PERICLES STAVROPOULOS

BIOGRAPHICAL SKETCH

(a) Education and Training

UNIVERSITY OF ATHENS, Athens, Greece	Chemistry, B.Sc. 1982
IMPERIAL COLLEGE OF SCIENCE, TECH., London, U.K	Organometallics, Ph.D. 1985
LOUIS PASTEUR UNIVERSITY, Strasbourg, France	Organometallics, Jan.-Dec. 1988
HARVARD UNIVERSITY, Cambridge, MA	Bioinorganic, Jan. 1989- June 1992

(b) Research and Professional Experience

Professor of Chemistry; September 2024-present
MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY (formerly University of Missouri-Rolla), Rolla, MO; Department of Chemistry

Associate Professor of Chemistry; September 2002-August 2024
MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY (formerly University of Missouri-Rolla), Rolla, MO; Department of Chemistry

Assistant Professor of Chemistry; September 1992 – August 2002
BOSTON UNIVERSITY, Boston, MA; Department of Chemistry

(c) Graduate and Postdoctoral Advisors

Sir Geoffrey Wilkinson (Imperial College, UK; deceased)
Prof. John Osborn (Louis Pasteur University, Strasbourg, France; deceased)
Prof. Richard H. Holm (Harvard University; deceased)

(d) Graduate Advisees

Dr. Bharat Singh, Research Director GE, India
Dr. Salma Kiani, Senior Research Scientist, Antisoma, Cambridge, MA.
Dr. Kuljeet Singh, Chair, Chemistry Department, Asham Valley College, India
Dr. Amy Tapper, Senior VP CMC & Preclinical, Imago BioSciences, San Francisco, CA.
Dr. Remle Çelenligil-Çetin, Chair, Chemistry Department Coç School, Istanbul, Turkey.
Dr. Les Dakin, Senior Research Scientist, AstraZeneca, Wilmington, DE
Dr. Devender Pinapareddy, Research Director, Advance Research Chemicals, Inc., Tulsa, OK
Dr. Arun Sahu, Internship in Pharmacy, Tampa, FL
Dr. Qiuwen Wang (exchange student), Department of Medicinal Chemistry, BeiGene Co. China
Dr. Anshika Kalra, Research Scientist, Curia Global, Albany NY.
Dr. Suraj Sahoo (Clariant Corporation, R&D, Polymers, Louisville, KY)
Dr. Meenakshi Mehta (post-doc at University of Kentucky, Lexington, KY)
Himanshu Bhatia (Missouri University of Sci. & Tech.) (current graduate student)

(e) Postdoctoral Advisees

Dr. Saidulu Gorla, ACS Synthetic/Coordination Research Chemist, Columbus, Ohio)
Dr. Vivek Bagchi, Senior Researcher, Inst. of Nano Science and Technology, Punjab, India
Dr. Patrina Paraskevopoulou, Assoc. Professor, Dept. of Chemistry, Univ. of Athens, Greece.
Dr. Rupam Dinda, Assoc. Professor, Dept. of Chemistry, National Institute of Technology, India
Dr. Rama Acharrya, Research Associate, University of Heidelberg, Germany
Dr. Linglin Han, Research Associate, Brigham's and Women's Hospital, Boston, MA
Dr. Lin Ai, Associate Professor, Department of Chemistry, Beijing Normal University, China

Dr. Purak Das, Assist. Professor, Dept. of Chemistry, Rishi Bankim Chandra College, India
Dr. Sudip Mohapatra, Assist. Professor, Dept. of Chemistry, Central University of S. Bihar, India

(f) Collaborators and Co-Editors

Prof. Leroy Cronin (University of Glasgow, UK)
Prof. Thomas Cundari (University of North Texas)
Prof. Jeffrey R. Long (UC-Berkeley)
Prof. James S. Panek (Boston University)
Prof. David T. Richens (Univ. of St. Andrews, Scotland, UK)

(g) Current and Completed Support

Current Support

NIH/NIGMS (R15GM139071)
Stavropoulos, P. (PI, 100%)
Title: Development of First-Row Transition-Metal Catalysts for Selective Nitrene/Carbene-Transfer Chemistry
Award Period: 09/1/2020 – 08/31/2024
Award Amount: $454,497

