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Education

- 2002 – 2004 **Postdoctoral** MIT, Cambridge, MA.
Advisor: Professor Daniel G. Nocera
- 1998 – 2003 **Ph. D.** Cornell University, Ithaca, NY.
Advisor: Professor Peter T. Wolczanski
- 1993 – 1997 **Hons. B.Sc.** University of Western Ontario.
Advisor: Professor James F. King

Appointments

- 2015-present **Professor**, Department of Chemistry, University of Florida, Gainesville, FL.
- 2021-present **University of Florida Term Professor**, Department of Chemistry, University of Florida, Gainesville, FL.
- 2017-2020 **University of Florida Research Foundation Professor**, Department of Chemistry, University of Florida, Gainesville, FL.
- 2011-2015 **Associate Professor**, Department of Chemistry, University of Florida, Gainesville, FL.
- 2010-present **Director**, Center for Catalysis, Department of Chemistry, University of Florida, Gainesville, FL.
- 2004-2011 **Assistant Professor**, Department of Chemistry, University of Florida, Gainesville, FL.
- 2010-2017 **Treasurer**, Florida Section of the American Chemical Society

Co-Founder

Round-CAT Technology

Honors and Awards

- 2004 Camille and Henry Dreyfus New Faculty Award.
- 2008 1st Place Overall Teaching Exhibit at the UF Eng. & Science Fair
- 2008 Special recognition for Creative Demonstrations, Innovative Design and Outstanding Performance at the UF Eng. & Science Fair
- 2008 Award for Best Visual Presentation at the UF Eng. and Science Fair
- 2008 NSF CAREER Award
- 2010 Alfred P. Sloan Fellowship Award

- 2010 Student Invited Seminar, MIT
- 2011 Heaton Family Faculty Award
- 2012 Anderson Faculty Honoree
- 2012 UF Outstanding Mentor of Undergraduate Research Award
- 2012 Professor Paul Tarrant Fellowship
- 2015 CLAS Mentor/Advisor of the Year
- 2015 Inorganic Student Seminar Invite, UC Berkeley
- 2017 University of Florida Research Foundation Professor Fellowship
- 2017 Japan Society for the Promotion of Science Fellowship
- 2019 UF CLAS Doctoral Dissertation/Mentoring Award
- 2021 University of Florida Term Professorship

Publications*corresponding author(s)

1. Mandal, U.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.*; A double tethered metallacyclobutane REMP catalyst for cyclic polymer synthesis, *J. Am. Chem. Soc.* **2021**, *submitted*.
2. Miao, Z.; Konar, D.; Sumerlin, B. S.*; Veige, A. S.* Soluble polymer precursors via REMP for the synthesis of cyclic polyacetylene. *Macromolecules*, **2021**, *accepted*.
3. Shen, Y-H.; Esper, A. M.; Ghiviriga, I.; Abboud, K. A.; Schanze, K. A.; Ehm, C.*; Veige, A. S.* SPAAC iClick: Progress towards a biorthogonal reaction incorporating metal ions. *Dalton Trans.* **2021**, DOI:10.1039/d1dt02626g.
4. Kane, A. Q.; Esper, A. M.; Searles, K. S.; Ehm, C.*; Veige, A. S.* Probing β -alkyl elimination and selectivity in polyolefin hydrogenolysis through DFT, *Catal. Sci. and Technol.* **2021**, DOI: 10.1039/d1cy01088c.
5. Miao, Z.; Gonsales, S. D.; Bowers, C. R.; Sumerlin, B. S.* Veige, A. S.* Cyclic Polyacetylene. *Nat. Chem.* **2021**, *13*, 792-799.

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6. Jakhar, V. K.; Johnson, E. C.; Kavuturu, A.; Heller, J. K.; Veige, A. S.; Ghiviriga, I.* A Precise NMR Method to Titering Organometal Reagents. *Org. Lett.* **2021**, *23*, 4945–4948.
7. Makal, T. A.; Veige, A. S.* Development of Inorganic Click (iClick) and Related Cycloaddition Chemistry, *Comprehensive Coordination Chemistry III*, Elsevier, **2021**, *accepted*.
8. Jakhar, V.; Pal, D.; Ghiviriga, I.; Abboud, K. A.; Lester, D. W.; Sumerlin, B. S.; Veige, A. S.* Tethered Tungsten-Alkylidenes for the Synthesis of Cyclic Polynorbornene via REMP: Unprecedented Stereoselectivity and Trapping of Key Catalytic Intermediates, *J. Am. Chem. Soc.* **2021**, *143*, 1235-1246.
9. Pal, D.; Miao, Z.; Garrison, J. B.; Veige, A. S.*; Sumerlin, B. S.* Ultrahigh Molecular Weight Macrocyclic Bottlebrushes via Post-Polymerization Modification of a Cyclic Polymer, *Macromolecules*, **2020**, *53*, 9717-9724.
10. Miao, Z.; Pal, D.; Weijia, N. Kubo, T.; Sumerlin, B. S.*; Veige, A. S.* Cyclic Poly(4-methyl-1-pentene): Efficient Catalytic Synthesis of a Transparent Cyclic Polymer,

