

## Dr. Christos Lampropoulos

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Date/place of birth: May 13, 1981, Patras, Greece

Nationality: Greek / US Permanent Resident

Marital status: Married

### Academic Background

08/2004-05/2009

Ph.D. in Physical-Inorganic Chemistry, Department of Chemistry, University of Florida, Gainesville, FL, USA.

Dissertation: “*Homo- and heterometallic manganese clusters: New metal architectures, single-molecule magnets, and physical phenomena*”.

Ph.D. Supervisor: Drago Professor George Christou

08/2004-12/2007

M.Sc. in Chemistry, Department of Chemistry, University of Florida, Gainesville, FL, USA.

Thesis: “*New manganese – cerium clusters with novel topologies: Synthesis, X-ray crystallography, and magnetic characterization of two unprecedented hexa- and decametallc mixed-metal cages*”.

M.Sc. Supervisor: Drago Professor George Christou

08/1999-05/2004

B.A. in Chemistry with Honors, University of Illinois at Chicago, Chicago, IL, USA.

Undergraduate research thesis: “*Synthesis of trifluoromethyl-containing organometallic compounds of platinum and molybdenum*”.

Undergraduate research supervisor: Professor John Morrison

### Professional / Research Experience

01/2014-present

Founding Partner CEO of Lamp Light Technologies LLC

08/2011-present

Assistant Professor of Chemistry, University of North Florida, Jacksonville

05/2013-08/2013

Visiting Assistant Professor of Chemistry, University of Cyprus, Nicosia, Cyprus

06/2009-06/2011

Post-Doctoral Research Fellow, University of Patras, Patras, Greece

### Current External Funding

#### - NSF-MRI Grant

**Title:** “*MRI: Acquisition of a Single-Crystal Microsource Diffractometer for Interdisciplinary Materials Research and STEM Education*”.

**Budget:** \$ 407,491.00

Principal Investigator: Dr. Christos Lampropoulos (group proposal with other Co-PIs).

#### - Cottrell College Science Award, Research Corporation for Science Advancement

**Title:** “*Target Synthesis of Hybrid Nanomaterials from Single-Molecule Magnets*”

**Budget:** \$ 45,000

Principal Investigator: Dr. Christos Lampropoulos

#### - Jean Dreyfus Boissevain Lectureship for Undergraduate Institutions

**Budget:** \$18,500.00

Principal Investigators: Dr. Christos Lampropoulos and Dr. Kenneth Laali.

### Past Funding

#### - European Commission-Funded Research: University of Patras (Patras, Greece).

**Title:** “*New approaches to nanoscale molecular magnetic materials from the use of cyanate groups in higher oxidation state manganese cluster chemistry*”.

Principal investigators: Dr. Christos Lampropoulos and Prof. Spyros P. Perlepes.

#### - NSF-Funded Projects: Research Assistantship (Award # NSF-CHE-0414555 and NSF-CHE-0910472)

- **NSF-Funded Research:** National High Magnetic Field Laboratory (Tallahassee, FL, USA).  
Subject: “*Characterization of single-molecule magnets using solid-state NMR spectroscopy*”.  
Collaborator: Prof. Naresh Dalal.
- **NSF/NIH-Funded Research:** University of Florida and National High Magnetic Field Laboratory (Tallahassee, FL, USA).  
Subject: “*Characterization of single-molecule magnets using high-frequency EPR techniques*”.  
Collaborator: Professor Stephen Hill.
- **Peer-reviewed publications (published/in press):** 30 (17 Full Papers, 12 Communications, 1 review)  
4 Invited Papers
- **Weight average of impact factor:** 4.013
- **Hetero-citations:** 407 (as of December 2014)
- **h-index:** 13
- **Presentations in conferences and research schools:** 52