Completed

Missouri University of Sci & Tech:	Stavropoulos, P.; PI, 100%	
ACS/PRF (60411-ND3)	(07/01/19-08/31/22)	(Total: $110,000)
NIH/NIGMS (R15GM117508)	(09/15/16-03/31/20)	(Total: $428,846)
NIH/NIEHS (Superfund) (P42 ES07381)	(04/01/05-03/31/11)	(Total: $1,201,589)
NSF (CHE-0412959)	(08/01/05-07/31/09)	(Total: $377,000)
NIH/NIEHS (Superfund) (P42 ES07381-06)	(04/01/00-03/31/05)	(Total: $721,911)
DOE (BES) (DE-FG02-99ER14978)	(08/01/99-07/31/02)	(Total: $300,000)

Previous:

Environmental Protection Agency (R823377-01-1)	(10/01/95-09/30/98)
Alzheimer's Association (IIRG-95-087)	(07/01/95-06/30/98)
Petroleum Research Fund/ACS (29383-G3)	(09/01/95-08/31/97)
American Federation for Aging Research	(07/01/94-06/30/95)
Camille and Henry Dreyfus Foundation (SG-96-063)	(01/01/96-12/31/96)

(h) Teaching Responsibilities at MST (2017-24, number of students in parenthesis)

General Chemistry II (Chem 1320): SP17 (143), FS17 (124), SP18 (176), FS18 (110), SP19 (145), FS19 (86), SP20 (142), FS20 (84), SP21 (125), FS21 (71), FS22 (81), SP23 (123), FS23 (81), SP24 (113), FS24 (84)

Qualitative Analysis (Laboratory) (Chem 1510): SP22 (19), SP23 (10), SP24 (9)

Undergraduate Research (Chem 4099): SP18 (1), FS19 (1), FS20 (1), SP21 (2), FS21 (1), SP22 (3), FS22 (1), SP23 (1), FS24 (1)

Graduate Research (Chem 6099): SP17 (2), SS17 (3), FS17 (3), SP18 (3), SS18 (3), FS18 (3), SP19 (4), SS19 (4), FS19 (4), SP20 (4), SS20 (4), FS20 (4), SP21 (4), SS21 (3), FS21 (3), SP22 (3), SS22 (3), FS22 (3), SP23 (3), FS23 (2), SP24 (1), SS24 (1), FS24 (1)

(i) Service Responsibilities at MST since 2017

Personnel Committee (2017, 2018, 2023 – 2025)
Faculty Search Committees (2017, 2018, 2024)
Graduate Recruiting Committee (FS20 – SP24)
Graduate Affairs Committee (2018 – present)
Space Committee (FS22 – present)
Campus P&T Committee (2024-2026)
Budget Committee (FS22 – SP24)

Bibliography

Graduate Work:

1. P. Stavropoulos, "Oxoalkyls and Aryls of Rhenium, Osmium, Tungsten and Molybdenum" Ph. D. Thesis, University of London (Imperial College), December 1985.

2. P. Stavropoulos, P. G. Edwards, G. Wilkinson, M. Motevalli, K. M. A. Malik, M. B. Hursthouse "Oxoalkyls of Rhenium-(v) and -(vi). X-Ray Crystal Structures of $(Me_4ReO)_2Mg(thf)_4$, $[(Me_3SiCH_2)_4ReO]_2Mg(thf)_2$, $Re_2O_3Me_6$, and $Re_2O_3(CH_2SiMe_3)_6$" *J. Chem. Soc., Dalton Trans.* **1985**, 2167–2175.

3. R. P. Tooze, P. Stavropoulos, M. Motevalli, M. B. Hursthouse, G. Wilkinson "Synthesis and X-Ray Crystal Structures of the First Tetrahedral Osmium-(iv) Compounds, Tetrakis(cyclohexyl)osmium-(iv) and Tetrakis(o-methylphenyl)osmium-(iv)" *J. Chem. Soc., Chem. Commun.* **1985**, 1139–1140.