- Macromolecules*, **2020**, *53*, 7774-7782.
11. Zeman, C. J. III; Shen, Y-H.; Heller, J. K.; Abboud, K. A.; Schanze, K. S.*; Veige, A. S.* Excited state turn-on of aurophilicity and tunability of relativistic effects in a series of digold triazolates synthesized via iClick, *J. Am. Chem. Soc.* **2020**, *142*, 8331-8341.
 12. Mandal, U.; VenkatRamani, S.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* Synthesis and characterization of tungsten alkylidene and alkylidyne complexes featuring a new carbazole-based rigid trianionic ONO^{3-} pincer-type ligand. *Organometallics*, **2020**, *39*, 2207-2213.
 13. Beto, C. C.; Zeman, C. J. III; Yang, Y.; Bullock, J. D.; Holt, E. D.; Kane, A. Q.; Makal, T. A.; Yang, X.; Ghiviriga, I.; Schanze, K. S.*; Veige, A. S.* A application exploiting aurophilic interactions and iClick to produce white light emitting materials, *Inorg. Chem.* **2020**, *59*, 1893-1904.
 14. Roland, C. D.; Zhang, T.; VenkatRamani, S. Ghiviriga, I. Veige, A. S.* A catalytically relevant intermediate in the synthesis of cyclic polymers from alkynes, *Chem. Comm.* **2019**, *55*, 13697-13700.
 15. Chakraborty, J.; Mandal, U.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* Hydrolysis of a Trianionic Pincer-type Supported Molybdenum-Nitride Complex, *Chem-Eur. J.* **2019**, *25*, 1-6.
 16. Miao, Z.; Kubo, T; Pal, D.; Sumerlin, B. S.*; Veige, A. S.* A pH-responsive water-soluble cyclic polymer. *Macromolecules*, **2019**, *52*, 6260-6265.
 17. Niu, W.; Gonsales, S. A.; Kubo, T.; Bentz, K. C.; Pal, D.; Savin, D. A. Sumerlin, B. S.*; Veige, A. S.* Polypropylene: now available without chain ends. *Chem*, **2019**, *5*(1), 237-244.
 18. Beto, C. C.; Yang, Y.; Zeman IV, C. J.; Ghiviriga, I.; Schanze, K. S.*; Veige A. S.* Cu-Catalyzed Azide-Pt-Acetylide Cycloaddition: Progress To-wards a Conjugated Metallopolymer via iClick. *Organometallics*, **2018**, *37*, 4545-4550.
 19. Roland, C. D.; VenkatRamani, S. Ghiviriga, I.; Abboud, K. A. Veige. A. S.* Synthesis and characterization of a molybdenum alkylidyne supported by a trianionic OCO^{3-} pincer ligand. *Organometallics*, **2018**, *37*, 4500-4505.
 20. Niu, W.; Teng, I-T.; Chen, X.; Tan, W.; Veige, A. S. Aptamer-mediated selective delivery of a cytotoxic cationic NHC-Au(I) complex to cancer cells. *Dalton Transactions*, **2018**, *47*, 120-126.
 21. Beto, C. C.; Holt, E. D.; Yang, Y.; Ghiviriga, I. Schanze, K. S.*; Veige, A. S.* A new synthetic route to in-chain metallopolymers via copper(I) catalyzed azide-platinum-acetylide iClick. *Chem. Comm.* **2017**, *3*, 9934-9937.
 22. Yang, X.; VenkatRamani, S.; Beto, C. C.; Del Castillo, T. J.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* Single versus double Cu(I) catalyzed [3+2] azide/platinum diacetylide cycloaddition reactions. *Organometallics* **2017**, *36*, 1352-1357.
 23. Pedziwiatr, J.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S. Crystal structures of a novel NNN pincer ligand and its dinuclear titanium(IV) alkoxide pincer complex. *Acta, Cryst.* **2017**, *E73*, 122-126.
 24. Roland, C. D.; Li, H. Abboud, K. A.; Wagener, K. B.; Veige, A. S.* Cyclic polymers from alkynes. *Nature Chem.* **2016**, *8*, 791-796.