### Synergistic Activities:

- **Editorial board membership:** *Austin Journal of Nanomedicine & Nanotechnology* (since 2013)
- **Membership in the NHMFL EMR Users Committee (nominated and elected):** Since 2013
- **Membership in the ACS Committee for Computers in Chemical Education:** Since 2013
- **Membership in the Sensors Group at UNF:** Since 2012
- **Membership in the Materials/Materials Characterization Group at UNF:** Since 2012
- **Organizing Committees for local and International Conferences:** a) 13<sup>th</sup> Int. Conf. of Molecule-based Magnets (ICMM 2012); b) 4<sup>th</sup> N. America Greece Cyprus Workshop on Paramagnetic Materials (NAGC 2011); c) FL Inorg. Mater. Symp. (FIMS 2005-2009).
- **Reviewer in International Journals (Since 2011):** a) *J. Chem. Ed.* (ACS); b) *Inorg. Chem.* (ACS); c) *Polyhedron* (Elsevier); d) *Journal of Chemistry* (Hindawi); e) *ZAAC - Zeitschrift für Anorganische und Allgemeine Chemie* (Willey); f) *Coord.Chem.Rev.* (Elsevier).
- **Invited Lectures and Seminars:** Invited seminar Indiana University, Bloomington IN, 2013; Invited seminar Indiana University Purdue University Indianapolis, Indianapolis IN, 2013; North America Greece Cyprus workshop on paramagnetic materials (NAGC2013) Invited oral presentation, Limassol Cyprus, 2013; Florida ACS Meeting and Exposition (FAME2013) Invited oral presentation; Invited seminar Florida Institute of Technology, Melbourne FL 2012; Mastering Leadership Conference, Phoenix, 2012 (invited attendee); Hellenic Chemical Society lectureship, Greece 2012; 37<sup>th</sup> South Eastern Magnetic Resonance Conference, Tallahassee FL, 2008.

### Teaching Experience:

- **At UNF (Since Fall 2011)**
  - CHM 2045 General Chemistry I: Spring 2012  
Fall 2012 / Spring 2013,  
Fall 2013 / Spring 2014.
  - CHM 2045 L General Chemistry I Laboratory: Fall 2011 / Spring 2013
  - (H) CHM 2045 L Honors General Chemistry I Laboratory: Spring 2014
  - CHM 2046 General Chemistry II: Summer 2012
  - CHM 3610 Inorganic Chemistry: Fall 2011 / Fall 2012,  
Fall 2013
  - CHM 3610 L Inorganic Chemistry Laboratory: Fall 2011 / Spring 2012,  
Fall 2012 / Spring 2013,  
Fall 2013
  - CHM 4910 Chemical Research: Spring 2012 (4 students)  
Summer 2012 (1 student)  
Fall 2012 (1 student)  
Spring 2013 (1 student)

- CHM 4930 Chemical Research (selected topics)
  - Fall 2013 (1 student)
  - Fall 2012 (1 student)
  - Spring 2013 (1 student)
- Nominated 2 times for outstanding undergraduate teaching
- UNF Outstanding Undergraduate Teaching Award for AY2014-15
- **At the University of Patras (2009-2011) as Lecturer / Guest Lecturer**
  - Magnetism and Magnetic Materials (seminar series)
  - Bioinorganic Chemistry (lectures part of graduate level course)
  - Inorganic Chemistry Laboratory (teaching assistant)
  - Molecular Materials (lectures part of graduate level course)
- **At the University of Florida (2004-2009) as a Teaching Assistant (discussion sections)**
  - CHM 2045 General Chemistry I (1 semester)
  - CHM 2046 General Chemistry II (8 semesters)
  - Recipient of the 2006 Department of Chemistry Teaching award

### **Research Group Mentorship**

- **At UNF (Since Fall 2011):**
  - 17 Undergraduate Students
  - 2 High School Visiting Student
  - 1 Post-Doctoral Fellow / Visiting Faculty
  - Nominated for the UNF Mentor of the year award (AY2013-2014)
- **At the University of Patras (2009-2011):**
  - 6 Senior Undergraduate Researchers
  - 2 Graduate Students
- **At the University of Florida (2004-2009):**
  - 3 High School Students
  - 4 Undergraduate Students
  - Trained 3 Post-doctoral fellows, 8 graduate (M.Sc. and Ph.D) students

### **Experimental Techniques and Skills**

- Synthesis of metal complexes (monomers, clusters, coordination polymers).
- Synthesis of oximate-based organic ligands.
- Solvothermal and Hydrothermal techniques.
- Purification of metal compounds.
- Crystallization (growth of single crystals) of chemical compounds.
- Characterization and Study of chemical compounds with thermal techniques (*TG/DTG, DTA, DSC*), electrochemistry and cyclic voltammetry (*CV*), spectroscopic methods (*IR, far-IR, Raman, UV/VIS, Mössbauer, EPR, HFEP, NMR, ES/EI/MALDI Mass-spec*), microscopy (*SEM, TEM*), and elemental analysis.
- Full Magnetic Characterization of chemical compounds a SQUID magnetometer and MPMS system, and simulation of the experimental data to theoretical models.
- Full Electronic and Mechanical Maintenance of the MPMS/PPMS-SQUID magnetometer apparatus and its accompanying supplies.
- Full cryogenic maintenance of major instruments.
- Qualitative and quantitative analysis of metal ions using instrumental methods.
- Writing and submitting scientific papers and research proposals.
- Chemical Safety and Chemical Waste Management
- Expertise in molecular modeling software (*2D and 3D chemical structure representations*), statistical and

data-processing software (*ORIGIN, SigmaPlot*), graphic designing software (*Adobe Photoshop CS, Adobe Dreamweaver CS, Macromedia Flash*), webpage designing software (*php and html codes*).