4. P. Stavropoulos, P. G. Edwards, T. Behling, G. Wilkinson, M. Motevalli, M. B. Hursthouse "Oxoaryls of Rhenium-(v) and -(vi) and Osmium-(vi). X-Ray Crystal Structures of Dimesityldioxo-rhenium -(vi), Tetramesityloxorhenium -(vi), and Dimesityldioxoosmium-(vi)" *J. Chem. Soc., Dalton Trans.* **1987**, 169–175.

5. P. Stavropoulos, P. D. Savage, R. P. Tooze, G. Wilkinson, B. Hussain, M. Motevalli, M. B. Hursthouse "The Synthesis and X-Ray Crystal Structures of Homoleptic Tetrahedral Aryls of Osmium-(iv) and of Cyclohexyls of Ruthenium-(iv), Osmium-(iv), and Chromium-(iv)" *J. Chem. Soc., Dalton Trans*. **1987**, 557–562.

6. P. Stavropoulos, G. Wilkinson, M. Motevalli, M. B. Hursthouse "Oxo Methyls of Molybdenum-(v), Tungsten-(v) and Rhenium-(v): X-Ray Crystal Structure of $(Me_4WO)_2Mg(thf)_4$" *Polyhedron* **1987**, *6*, 1081–1087.

7. P. Stavropoulos, P. D. Savage, R. P. Tooze, G. Wilkinson, B. Hussain, M. Motevalli, M. B. Hursthouse "ChemInform Abstract: The Synthesis and X-Ray Crystal Structures of Homoleptic Tetrahedral Aryls of Osmium-(iv) and of Cyclohexyls of Ruthenium-(iv), Osmium-(iv), and Chromium-(iv)" *ChemInform* **1987**, *18*, 28.

Postdoctoral work:

8. P. Stavropoulos, N. Bryson, M.-T. Youinou, J. A. Osborn "Chromyl Complexes with Aryloxy and Siloxy Ligands" *Inorg. Chem.* **1990**, *29*, 1807–1811.

9. P. Stavropoulos, M. Carrié, M. C. Muetterties, R. H. Holm “Reaction Sequence Related to that of Carbon Monoxide Dehydrogenase (Acetyl CoA Synthase): Thioester Formation Mediated at Structurally Defined Nickel Centers” *J. Am. Chem. Soc.* **1990**, *112*, 5385–5387.

10. P. Stavropoulos, N. Bryson, M.-T. Youinou, J. A. Osborn “ChemInform Abstract: Chromyl Complexes with Aryloxy and Siloxy Ligands” *ChemInform* **1990**, *21*, 34.

11. P. Stavropoulos, M. C. Muetterties, M. Carrié, R. H. Holm “Structural and Reaction Chemistry of Nickel Complexes in Relation to Carbon Monoxide Dehydrogenase: A Reaction System Simulating Acetyl-Coenzyme A Synthase Activity” *J. Am. Chem. Soc.* **1991**, *113*, 8485–8492.

Work as Principal Investigator:

12. B. Singh, J. R. Long, G. C. Papaefthymiou, P. Stavropoulos “On the Reduction of Basic Iron Acetate: Isolation of Ferrous Species Mediating Gif-Type Oxidation of Hydrocarbons” *J. Am. Chem. Soc.* **1996**, *118*, 5824–5825.

13. M. Sadeghi, W. Liu, T.-G. Zhang, P. Stavropoulos, B. Levy “The Role of Photo-Induced Charge Carrier Separation Distance in Heterogeneous Photocatalysis. Oxidative Degradation of CH_3OH Vapor in Contact with Pt/TiO_2 and Co-fumed TiO_2-Fe_2O_3” *J. Phys. Chem*. **1996**, *100*, 19466–19474.

14. K. Singh, J. R. Long, P. Stavropoulos “Ligand-Unsupported Metal-Metal (M = Cu, Ag) Interactions Between Closed-Shell d^{10} Trinuclear Systems” *J. Am. Chem. Soc*. **1997**, *119*, 2942–2943.

15. C. E. Masse, B. S. Knight, P. Stavropoulos, J. S. Panek “Asymmetric C-N Bond Constructions via Crotylsilane Addition Reactions: A Stereocontrolled Route to Dipeptide Isosteres” *J. Am. Chem. Soc*. **1997**, *119*, 6040–6047.