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25. VenkatRamani, S.; Roland, C. D.; Zhang, J. G.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Trianionic pincer complexes of niobium and tantalum as precatalysts for ROMP of norbornene. Organometallics* **2016**, *35*, 2675-2682.
26. O'Reilly, M. E.; Dutta, S.; Veige, A. S.* *β -Alkyl elimination: A fundamental organometallic reaction. Chem. Rev.* **2016**, *116*, 8105-8145.
27. Gonsales, Stella A.; Ghiviriga, I.; Veige, A. S. *Carbon dioxide cleavage across a tungsten-alkylidene bearing a trianionic pincer-type ligand. Dalton Trans.* **2016**, *45*, 15783-15785.
28. Niu, W.; Chen, X.; Tan, W.; Veige, A. S.* *N-Heterocyclic carbene gold(I) complexes conjugated to a leukemia specific DNA-aptamer for targeted drug delivery. Angew Chem, Int. Ed.* **2016**, *128*, 9035-9039.
29. Nadif, S. S.; Kubo, T.; Gonsales, Stella A.; VenkatRamani, S.; Ghiviriga, I.; Sumerlin, B. S.; Veige, A. S. *Introducing "ynene" metathesis: ring-expansion metathesis polymerization (REMP) leads to highly cis and syndiotactic cyclic polymers of norbornene. J. Am. Chem. Soc.* **2016**, *138*, 6408-6411.
30. Pascualini, M. E.; Stoian, S. A.*; Ozarowski, A.; Abboud, K. A.; Veige, A. S. **Solid state collapse of a high-spin square-planar Fe(II) complex, solution phase dynamics, and electronic structure characterization of an Fe(II)₂ dimer.*" *Inorg. Chem.* **2016**, *55*, 5191-5200.
31. Gonsales, Stella A.; Kubo, T.; Flint, M. K.; Abboud, K. A.; Sumerlin, B. S.; Veige, A. S. *Highly tactic cyclic polynorbornene: stereoselective ring expansion metathesis polymerization (REMP) of norbornene catalyzed by a new tethered tungsten-alkylidene catalyst. J. Am. Chem. Soc.* **2016**, *138*, 4996-4999.
32. Beto, C. C.; Yang, X.; Powers, A. R.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Expanding iClick to group 9 metals. Polyhedron,* **2016**, *108*, 87-92.
33. Nadif, S. S.; O'Reilly, M. E.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Remote multi-proton storage within a pyrrolide pincer type ligand. Angew Chem, Int. Ed.* **2015**, *54*, 15138.
34. Pascualini, M. E.; Stoian, S. A.*; Ozarowski, A.; Di Russo, N. V.; Thuijs, A. E.; Abboud, K. A.; Christou, G.; Veige, A. S.* *Synthesis and characterization of a family of M²⁺ complexes supported by a trianionic ONO³⁻ pincer-type ligand: towards the stabilization of high-spin square-planar complexes. Dalton Trans.* **2015**, *44*, 20207-20215.
35. VenkatRamani, S.; Ghiviriga, I.; Abboud, K. A.; Veige,* A. S. *A new ONO³⁻ trianionic pincer ligand with intermediate flexibility and its tungsten alkylidene and alkylidyne complexes. Dalton Trans.,* **2015**, *44*, 18475-18486.
36. Gonsales, S. A.; Pascualini, M. E.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Evidence for a Zwitterionic transition state in double bond rotations within tungsten-vinyl complexes. Chem. Comm.* **2015**, *51*, 13404-13407.
37. Powers, A. R.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Au-iClick mirrors the mechanism of copper catalyzed azide-alkyne cycloaddition (CuAAC). Dalton Trans.* **2015**, *44*, 14747-14752.
38. VenkatRamani, S.; Huff, N. B.; Jan, M. T.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *New alkylidyne complexes featuring a flexible trianionic ONO³⁻ pincer-type ligand: inorganic enamine effect versus sterics in electrophilic additions. Organometallics* **2015**, *34*, 2841-2838.