### **Awards and Achievements**

- UNF 2014-2015 Outstanding Undergraduate Teaching Award, Spring 2015.
- COAS Travel Award, Fall 2014.
- UNF TLO award, Fall 2014.
- Cottrell College Science Award, Research Corporation for Science Advancement, Spring 2014.
- Nominated for the 2013-2014 Mentor of the Year Award, Spring 2014.
- Nominated for the 2013-2014 Outstanding Undergraduate Teaching Award, Fall 2013.
- Research Enhancement Grant, UNF, Fall 2013.
- Nominated for the NHMFL EMR Users Committee, 2013.
- Visiting Assistant Professorship, University of Cyprus, Summer 2013.
- Nominated for the Committee for Computers in Chemical Education, Summer 2013.
- Research Development Grant, UNF, Summer 2013.
- Hellenic Association of Chemists Lectureship Award, Summer 2012.
- Proposal Development Grant, UNF, Summer 2012.
- Howard Hughes Medical Institute (*HHMI*), Science for Life Graduate Student Mentor Award, Spring 2009.
- Graduate Student Travel Award, 37<sup>th</sup> South Eastern Magnetic Resonance Conference (*SEMRC 2008*).
- The Crow Stasch Award of excellence in scientific publication, 2008.
- Center for Research in the Bio-Nano Interface, Graduate Student Award in Chemical Education, Spring 2008.
- College of Liberal Arts and Sciences, Travel awards for participation at the 10<sup>th</sup> International Conference on Molecular-based Magnets (*ICMM*), Victoria Canada, August 2006.
- Department of Chemistry Teaching Award for the academic year 2005-2006.
- Gerondelis Foundation Scholarship, Spring 2005.
- Honors College Tuition waiver for the academic years 2000-2004, University of Illinois at Chicago.
- National Bank of Greece, Outstanding Undergraduate Student Award, Spring 2004.

### **Membership in Professional Organizations and Honors Societies**

- National High Magnetic Field Laboratory, EMR Users Committee (since 2013)
- American Chemical Society (ACS) Committee for Computers in Chemical Education (since 2013)
- American Chemical Society (ACS) (since 2007)
- Hellenic Association of Chemists (since 2009)
- $\Phi\chi\Sigma$  International Honors Society (since 2000)
- International Society of Collegiate Scholars (since 2000)

