gallo**, visiting Professor, Beifang University of Nationalities, Yinchuan, China, May-June 2013.
- **R.S. Srivastava**, Ph.D. Thesis evaluation report of V. Kalpana, University of Madras, India. Synthesis, Characterization and Application of Novel Dendrimers with Ether, Triazole as Branching and Benzoheteroazole, Thiazole as Surface and Synthesis of Heterocalxarenes, July 2013.
- **R.S. Srivastava**, Ph.D. Thesis evaluation report of Santosh Kumar Sahoo. Indian Institute of Technology, Guwahati, Assam, India. Development & Application of Transition Metal Catalysts for the Construction of Heterocycles, February 2013.
- **F.R. Louka**, supervised French Interns Guénaëlle de Lorgeril and Gerard Ducharme, 2013.

## 2012

- **K. Knierim, S.S. Massoud**, Instructional Improvement Mini-Grant, 2012-13.
- **T. Junk, A.A. Gallo**, Step Grant Funding for Smart Classroom, 2012.
- **S.S. Massoud**, reviewed textbook: Inorganic Chemistry by Hagerman: Chapters 1, 2, 8, 9, 10 and 11, W.H. Freeman & Co, 2012.
- **S.S. Massoud**, editorial board of *Dataset Papers in Materials Science*, 2012-present
- **S.S. Massoud, K. Knierim**, instructional Mini-Grant fund for purchasing overhead projector, – UL Lafayette, funded, 2012.
- **F.R. Louka**, Instructor Mini-grant: Enhancement of Teaching Techniques in Chemistry Lectures. \$475, 2012.
- **F.R. Louka**, upgraded the Analytical Lab, supervised procurement, installation, and methods development for new gas chromatograph and atomic absorption spectrophotometer funded by College, 2012.
- **R.S. Srivastava, S. Murru**, method of producing Chiral N-Substituted Allyl Amine Compounds. *International Patent*, pending, 2012.
- **R.S. Srivastava**, hired Post-Doc Dr. Siva Murru, December 2009-November 2012.
- **W. Xu**, judge for High School Senior Division on Protein Modeling. Louisiana Region II 23rd and 24th Annual Science Olympiad, 2011-2012.

## Offices Held and Professional Memberships

- **A.A. Gallo**, member: American Chemical Society (1973-pres.), Louisiana Academy of Sciences (1985-pres.). Co- advisor, UL Student affiliates of the American Chemical Society (2008-2013). President, UL Chapter of Sigma Xi (2004-2008).
- **T. Junk**, member: Phi Lambda Upsilon (1994-pres.), American Chemical Society (1995-pres.), Sigma Xi (1996-pres.), Louisiana Academy of Sciences (2009-pres.), American Association for the Advancement of Science (2005-pres.).
- **K. Knierim**, member: American Chemical Society (1975 – Pres.), Sigma Xi (1983 – Pres.), National Association Of Corrosion Engineers (2010 – Pres.); Director, Regional Science Olympiad (1998 – Pres.)
- **F. R. Louka**, member, American Chemical Society (2007-Pres.)
- **S.S. Massoud**, member, American Chemical Society (2001-Pres.)
- **R.S. Perkins**, member, American Chemical Society (1967-pres.)
- **R.S. Srivastava**, member: American Chemical Society (1993-pres.), Advisory Board, Asian Journal of Chemistry (2010-pres.), Sigma Xi (2010 – pres.)

## Graduate Student Production

### Graduate

- N.S.M. Ahmed. Kinetics and Electrochemical Studies on Some Ion-Pairs in Mixed Solvents. Ph.D. thesis submitted to Alexandria University, Alexandria, Egypt, 2015. External Examiner: **S.S. Massoud**.
- M. Ganesh, thesis evaluation. Indian Institute of Technology. Guwahati, Assam, India. R.S. 2015, **R.S. Srivastava**.
- A.K. Visvesvaraya, thesis evaluation. Technological University, Belagavi, Karnataka, India, 2015, **R.S. Srivastava**.
- R. Hill, Ethanol-Adenylyl Cyclase Pathway. Ph.D., LSU, 2015, Member of Committee: **W. Xu**.
- S. Singh, Title of the Final Defense: Spatial relationships based protein structure representation for alignment free comparison, local structural motif discovery and hierarchical classification, Member of Committee, 2015, **W. Xu**.
- A. Kascak, Ph.D. student, "Determining the Interactions Between the Ghost shrimp *Lepidophthalmus louisianensis* and Crude Oil." Member of committee, 2015, **F.R. Louka**.
- V.K. Chaitanya Nune. Interplay between Structure and Cell-Biomaterial Interactions in Orthopedic Implants. Ph.D., UL, 2014. Member of committee: W. Xu.P.K. Surya. Mechanical Property Anisotropy in High Strength Niobium Microalloyed Spiral-Welded Linepipe Steels. Ph.D., UL, 2014, Member of committee: **W. Xu**.
- R. Hill. Ethanol-Adenylyl Cyclase Pathway. Ph.D., LSU, 2014. Member of committee: W. Xu. G. Nakka. Crystallization phenomenon of various polymers on carbon nanotubes. M.S., UL, 2014, Member of committee: **W. Xu**.