39. Yang, X.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S. *Organogold oligomers: exploiting iClick and aurophilic cluster formation to prepare solution stable Au₄ repeating units. Dalton Tran.* **2015**, *44*, 11437-11443.
40. Gonsales, S. A.; Pascualini, M. E.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Fast "Wittig-like" reactions as a consequence of the inorganic enamine effect. J. Am. Chem. Soc.* **2015**, *137*, 4840-4845.
41. Nadif, S. Pedziwiatr, J.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Synthesis and characterization of group IV trianionic ONO³⁻ pincer-type ligand complexes and a rare case of through-space ¹⁹F-¹⁹F coupling. Organometallics* **2015**, *34*, 1107-1117.
42. Pascualini, M. E.; Di Russo, N. V.; Thuijs, A. E.; Ozarowski, A.; Stoian, S. A.; Abboud, K. A.; Christou, G.; Veige, A. S.* *A high-spin square-planar Fe(II) complex stabilized by a trianionic pincer-type ligand and conclusive evidence for retention of geometry and spin state in solution. Chem. Sci.* **2015**, *6*, 608-612.
Chemistry World Highlight: <http://www.rsc.org/chemistryworld/2014/10/high-spin-square-planar-iron-complex>
43. Garner, M. E.; Niu, W.; Chen, X.; Ghiviriga, I.; Abboud, K. A.; Tan, W.; Veige, A. S.* *N-heterocyclic carbene gold(I) and silver(I) complexes bearing functional groups for bio-conjugation. Dalton Trans.* **2015**, *44*, 1914-1923.
44. Pascualini, M. E.; Di Russo, N. V.; Quintero, P. A.; Thuijs, A. A.; Pinkowicz, D. Abboud, K. A.; Dunbar, K. R.; Christou, G.; Meisel, M. W.; Veige A. S.* *Synthesis, characterization, and reactivity of iron(III) complexes supported by a trianionic ONO³⁻ pincer ligand, Inorg. Chem.* **2014**, *24*, 13078-13088.
45. O'Reilly, M. E.; Veige, A. S.* *Trianionic pincer and pincer-type metal complexes and catalysis. Chem. Soc. Rev.*, **2014**, *33*, 836-839.
46. O'Reilly, M. E.; Nadif, S.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Synthesis and characterization of tungsten-alkylidene and -alkylidyne complexes supported by a new pyrrolide-centered trianionic ONO³⁻ pincer-type ligand. Organometallics*, **2014**, *33*, 836-839. "Cover Art"
47. Venkatramani, S.; Pascualini, M. E.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Synthesis and characterization of trianionic pincer-type complexes of tantalum(V) including solid (X-ray) and solution (NMR) state assignment of an intraligand N-H-F hydrogen bonding interaction. Polyhedron*, **2013**, *64*, 377-387.
48. Powers, A. R.; Yang, X.; Del Castillo, T. J.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Inorganic click (iClick) synthesis of heterotrinnuclear Pt^{II}/Au^I complexes. Dalton Trans.* **2013**, *42*, 14963-14966.
<http://blogs.rsc.org/dt/2013/09/10/using-click-reactions-to-incorporate-multiple-metals-in-molecules/>
49. Mullick, A. B.; R.; Chang, Y. M.; Ghiviriga, I.; Abboud, K. A.; Tan, W.; Veige, A. S.* *Human cancerous and healthy cell cytotoxicity studies of a chiral μ-dicarbene-digold(I) metallamacrocycle. Dalton Trans.* **2013**, *42*, 7440-7446, (invited special issue on N-heterocyclic carbenes).
50. McGowan, K. P.; O'Reilly, M. E.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Compelling mechanistic data and identification of the active species in tungsten-catalyzed alkyne polymerizations: conversion of a trianionic pincer into a new tetraanionic pincer-type ligand. Chem. Sci.* **2013**, *4*, 1145-1155.
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51. O'Reilly, M. E.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Unusually stable tungstenacyclobutadienes featuring an ONO trianionic pincer-type ligand*. *Dalton Trans.* **2013**, 42, 3326-3336.
“Hot Article” <http://blogs.rsc.org/dt/2013/01/30/remarkable-stability-demonstrated-by-tungstenacyclobutadiene-complexes/>
52. Mullick, A. B.; Jeletic, M. S.; Powers, A. R.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *Convenient in situ generation of a chiral bis-N-heterocyclic carbene palladium catalyst and its application in enantioselective synthesis*. *Polyhedron (invited Werner 100th Anniversary Issue)*, **2013**, 52, 810-819.
53. O'Reilly, M. E.; Ghiviriga, I.; Abboud, K. A.; Veige, A. S.* *A new ONO³⁻ trianionic pincer-type ligand for generating highly nucleophilic metal-carbon multiple bonds: an inorganic enamine*. *J. Am. Chem. Soc.* **2012**, 134, 11185-11195.
54. McGowan, K. P.; Veige, A. S.* *A Neutral Trianionic Pincer [NCN]Cr^{IV}-Me Complex as a highly active ethylene polymerization precatalyst*. *J. Organomet. Chem.* **2012**, 711, 10.
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57. Jeletic, M. S.; Lower, C. E.; Ghiviriga, I.; Veige, A. S.* *Chemical exchange saturation transfer (CEST) as a quantitative tool to measure ligand flexibility of chelating chiral di-N-heterocyclic carbene complexes*. *Organometallics*, **2011**, 30, 6034-6043.
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62. Del Castillo, T. J.; Sarkar, S.; Abboud, K. A. Veige, A. S.* *1,3-Dipolar cycloaddition between a metal-azide (Ph₃PAuN₃) and a metal-acetylide (Ph₃PAuC \equiv CPh): an inorganic version of a click reaction*. *Dalton Trans.* **2011**, 40, 8140-8144.
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- two-electron mixed-valence complexes. *J. Am. Chem. Soc.* **2005**, *127*, 16641–16651.
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 84. Gray, T. G.; Veige, A. S.; Nocera, D. N. *Cooperative bimetallic chemistry: hydrogen addition in two-electron mixed-valence compounds.* *J. Am. Chem. Soc.* **2004**, *126*, 9760–9768.
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Patents/Patent Applications

- 1) Mandal, U.; Veige, A. S. Tethered Alkylidene and Methods of Making the Same. US App. No. 63/222,096 (2021).
- 2) Beto, C. E.; Yang, Y.; Schanze, K. S.; Veige, A. S. Metallopolymers and iClick Synthesis