### List of Publications in International Peer-Reviewed Journals

33. (C) Douglas, H. G.; Budd, C. A.; Kline, A.; McDaniel, C. A.; Castro, A.; **Lampropoulos, C.\*** “An Undergraduate Laboratory Experiment in Inorganic Chemistry: Synthesis and Characterization of a Dodecanuclear Molecular Cluster With Exotic Magnetic Properties” *Journal of Chemical Education* **2014**, under submission. (UNF Project with undergraduate student coauthors).
32. (FP) **Lampropoulos, C.**; Vinslava, A.; Abboud, K. A.; Christou, G. “Homo- and Heterometalic Manganese Triangles: New Single-Molecule Magnets, and Probes of Magnetic Interactions and Spin Frustration Effects”, *Inorganic Chemistry* **2014**, under submission.
31. (FP) Papatriantafyllopoulou, C.; Manos, M. J.; Moushi, E. E.; Christou, G.; Cain, J. M.; **Lampropoulos, C.\***; Tasiopoulos, A. J. “Mn<sub>20</sub> Carboxylate-Bridged Single-Molecule Magnet With the Metal Core Topology of a Staggered Bicapped Meissner Supertetrahedron: High-Yield Synthesis, and Reactivity Studies” *Inorganic Chemistry* **2014**, under submission. (UNF Project with undergraduate student coauthors).
30. (FP) Khandar, A. A.; Ghosh, B. K.; **Lampropoulos, C.\***; Gargari, M. S.; Yilmaz, V. T.; Bhar, K.; Hosseini-Yazdi, S. A.; Cain, J.; Mahmoudi, G. “Coordination Complexes and Polymers From the Initial Application of Phenyl-2-pyridyle Ketone Azine in Mercury Chemistry” *Polyhedron* **2015**, 85, 467. DOI: [10.1016/j.poly.2014.09.005](https://doi.org/10.1016/j.poly.2014.09.005) (UNF Project with undergraduate student coauthor).
29. (FP) **Lampropoulos, C.**; Thuijs, A. E.; Mitchell, K. J.; Abboud, K. A.; Christou, G. “Manganese/Cerium Clusters Spanning a Range of Oxidation Levels and CeMn<sub>8</sub>, Ce<sub>2</sub>Mn<sub>4</sub>, and Ce<sub>6</sub>Mn<sub>4</sub> Nuclearities: Structural, Magnetic and EPR Properties” *Inorganic Chemistry* **2014**, 53, 6805. DOI: [10.1021/ic500617f](https://doi.org/10.1021/ic500617f)
28. (IR) **Lampropoulos\*, C.**; Cain, J. M. “Transition Metal Clusters: A Unique STEM Playground” *Austin Journal of Nanomedicine and Nanotechnology* **2014**, 2 (3), 1019. (UNF Project with undergraduate student coauthor).
27. (FP) Zartilas, S.; Papatriantafyllopoulou, C.; Stamatatos, T. C.; Nastopoulos, V.; Cremades, E.; Ruiz, E.; Christou, G.; **Lampropoulos, C.**; Tasiopoulos, A. J. “A Mn<sup>II</sup><sub>6</sub>Mn<sup>III</sup><sub>6</sub> Single-Strand Molecular Wheel with a Reuleaux Triangular Topology: Synthesis, Structure, Magnetism, and DFT Studies” *Inorganic Chemistry*, **2013**, 52, 12070. DOI: [10.1021/ic401872c](https://doi.org/10.1021/ic401872c) (UNF Project / During Visiting appointment at the University of

Cyprus).

26. (IFP) Kizas, C. M.; Papatriantafyllopoulou, C.; Pissas, M.; Sanakis, Y.; Tasiopoulos, A. J.; Javed, A.; **Lampropoulos, C.\*** “Synthesis, Magnetic and Spectroscopic Characterization of a new Fe<sub>7</sub> Cluster With a Six-Pointed Star Topology” *Polyhedron* **2013**, *64*, 280. (UNF Project with undergraduate student coauthors). DOI: [10.1016/j.poly.2013.05.015](https://doi.org/10.1016/j.poly.2013.05.015)
25. (IC) Henthorn, J. D.; Mishra, N.; Haun, C. D.; Castro, A. L.; Douglas, H. G.; Pegram, M.; Stadelmaier, B.; Huebner, J. S.; **Lampropoulos, C.\*** “Using Single-Molecule Magnets as Analyte-Recognition Compounds in Photo-Electric Chemical Sensors: Recent Results from [Mn<sub>12</sub>O<sub>12</sub>(O<sub>2</sub>CCH<sub>3</sub>)<sub>16</sub>(H<sub>2</sub>O)<sub>4</sub>]·2CH<sub>3</sub>COOH·4H<sub>2</sub>O, and [Mn<sub>12</sub>O<sub>12</sub>(O<sub>2</sub>CPh)<sub>16</sub>(H<sub>2</sub>O)<sub>4</sub>]” *Polyhedron* **2013**, *53*, 62. DOI: [10.1016/j.poly.2013.01.017](https://doi.org/10.1016/j.poly.2013.01.017) (UNF Project with undergraduate student coauthors).
24. (C) Adams, S. T.; da Silva Neto, E. H.; Datta, S.; Ware, J. F.; **Lampropoulos, C.**; Christou, G.; Myaesoedov, Y.; Zeldov, E.; Friedman, J. R. “Geometric-Phase Interference in a Mn<sub>12</sub> Single-Molecule Magnet with Fourfold Rotational Symmetry” *Physical Review Letters* **2013**, *110*, 087205. DOI: [10.1103/PhysRevLett.110.087205](https://doi.org/10.1103/PhysRevLett.110.087205)
23. (FP) **Lampropoulos, C.**; Murugesu, M.; Harter, A. G.; Wernsdorfer, W.; Hill, S.; Dalal, N. S.; Reyes, A. P.; Kuhns, P. L.; Abboud, K. A.; Christou, G. “Synthesis, Structure, and Spectroscopic and Magnetic Characterization of [Mn<sub>12</sub>O<sub>12</sub>(O<sub>2</sub>CCH<sub>2</sub>Bu<sup>t</sup>)<sub>16</sub>(MeOH)<sub>4</sub>]·MeOH, a Mn<sub>12</sub> Single-Molecule Magnet with True Axial Symmetry” *Inorganic Chemistry* **2013**, *52*, 258. DOI: [10.1021/ic301764t](https://doi.org/10.1021/ic301764t)
22. (C) Li, S.; Bo, L.; Wen, B.; Sarachik, M. P.; Subedi, P.; Kent, A. D.; Yeshurun, Y.; Millis, A. J.; **Lampropoulos, C.**; Mukherjee, S.; Christou, G. “Experimental Determination of the Weiss Temperature of Mn<sub>12</sub>-Ac and Mn<sub>12</sub>-Ac-MeOH”, *Physical Review B* **2010**, *82*, 174405. DOI: [10.1103/PhysRevB.82.174405](https://doi.org/10.1103/PhysRevB.82.174405).
21. (FP) Moushi, E. E.; **Lampropoulos, C.**; Wernsdorfer, W.; Nastopoulos, V.; Christou, G.; Tasiopoulos, A. J. “Including Single-molecule Magnetism in a Family of Loop-of-loops aggregates: Heterometallic Mn<sub>40</sub>Na<sub>4</sub> Clusters and the Homometallic Mn<sub>44</sub> Analog”, *Journal of the American Chemical Society* **2010**, *132*, 16146. DOI: [10.1021/ja106666h](https://doi.org/10.1021/ja106666h)
20. (C) Chen, L.; Wernsdorfer, W.; **Lampropoulos, C.**; Christou, G.; Chiorescu, I. “On-chip SQUID Measurements in the Presence of High Magnetic Fields” *Nanotechnology* **2010**, *21*, 405504. DOI: [10.1088/0957-4484/21/40/405504](https://doi.org/10.1088/0957-4484/21/40/405504)
19. (FP) Wen, B.; Subedi, P.; Bo, L.; Yeshurun, Y.; Sarachik, M. P.; Kent, A. D.; Millis, A. J.; **Lampropoulos, C.**; Christou, G. “Realization of Random-field Ising Ferromagnetism in a Molecular Magnet” *Physical Review B* **2010**, *82*, 014406. DOI: [10.1103/PhysRevB.82.014406](https://doi.org/10.1103/PhysRevB.82.014406)