- S. Guin. Transition Metal Catalyzed C-C and C-O Bond Formation via C-H Activation. Indian Institute of Technology, Assam, India, Ph.D., 2014. Member of committee: **R.S. Srivastava**.
- K. Satbhai. Interaction of petroleum hydrocarbons phenanthrene and dibenzothiophene and their effects on reproductive behavior in amphipod *Hyaella Azteca*. Spring 2012-present. Member of committee: **F.R. Louka**.
- S. Sovine. Heterogeneous catalysis of glycerol to propylene glycol over copper chromite. Member of committee: MS, 2012, **A.A. Gallo**.

## **External Funding**

### **2017**

- **K.D. Knierim, W. Xu**. Expanding the Application of Computational Chemistry in Teaching and Research at UL Lafayette. Enhancement Program, Board of Regents Support Fund (LEQSF(2017-18)-ENH-TR-31), \$11,255 (2017–2018).
- **A.A. Gallo, R. L. Simon, T. Junk, W. Xu**. Benchtop NMR Spectrometer for Integration into the Chemistry Curriculum,: Board of Regents Support Fund, (LEQSF(2017-18)-ENH-TR-30), \$58,366 (2017-2018).
- **H. Yan**. Investigating reaction mechanism of water-gas shift reaction on mesoporous ceria-based catalysts, , LA Board of Regents (BoR) Research Competitiveness Subprogram (RCS), \$121,383, (2017-2020).
- **Y. Wang**. Controlled Polymer Synthesis Towards the Precision of Biomacromolecules, \$145,500, BoRSF RCS (2017-2020).

### **2016**

- **R.S. Srivastava** (PI), C. Murru. Studies on Catalytic Asymmetric C-H Amination of Alkenes. PI-NSF, \$375,000 (2016-2019).
- **R.S. Srivastava**. Enantioselective C-H Amination of Alkenes and Carbonyl Compounds and Novel Application Thereof. Natl. Institutes of Health, \$145,000 (2016-2019)

### **2015**

- V. Raghavan, **W. Xu**. Development of an Algorithm and a Tool for Accurate Comparison of Protein and Chemical 3-D Structures. Board of Regents Support Fund (LEQSF(2015-18)-RD-B-06), \$182,679, 2015-2018.
- **W. Xu**, R.K. Bajpai, A.Y. Chistoserdov, **A.A. Gallo, T. Junk, R.S. Perkins, R.S. Srivastava**. Integrating Analytical Ultracentrifugation into Chemistry Teaching and Research Laboratories for Undergraduates Majoring in Chemistry, Biology and Engineering. Board of Regents Support Fund (LEQSF(2015-16)-ENH-TR-34), \$58,366, 2015 – 2016.

### **2014**

- **W. Xu** (PI), **A.A. Gallo** (Co-PI), **R.S. Perkins** (Co-PI), **T. Junk** (Co-PI), **R.S. Srivastava** (Co-PI), R. Bajpai (Co-PI). Integration of a Florescence spectrometer into chemistry and biochemistry. BoR- ENH, \$32,000, 2014.

- **R.S. Srivastava** (PI). Transition-metal catalyzed asymmetric nitrogeneration of hydrocarbons (olefins): Method development and its synthetic applications to valuable chemicals. BOR-ITRS, \$225,000, 2014-2017.
- **W. Xu** (PI). Structure-function studies of ethylene-forming enzyme based on a theoretical 3-D model. National Science Foundation's EPSCoR Award (LEQSF-EPS(2015)-PFUND-425). BoRSF, \$10,000, 2014-2015.

### 2013

- **W. Xu**, Principal Investigator. Research Competitiveness Subprogram, Board of Regents Support Fund. Biochemical and Spectroscopic Characterizations of the Site-directed Mutants around Accessory Chlorophylls, A<sub>0</sub>, A<sub>1</sub> and F<sub>X</sub> of *Synechocystis* sp. PCC 6803, \$150,917, 2013–2016.
- **R.S. Srivastava**, Principal Investigator. BoRSF-LEQSF (ITRS). Copper-Catalyzed Asymmetric Allylic Amination: Method development, Mechanistic studies and its Synthetic application. \$225,000, 2013-16.

### 2012

- R.K. Bajpai, A.Y. Chistoserdov, **A.A. Gallo, F. Louka, W. Xu (PI), R.S. Perkins, R.S. Srivastava, E.R. Taylor**. Enhancement Program, Board of Regents Support Fund. Enhancement of Spectroscopy and Macromolecule Characterization Techniques in Undergraduate Laboratories for Chemistry, Biology and Engineering Majors. \$38,261, 2012–2014.
- **F.R. Louka**, Co-PI of a proposal submitted to Gulf of Mexico Research Initiative (GoMRI). The effect of sediment bioturbators on the biological degradation of petroleum in coastal ecosystems. \$1,010,901, 2012-2015.