- Thereof. US App. No. 63/231,849 (2021).
- 3) Veige, A. S.; Sumerlin, B. S.; Miao, Z. Removing acetylene from ethylene gas streams during polyethylene synthesis. U.S. Pat. Appl. Publ. (2021), US 20210094896 A1 20210401.
 - 4) Gonsales, S.; Miao, Z.; Sumerlin, B. S.; Veige, A. S. Cyclic polyacetylene and methods of preparing the same. PCT Int. Appl. (2020), US21/17916.
 - 5) Veige, A. S.; Jakhar, V. K.; Jan, M. J.; Compositions and methods for stereoregular ring expansion metathesis polymerization. PCT Int. Appl. (2019), WO 2019108969 A1 20190606.
 - 6) Veige, A. S. *Bifunctional Catalysts for Ring Expansion Metathesis Polymerization and Cyclic Polymers Prepared with Same*. PCT Int. Appl. 62/822,514 (2019).
 - 7) Veige, A. S. Functionalized cyclic polymers and methods of preparing same. PCT Int. Appl. (2020), WO 2020223672 A1 20201105.
 - 8) Veige, A. S. *Macrocyclic polyalkanes, macrocyclic polyalkane-alkenes, and related methods*, PCT Int. Appl. (2019), WO 2019060090 A1 20190328.
 - 9) Veige, A. S. *Cyclic polyolefins derived from hexyne, octyne, nonyne, pentadecyne and their copolymers with acetylene*. PCT Int. Appl. (2019), WO 2019058192 A1 20190328.
 - 10) Jakhar, V. and Veige, A. S. *Catalysts and Methods of Polymerizing*. PCT Int. Appl. (2020), WO 2020223426 A1 20201105.
 - 11) Niu, W.; Garner, M. E.; Veige, A. S. *Aptamer conjugates with N-heterocyclic carbene metal complexes for targeted drug delivery*. PCT Int. Appl. (2017), WO 2017049270 A1 20170323.
Issued Patent No. US 2017/0107516 A1
 - 12) Veige, A. S.; Gonsales, S. A. *Catalyst for ring expansion metathesis polymerization of cyclic monomers*. PCT/US2016/052437, WO 2017/049270 A1, March 23, 2017.
 - 13) Roland, C. D.; Kuppaswamy, S.; McGowan, K. P.; Sarker, S.; Veige, A. S. *Metallacycloalkylene complex and use for alkyne polymerization to cyclic polyacetylenes*. PCT Int. Appl. (2015), WO 2015191571 A1 20151217.
 - 14) Veige, A. S.*; Falkowski, J. M.; O'Reilly, M. *Trianionic Pincer Ligands, Cr(III)/Cr(V) catalytic system and its use for aerobic oxidation of organic substrates*. U.S. (2014), US 8846950 B2 20140930.
Issued Patent No. US 8,846,950 B2
 - 15) Sarkar, S.; Kuppaswamy, S.; McGowan, K. P.; Veige, A.S.* *Tridentate pincer ligand supported metal-alkylidyne and metallacycloalkylene complexes for alkyne*

- polymerization*. PCT Int. Appl. (2013), WO 2013085707 A1 20130613.
Issued Patent No. US 2014/00309389 A1
- 16) O'Reilly, M. E.; Jan, M. T.; Veige, A. S. *ONO pincer ligands and ONO pincer ligand comprising metal complexes*. PCT Int. Appl. (2012), WO 2012154945 A2 20121115.
Issued Patent No. US 2014/0073800 A1
- 17) Veige, A. S.*; Murray, J. L.; Del Castillo, T. J. *Method for linking two or more metal metals for photo and electronic materials*. PCT Int. Appl. (2012), WO 2012058285 A2 20120503.
- 18) Veige, A. S.*; McGowan K. P. *NCN Trianionic Pincer Complexes as Catalysts for Olefin Polymerization and Isomerization*. PCT Int. Appl. (2012), WO 2012047517 A2 20120412.
Issued Patent No. US 2013/0289326 A1
- 19) Veige, A. S.; Sarkar, S. *Method for transferring N-atoms from metal complexes to organic and inorganic substrates*. U.S. Pat. Appl. Publ. (2009), US 20090281343 A1 20091112.
- 20) Veige, A. S.; Jeletic, M. S.; Lowry, R. J. *Preparation of N-heterocyclic carbene catalysts for enantioselective catalysis*. PCT Int. Appl. (2008), WO 2008101197 A1 20080821.
Issued Patent No. US 8,455,661 B2

Invited Seminars

1. University of South Alabama, Mobile, AL, November 12, 2004.
2. College of Charleston, Charleston, SC, October 2005,
3. Rollins College, Winter Park, FL, February, 22, 2007.
4. Valdosta State University, Valdosta, GA, Thursday, 6, 2007.
5. NSF Inorganic Workshop, Virginia Beach, VA, June 9-12, 2008.
6. Symposium Invitation: Activation of Dinitrogen: Past, Present and Future. ACS, Philadelphia, PA, August, 17, 2008.
7. John Carroll University, Cleveland, OH, November 5, 2008.
8. Case Western Reserve University, Cleveland, OH, November 6, 2008.
9. University of Toronto, Toronto, ON, Canada, November 26, 2008.
10. University of Guelph, Guelph, ON, Canada, November 27, 2008.
11. Indiana University, Bloomington, IN, January 15, 2009.
12. Florida State University, Tallahassee, FL, February 5, 2009.
13. UC Santa Barbara, Santa Barbara, CA, March 4, 2009.
14. UC Irvine, Costa Mesa, CA, March 5, 2009.
15. California Institute of Technology, Pasadena, CA, March 9, 2009.
16. UCLA, Los Angeles, CA, March 11, 2009.
17. Georgia Institute of Technology, Atlanta, GA, April 27, 2009.
18. Emory University, Atlanta, GA, April 28, 2009.
19. Florida Section of the ACS Conference, FAME, Orlando, FL, May 15, 2009.
20. North American-Greece-Cyprus Workshop on Paramagnetic Materials (NAGC), Protaras, Cyprus, June 15, 2009.
21. Organometallics Gordon Research Conference, Newport, RI, July 12, 2009.
22. MIT, Cambridge, MA, May 5th, 2010.