16. B. Singh, J. R. Long, F. Fabrizi de Biani, D. Gatteschi, P. Stavropoulos “Synthesis, Reactivity, and Catalytic Behavior of Iron/Zinc-Containing Species Involved in Oxidation of Hydrocarbons under Gif-Type Conditions” *J. Am. Chem. Soc*. **1997**, *119*, 7030–7047.

17. S. Kiani, J. R. Long, P. Stavropoulos “Evidence for Cu···H Interactions in Dinuclear Cu(I) of Hindered Hydrotris(pyrazolyl)borate Ligands” *Inorg. Chim. Acta* **1997**, *263*, 357–366 (volume in honor of Prof. R. H. Holm).

18. C. E. Masse, B. S. Knight, P. Stavropoulos, J. S. Panek “ChemInform Abstract: Asymmetric C-N Bond Constructions via Crotylsilane Addition Reactions: A Stereocontrolled Route to Dipeptide Isosteres” *ChemInform* **1997**, *28*, 42.

19. K. Singh, J. R. Long, P. Stavropoulos “Polynuclear Complexes of Copper(I) and the 2-(3(5)-Pyrazolyl)-6-methylpyridine Ligand: Structures and Reactivity toward Small Molecules” *Inorg. Chem*. **1998**, *37*, 1073–1079.

20. A. Tapper, J. R. Long, R. J. Staples, P. Stavropoulos “Oxygenation of Hydrocarbons Mediated by Mixed-Valent Basic Iron Trifluoroacetates and Valence-Separated Component Species

under Gif-Type Conditions Involves Carbon- and Oxygen-Centered Radicals" *Angew. Chem. Int. Ed.* **2000**, *39*, 2343–2346.

21. Dakin, P. C. Ong, J. S. Panek, R. J. Staples, P. Stavropoulos "Speciation and Mechanistic Studies of Chiral Copper(I) Schiff Base Precursors Mediating Asymmetric Carbenoid Insertion Reactions of Diazoacetates into the Si-H Bond of Silanes" *Organometallics* **2000**, *19*, 2896–2908.

22. D. Neuman, P. Paraskevopoulou, N. Psaroudakis, K. Mertis, R. J. Staples, P. Stavropoulos "Structural and Functional Characteristics of Rhenium Clusters Derived from Redox Chemistry of the Triangular [$Re^{III}_3(\mu\text{-}Cl_3)$] Core Unit" *Inorg. Chem.* **2000**, *39*, 5530–5537.

23. S.Kiani, A. Tapper, R. J. Staples, P. Stavropoulos "Functional Aspects of Gif-type Oxidation of Hydrocarbons Mediated by Iron Picolinate H_2O_2-Dependent Systems: Evidence for the Generation of Carbon- and Oxygen-Centered Radicals" *J. Am. Chem. Soc.* **2000**, *122*, 7503–7517.

24. S. B. Marr, R. O. Carvel, D. T. Richens, H.-J. Lee, M. Lane, P. Stavropoulos "A Comparison between Iron and Ruthenium Reagents Mediating Gif^{IV}-type Oxygenation of Cyclohexane" *Inorg. Chem.* **2000**, *39*, 4630–4638.

25. R. Çelenligil-Çetin, R. J. Staples, P. Stavropoulos "Synthesis, Characterization, and Reactivity of Ferrous and Ferric Oxo/Peroxo Pivalate Complexes in Relation to Gif-type Oxygenation of Substrates" *Inorg. Chem.* **2000**, *39*, 5838–5846.

26. D. Neuman, P. Paraskevopoulou, N. Psaroudakis, K. Mertis, R. J. Staples, P. Stavropoulos "ChemInform Abstract: Structural and Functional Characteristics of Rhenium Clusters Derived from Redox Chemistry of the Triangular [$Re^{III}_3(\mu\text{-}Cl_3)$] Core Unit" *ChemInform* **2001**, *32*, 10.

27. P. Stavropoulos, R. Çelenligil-Çetin, A. Tapper "The Gif Paradox" *Acc. Chem. Res*. **2001**, *34*, 745–752.

28. P. Stavropoulos, R. Çelenligil-Çetin, A. Tapper "ChemInform Abstract: The Gif Paradox" *ChemInform* **2001**, *32*, 48.

29. P. Paraskevopoulou, N. Psaroudakis, S. Koinis, P. Stavropoulos, K. Mertis "Catalytic Selective Oxidation of Benzyl Alcohols to Aldehydes with Rhenium Complexes" *J. Mol. Cat. A: Chem.* **2005**, *240*, 27–32.

30. P. Stavropoulos, R. Çelenligil-Çetin, S. Kiani, A. Tapper, D. Pinnapareddy, P. Paraskevopoulou "Gif Reactions" in *Handbook of C–H Transformations. Applications in Organic Synthesis*; Dyker, G. (Ed.); Wiley-VCH: Weinheim, 2005; pp 497–507.

31. P. Paraskevopoulou, E. Petalidou, N. Psaroudakis, P. Stavropoulos, K. Mertis "Efficient Chemoselective Oxidation of Phenylmethanols to Aldehydes with Iodosobenzene" *Monatsh. Chem.* **2005**, *136*, 2035–2039.

32. P. Stavropoulos, R. Çelenligil-Çetin, S. Kiani, A. Tapper, D. Pinnapareddy, P. Paraskevopoulou "Iron, bis(pyridine)bis(2-pyridinecarboxylato-N1,O2)" in *Encyclopaedia of Reagents for Organic* Synthesis; Fuchs, P. (Ed.); Wiley: New York, **2006**; pp 414–415.

33. P. Paraskevopoulou, E. Petalidou, A. Panas, M. Ioannou, S. Koinis, N. Psaroudakis, N. Leventis, P. Stavropoulos, K. Mertis "Redox reactivity and comprehensive synthetic chemistry of the perchloroditungstate $[W_2(\mu\text{-}Cl)_3Cl_6]^{n-}$ (n = 3, 2, 1) anions in organic media" *Polyhedron* **2008**, *27*, 2859–2866.

34. R. Çelenligil-Çetin, P. Paraskevopoulou, R. Dinda, Y. Sanakis, R. J. Staples, E. Sinn, N. P. Rath, P. Stavropoulos "Synthesis, Characterization, and Reactivity of Iron Trisamido-Amine Complexes that Undergo both Metal- and Ligand-Centered Oxidative Transformations" *Inorg. Chem*. **2008**, *47*, 1165–1172.

35. R. Çelenligil-Çetin, P. Paraskevopoulou, R. Dinda, N. Lalioti, Y. Sanakis, A. M. Rawashdeh, R. J. Staples, E. Sinn, P. Stavropoulos "Oxidative Ligand Rearrangement due to Incipient Aminyl Radicals in the Oxidation of Iron(II) Species with Dioxygen" *Eur. J. Inorg. Chem.* **2008**, 673–677.

36. R. Çelenligil-Çetin, P. Paraskevopoulou, N. Lalioti, Y. Sanakis, R. J. Staples, N. P. Rath, P. Stavropoulos "Metalloradical Complexes of Manganese and Chromium Featuring an Oxidatively Rearranged Ligand" *Inorg. Chem*. **2008**, *47*, 10998–11009.

37. P. Paraskevopoulou, A. Lin, Q. Wang, D. Pinnapareddy, R. Acharrya, R. Dinda, R. Çelenligil-Çetin, G. Floros, Y. Sanakis, A. Choudhury, N. P. Rath, P. Stavropoulos "Synthesis and Characterization of a Series of Structurally and Electronically Diverse Fe(II) Complexes Featuring a Family of Triphenylamido-amine Ligands" *Inorg. Chem*. **2010**, *49*, 108–122.

38. P. Paraskevopoulou, C. Makedonas, N. Psaroudakis, C. A. Mitsopoulou, G. Floros, A. Seressioti, M. Ioannou, Y. Sanakis, N. Rath, C. J. Gómez García, P. Stavropoulos, K. Mertis "Isolation, Characterization, and Computational Studies of the Novel $[Mo_3(\mu_3\text{-}Br)_2(\mu\text{-}Br)_3Br_6]^{2-}$ Cluster Anion" *Inorg. Chem.* **2010**, *49*, 2068–2076.