23. Current Trends in Molecular and Nanoscale Magnetism (CTMNM), Orlando, FL, June 20, 2010.
24. *N*-Heterocyclic Carbene Chemistry, Canadian Chemistry Conference, Toronto, CA, May 29, 2010
25. Cornell University, Sept. 30th 2010.
26. PACIFICHEM, Honolulu, HA, December 15, 2010.
27. Florida Section of the ACS Conference, Young Investigators of Florida Symposium, FAME, Innisbrook, FL, May 15, 2011.
28. University of Miami, FL, September 1, 2011.
29. Florida International University, September 2, 2011.
30. University of North Florida, March 2, 2012.
31. University of Ottawa, March 9, 2012.
32. Symposium Invitation: Symposium in Honor of Prof. Oleg Ozerov's ACS Award in Pure Chemistry, San Diego, CA, March, 25-29, 2012.
33. Florida Section of the ACS Conference, Inorganic Session, FAME, Innisbrook, FL, May 18, 2012.
34. Challenges in Inorganic and Materials Chemistry (ISACS8), Toronto, Canada, July 19-22, 2012.
35. Exxon Mobil, Baytown, TX, February 22, 2013.
36. University of Oregon, April 16th, 2013.
37. University of California, Riverside, April 18th, 2013.
38. Invited Speaker: The 20th International Symposium on Olefin Metathesis and Related Chemistry (ISOM XX), July 14-19, 2013.
39. University of South Florida, Sept. 5th, 2013.
40. University of Strasbourg, Strasbourg, France, Nov. 21st, 2013.
41. Ecole Polytechnique, Paris, France, Nov. 22nd, 2013.
42. Discussion Experiment Theory Inorganic Chemistry (DETIC), Tarragona, Spain, Nov. 25th, 2013.
43. University of Virginia, Jan. 31st, 2014.
44. Invited Speaker: Fusion Conference, Functional Polymeric Materials, Cancun, Mexico, February, 13, 2014.
45. Invited Speaker: Zing Conference, 4th Polymer Conference, Cancun, Mexico, December, 11, 2014.
46. University of Berkeley, Berkeley, CA, February 27, 2015.
47. Southern Methodist University, Dallas, TX, April 9th, 2015.
48. PPG Industries, Pittsburgh, PA, April 21, 2015.
49. Michigan State University, MI, September 21, 2015.
50. PACIFICHEM. American Chemical Society Meeting, Honolulu, HI, December 17, 2015, *Metal Coordination Sphere Design for Challenging Bond Transformations*.
51. PACIFICHEM. American Chemical Society Meeting, Honolulu, HI, December 19, 2015, *Cyclic and Topological Polymers*.
52. PACIFICHEM. American Chemical Society Meeting, Honolulu, HI, December 19, 2015, *Activation of Small Molecules by Electropositive Metals Related to Chemical Energy Conversion*.
53. University of South Florida, Tampa, FL, March 1, 2016.
54. Fusion, 2nd Small Molecules Activation Conference, May 20-23, 2016, Cancun, Mexico.
55. 99th Canadian Society for Chemistry National Meeting, Ligand Design In Metal Chemistry Symposium, June 5-9th, 2016, Halifax, Nova Scotia, Canada.
56. Exxon Mobil, Baytown, TX, Aug. 26th, 2016.

57. Baylor University, Waco, TX, Sept. 9th, 2016.
58. Cyclic Polymer Symposium, Soochow University, Suzhou, China, Oct. 23rd, 2016.
59. Auburn University, Auburn, AL, Nov. 10th, 2016.
60. Manchester University, Manchester, England, Nov. 30th, 2016.
61. University of Newcastle, Newcastle, England, Dec. 6th, 2016.
62. University of Leeds, Leeds, England, Dec 7th, 2016.
63. University of Pennsylvania, Philadelphia, PA, January, 17th, 2017.
64. Denison University, Granville, OH, February 28th, 2017.
65. Florida Institute of Technology, Melbourne, FL, April 13th, 2017.
66. Princeton University, Princeton, NJ, May 16th, 2017.
67. International Symposium on Olefin Metathesis and Related Chemistry (ISOM XXII), Zurich, Switzerland, July 9, 2017
68. Symposium Invitation: ACS National Meeting, Washington, DC, August 20-24th 2017.
69. Advances in Polyolefins, Santa Clara, CA, Sept 27th, 2017.
70. McGill University, Montreal, Canada, Oct 2nd, 2017.
71. Symposium on *N*-Heterocyclic Carbenes, SERMACS, Charlotte, NC, Nov. 10th, 2017
72. Zeon Corporation, Tokyo, Japan, Dec. 5th, 2017.
73. Tokyo Institute of Technology, Ookayama, Japan, Dec. 6th, 2017.
74. Kanagawa University, Yokohama, Japan, Dec. 7th, 2017.
75. University of Tokyo, Tokyo, Japan, Dec. 8th, 2017.
76. Kyoto University, Kyoto Japan, Dec. 12th, 2017.
77. Tokyo Institute of Technology, Suzukake Japan, Dec. 14th, 2017.
78. University of British Columbia, Vancouver, BC, January, 25th, 2018.
79. Purdue University, West Lafayette, IN, Feb 8, 2018.
80. University of California Chemical Symposium (UCCS), UCLA Lake Arrowhead Conference Center, March 26-28, 2018
81. ACS National Meeting, New Orleans, March 18th-27th, 2018.
82. Fusion Conference, 4th Functional Polymeric Materials Conference, Nassau, Bahamas, June 5th-8th, 2018.
83. Organometallics Gordon Research Conference, Salve Regina University, Newport, RI, July 8th-July 13th, 2018.
84. Indiana University, Bloomington IN, October 5th, 2018.
85. University of Colorado, Boulder, CO, October, 15th, 2018.
86. Texas A&M University, College Station, TX, November 9th, 2018.
87. Zeon Corporation, Tokyo, Japan, January 29th, 2019.
88. Tokyo Institute of Technology, International Symposium: Polymers Meet Topology, January 31st, 2019.
89. University of Georgia, Athens, Georgia, February 11th, 2019.
90. Nankai University, Tianjin, China, May 5th, 2019
91. Tianjin University, Tianjin, China, May 5th, 2019
92. Shanghai Jiotong University, Shanghai, China, May 7th, 2019
93. East China Normal University, Shanghai, China, May 8th, 2019
94. 5th Blue Sky Conference on Catalytic Olefin Polymerization, Naples, Italy, June 24th-June 28th, 2019.
95. Leiseburg Kolloquium, University of Heidelberg, Heidelberg, Germany, July 1st, 2019.
96. UC San Diego, Symposium on 0D-4D Materials. San Diego, August 23rd, 2019.
97. POLYPMSE Symposium, ACS National Meeting, San Diego, August 27th, 2019.
98. University of Minnesota, Minneapolis, MN, October, 22nd, 2019.
99. University of Florida, SMARTS Symposium, Gainesville, FL, January 31, 2020.