39. G. Unal, E. Marquez, M. H. O'Brien, P. Stavropoulos, I. P. Callard "Expression of cytochrome P450 aromatase isoforms in female *Alburnus tarichi* (Guldenstaedtii, 1814)" *Ege Journal of Fisheries and Aquatic Studies* **2011**, *38*, 247–252.

40. V. Bagchi, G. Raptopoulos, P. Das, S. Christodoulou, Q. Wang, L. Ai, M. Pitsikalis, P. Paraskevopoulou, P. Stavropoulos "Synthesis and Characterization of a Family of Co(II) Triphenylamido-Amine Complexes and Catalytic Activity in Controlled Radical Polymerization of Olefins" *Polyhedron* **2013**, *52*, 78–90 (Alfred Werner Nobel prize commemorative issue).

41. G. Unal, E. C. Marquez, M. Feld, P. Stavropoulos, I. P. Callard "Isolation of estrogen receptor subtypes and vitellogenin genes: Expression in female *Chalcalburnus tarichi*" *Comp. Biochem. Physiol., Part B* **2014**, *172-173*, 67–73.

42. V. Bagchi, P. Paraskevopoulou, P. Das, L. Chi, Q. Wang, A. Choudhury, J. S. Mathieson, L. Cronin, D. B. Pardue, T. R. Cundari, G. Mitrikas, Y. Sanakis, P. Stavropoulos "A Versatile Tripodal Cu(I) Reagent for C–N Bond Construction via Nitrene-Transfer Chemistry: Catalytic Perspectives and Mechanistic Insights on C–H Aminations/Amidinations and Olefin Aziridinations" *J. Am. Chem. Soc.* **2014**, *136*, 11362–11381.

43. N. Levesanos, W. P. R. Liyanage, E. Ferentinos, G. Raptopoulos, P. Paraskevopoulou, Y. Sanakis, A. Choudhury, P. Stavropoulos, M. Nath, P. Kyritsis "Investigating the Structural, Spectroscopic, and Electrochemical Properties of $[Fe\{(EP\textit{i}Pr_2)_2N\}_2]$ (E = S, Se) and the

Formation of Iron Selenides by Chemical Vapor Deposition" *Eur. J. Inorg. Chem.* **2016**, 5332–5339.

44. P. Stavropoulos "Metal-Catalyzed and Metal-Free Intermolecular Amination of Light Alkanes and Benzenes" *Comm. Inorg. Chem.* **2016**, 1–57.

45. L. Fang, C. Lv, G. Wang, L. Feng, P. Stavropoulos, G. Gao, L. Ai, J. Zhang "Discrimination of enantiomers of dipeptide derivatives with two chiral centers by tetraaza macrocyclic chiral solvating agents using ^{1}NMR spectroscopy" *Org. Chem. Front.* **2016**, *3*, 1716–1724.

46. C. Lv, L. Feng, H. Hao, G. Wang, P. Stavropoulos, L. Ai "Chiral discrimination of α-hydroxy acids and *N*-Ts-α-amino acids induced by tetraaza macrocyclic chiral solvating agents by using ^{1}H NMR spectroscopy" *Org. Biomol. Chem*. **2017**, *15*, 1642–1650.

47. L. Feng, G. Gao, H. Zhao, L. Zheng, Y. Wang, P. Stavropoulos, L. Ai, J. Zhang "Synthesis of Tripeptide Derivatives with Three Stereogenic Centers and Chiral Recognition Probed by Tetraaza Macrocyclic Chiral Solvating Agents Derived from D-Phenylalanine and (1*S*,2*S*)-(+)-1,2-Diaminocyclohexane via ^{1}H NMR Spectroscopy" *J. Org. Chem.* **2018**, *83*, 13874–13887.