100. Louisiana State University, Baton Rouge, LA, February, 28, 2020.
101. NC State University, Virtual Seminar, October, 8th, 2020.
102. Albemarle Co. Virtual Seminar, November, 19th, 2020.
103. Rutgers University, New Jersey, Virtual Seminar, April 23, 2021.

Service Profession

- Session Leader, Organometallics GRC, Newport RI, July 8th, 2019
- Associate Editor, Coordination Chemistry Reviews (2017 - present)
- Advisory Board, Chem, Cell Press (2018 – present)
- Polyhedron Editorial Board Member (2013 - present)
- Treasurer, Florida Section of the American Chemical Society (2010-2017)
- National Science Foundation Review Panel (2012, 2020)

Organization of Meetings and Symposia

1. Award Symposium: George Christou 2019 ACS Award in Inorganic Chemistry, American Chemical Society Meeting, Orlando, FL, March 31 - April 4, 2019.
2. Symposium Co-organizer, Innovative Approaches in Bond-Cleavage and Bond-Forming Reactions at Late Transition-Metal Centres, PACIFICHEM. American Chemical Society Meeting, Honolulu, HI, December 15-16, 2015.
3. Symposium Co-organizer, New Catalysis through Ligand Design, ACS Division of Catalysis. American Chemical Society Meeting, Denver, CO, March 22-26, 2015.
4. Symposium Co-organizer, Catalysis Science: The Next Generation, ACS Division of Catalysis. American Chemical Society Meeting, Dallas, TX, March 15-18, 2014.
5. As Treasurer of the Florida Section of the American Chemical Society (FLACS), 89th Florida Annual Meeting and Exposition (FAME) of the ACS, Innisbrook, FL, May 9-12, 2013.
6. Co-organizer, "Symposium on C-H Bond Activation, ACS Division of Catalysis. American Chemical Society Meeting, New Orleans, LA, April 7-10, 2013.
7. As Treasurer of the Florida Section of the American Chemical Society (FLACS), 88th Florida Annual Meeting and Exposition (FAME) of the ACS, Innisbrook, FL, May 13-15, 2012.
8. As Treasurer of the Florida Section of the American Chemical Society (FLACS), 87th Florida Annual Meeting and Exposition (FAME) of the ACS, Innisbrook, FL, May 13-15, 2011.
9. Co-organizer, "Third Workshop on Current Trends in Molecular and Nanoscale Magnetism" Orlando, FL, June 20-24, 2010.
10. Co-organizer, "Award Symposium: Peter T. Wolczanski, 2011 ACS Award in Organometallics, American Chemical Society Meeting, Anaheim, CA, March 26-31, 2011.
11. As Treasurer of the Florida Section of the American Chemical Society (FLACS), 86th Florida Annual Meeting and Exposition (FAME) of the ACS, Innisbrook, FL, May 13-15, 2010.
12. Inorganic Symposium Organizer, Florida Section of the American Chemical Society (FLACS), 85th Florida Annual Meeting and Exposition (FAME) of the ACS, Kissimmee, FL, May 8-10, 2008.
13. Co-organizer, University of Florida, Center for Catalysis, "Frontiers in Catalysis Symposium" Gainesville, FL, April 2007.
14. Co-organizer, University of Florida, Center for Catalysis, "Frontiers in Catalysis Symposium" Gainesville, FL, May 2005.

Outreach

Annual chemistry day at the Gainesville Oaks Mall (2006 - present). *We have developed a long-term partnership between the PI, university students, and local businesses to increase the visibility and attractiveness of the chemical sciences to the public and future scientists. This educational outreach goal coincides annually with the National Chemistry Week. The event is an interactive, fun, and educational experience for students in K–12, local teachers, and parents. My team of undergraduate and graduate student volunteers and I have garnered local media attention through this outreach event. This event raises awareness of the Chemistry program at UF and provides positive publicity within the community for the University of Florida.*

**Funding**

Role	Agency	Grant Title & Dates	Bold = active
PI	National Science Foundation (NSF-CHE)	Catenated, Singlet Fission, and Semi-conducting Cyclic Polymers 9/1/2021 - 8/31/2024	\$645,000 Co-PI: Brent Sumerlin
PI	National Science Foundation	Pioneering Multi-anionic Pincer Ligand Catalysts and Ring Expansion Alkyne	\$485,000

	(NSF-CHE)	Metathesis 8/1/2019 - 7/31/2022	
PI	Industrial Partner	Synthesis of Cyclic Polynorbornene 9/13/2021-9/12/2022	\$100,000
PI	US Department of Energy (DOE-BES)	Expanding iClick to Link Metal Ions in Multidimensional Metallopolymers and Mater 6/1/2019 - 5/31/2022	\$450,000 Co-PI: Kirk Schanze
PI	ACS-PRF-ND	Homogeneous Catalytic Hydrogenolysis of Polyolefins 01/01/2018 – 08/31/2021	\$110,000
PI	National Science Foundation (NSF-CHE-MSN)	Conducting Cyclic Polymers 09/01/2018-08-31-2021	\$450,000 Co-PI: Brent Sumerlin
PI	UF Office of Technology Licensing	Polymer Commercialization 6/1/2020-6/1/2021 (extended)	\$20,000
Co-PI	UF Office of Technology Licensing	Aptamer ATIII Commercialization 5/01/2020-6/21/2021 (extended)	\$15,000
Co-PI	NSF-MRI	MRI: Acquisition of an X-Ray Diffractometer for Next Generation Functional Molecules and Materials 08/01/2018-07-31-2021	\$399,999 PI: LM-White Co-PIs Castellano, Christou, Abboud
PI	ExxonMobil	Synthesis of Cyclic Polyolefins 11/12/2015-10/12/2019	\$422,744
PI	National Science Foundation (NSF-CHE-CAT)	Ligand and Catalyst Designs for Stereocontrolled Ring Expansion Polymerization (REP) 08/01/2016-07/31/19	\$450,000
PI	US Department of Energy (DOE-BES)	iClick Synthesis of Metallopolymers and Highly Emissive Materials 07/15/2016-07/14/19	\$450,000 Co-PI: Kirk Schanze
PI	National Science Foundation (NSF-CHE-MSN)	Revolutionary and Efficient Synthesis of Cyclic Polymers 09/01/2015-08-31-2018	\$315,000 Co-PI: Brent Sumerlin
Co-PI	ARO-DURIP	Acquisition of Dynamic Mechanical Analyzer and Stress-Controlled Rheometer for the Mechanical Characterization of Advanced Materials 7/15/2016 – 7/14/2017	\$224,180
PI	National Science Foundation (NSF-CHE-CAT)	Trianionic pincer supported transition metal complexes for catalyzing value-added reactions 07/15/2013 – 06/30/2016	\$465,000
PI	Strem Chemicals Inc.	Catalysts containing N-heterocyclic carbenes for enantioselective catalysis 05/06/2011 – 05/05/2018	\$13,362.50
PI	Eastman Chemical Co.	Eastman Grad Summer Fellowship Award 05/15/5012 – 05/14/2013	\$10,000
PI	US Department of Energy	Linking metal ions via inorganic click (iClick) reactions	\$160,000

	(DOE-BES)	08/15/2013 – 05/15/2015	
PI	Eastman Chemical Co.	2013 Eastman fellowship award Andrew Powers 04/29/2013 – 04/28/2014	\$5,000
PI	American Chemical Society	A new method to link metal ions via cycloaddition of metal-azides to metal-acetylides 01/01/2012 – 08/31/2014	\$100,000
PI	National Science Foundation	CAREER: New Group VI Catalysts for Nitrile Alkyne Cross- Metathesis (NACM): design, synthesis, and application of trianionic pincer ligands. 04/01/2008 – 03/31/2013	\$623,696
PI	Office of Technology Licensing	Trianionic pincer ligand supported metal alkylidyne complexes for alkyne polymerization 05/01/2013 – 05/15/2014	\$23,501
PI	Alfred P. Sloan	New ligands for organometallic chemistry 06/01/2010 – 05/31/2012	\$50,000
co-PI	National Science Foundation NSF-MRI	Acquisition of a dual source X-ray diffraction instrument 08/01/2008 – 07/31/2010	\$261,619
PI	Camille and Henry Dreyfus Foundation	Bridging the gap between early and late-metal catalysis: d^2 square-planar complexes that mimic their d^8 counterparts 08/15/2004 – 08/15/2010	\$50,000
PI	ACS PRF, Type G	Group 6 Mo(IV), W(IV) square planar complexes supported by new tri-anionic pincer type ligands 04/15/2005 – 04/15/2006	\$35,000