48. V. Bagchi, A. Kalra, P. Das, P. Paraskevopoulou, S. Gorla, L. Ai, Q. Wang, S. Mohapatra, A. Choudhury, Z. Sun, T. R. Cundari, P. Stavropoulos "Comparative Nitrene-Transfer Chemistry to Olefinic Substrates Mediated by a Library of Anionic Mn(II) Triphenylamido-Amine Reagents and M(II) Congeners (M = Fe, Co, Ni) Favoring Aromatic over Aliphatic Alkenes" *ACS Catal.* **2018**, *8*, 9183–9206.

49. H. Zhang, H. Zhao, J. Wen, Z. Zhang, P. Stavropoulos, Y. Li, L. Ai, J. Zhang "Discrimination of enantiomers of amides with two stereogenic centers enabled by chiral bisthiourea derivatives using 1H NMR Spectroscopy" *Org. Biomol. Chem*. **2021**, *19*, 6697–6706.

50. A. Kalra, V. Bagchi, P. Paraskevopoulou, P. Das, L. Ai, Y. Sanakis, G. Raptopoulos, S. Mohapatra, A. Choudhury, Z. Sun, T. R. Cundari, P. Stavropoulos "Is the Electrophilicity of the Metal Nitrene the Sole Predictor of Metal-Mediated Nitrene Transfer to Olefins? Secondary Contributing Factors as Revealed by a Library of High-Spin Co(II) Reagents" *Organometallics* **2021**, *40*, 1974–1996.

51. J. Wen, L. Feng, H. Zhao, L. Zheng, P. Stavropoulos, L. Ai, J. Zhang "Chiral Recognition of Hydantoin Derivatives Enabled by Tetraaza Macrocyclic Solvating Agents Using ^{1}H NMR Spectroscopy" *J. Org. Chem.* **2022**, *87*, 7934–7944.

52. Y.-L. Li, H.-M. Zhao, Y.-Q. Ren, M. Qui, H.-T. Zhang, G.-P. Gao, L. Zheng, P. Stavropoulos, L. Ai "Synthesis of Enantiomers of Chiral Ester Derivatives Containing an Amide Group and Their Chiral Recognition by ^{1}H NMR Spectroscopy" *ChemSelect* **2023**, *8*, e202204039.

53. S. K. Sahoo, B. Harfmann, L. Ai, Q. Wang, S. Mohapatra, A. Choudhury, P. Stavropoulos "Cationic Divalent Metal Sites (M = Mn, Fe, Co) Operating as Both Nitrene-Transfer Agents and Lewis Acids toward Mediating the Synthesis of Three- and Five-Membered *N*-Heterocycles" *Inorg. Chem*. **2023**, *62*, 10743-10761.

54. M. Sharma, R. M. Fritz, J. O. Adebanjo, Z. Lu, T. R. Cundari, M. A. Omary, A. Choudhury, P. Stavropoulos “Nitrene-Transfer Chemistry to C–H and C=C Bonds Mediated by Triangular Coinage Metal Platforms Supported by Triply Bridging Pnictogen Elements Sb(III) and Bi(III)” *Organometallics* **2024**, *43*, 634-652.

55. S. K. Sahoo, B. Harfmann, H. Bhatia, H. Singh, S. Balijapelly, A. Choudhury, P. Stavropoulos “A Comparative Study of Cationic Copper(I) Reagents Supported by Bipodal Tetramethylguanidinyl-Containing Ligands as Nitrene-Transfer Catalysts” *ACS Omega* **2024**, *9*, 15697-15708.

56. Y. Wang, H. Zhao, C. Yang, L. Fang, L. Zheng, H. Lv, P. Stavropoulos, L. Ai, J. Zhang “Chiral Recognition of Chiral (Hetero)Cyclic Derivatives Probed by Tetraaza Macrocyclic Chiral Solvating Agents via ^{1}H NMR Spectroscopy” *Anal. Chem.* **2024**, *96*, 5188-5194.

57. M. Sharma, R. M. Fritz, H. Bhatia, J. O. Adebanjo, Z. Lu, M. A. Omary, T. R. Cundari, A. Choudhury, P. Stavropoulos “C–H Amination Chemistry Mediated by Trinuclear Cu(I) Sites Supported by a Ligand Scaffold Featuring an Arene Platform and Tetramethylguanidinyl Residues” *Dalton Trans.* **2024**, DOI: 10.1039/D4DT01670J