[10.1103/PhysRevB.82.014406](https://doi.org/10.1103/PhysRevB.82.014406)

18. (C) Koumoussi, E. S.; Manos, M. J.; **Lampropoulos, C.**; Tasiopoulos, A. J.; Wernsdorfer, W.; Christou, G.; Stamatatos, T. C. “ $\alpha$ -Benzoin Oxime in Higher Oxidation State 3d Metal Cluster Chemistry: Structural and Magnetic Study of a New Mn<sup>III</sup><sub>9</sub> Complex”, *Inorganic Chemistry* **2010**, *49*, 3077. DOI: [10.1021/ic100178y](https://doi.org/10.1021/ic100178y)
17. (FP) **Lampropoulos, C.**; Redler, G.; Data, S.; Abboud, K. A.; Hill, S.; Christou, G. “Binding of Higher Alcohols onto Mn<sub>12</sub> Single-Molecule Magnets: Engineering the Highest Barrier Mn<sub>12</sub> SMM” *Inorganic Chemistry* **2010**, *49*, 1325. DOI: [10.1021/ic901480y](https://doi.org/10.1021/ic901480y)
16. (IFP) Mukherjee, S.; Daniels, M. R.; Bagai, R.; Abboud, K. A.; Christou, G.; **Lampropoulos, C.\*** “A variety of new tri- and tetranuclear Mn-Ln and Fe-Ln (Ln = lanthanide) complexes” *Polyhedron* **2010**, *29*, 54. DOI: [10.1016/j.poly.2009.06.003](https://doi.org/10.1016/j.poly.2009.06.003)  
Invited paper for the special issue of Polyhedron entitled: *Polyhedron: the Next Generation*
15. (FP) **Lampropoulos, C.**; Stamatatos, T. C.; Manos, M. J.; Tasiopoulos, A. J.; Abboud, K. A.; Christou, G. “New mixed-valence Mn<sup>II/III</sup><sub>6</sub> complexes bearing oximato and azido ligands: Synthesis, and structural and magnetic characterization” *European Journal of Inorganic Chemistry* **2010**, *15*, 2244. DOI: [10.1002/ejic.200901013](https://doi.org/10.1002/ejic.200901013)
14. (C) **Lampropoulos, C.**; Hill, S.; Christou, G. “A Caveat for single-molecule magnetism: non-linear Arrhenius plots” *Chem.Phys.Chem.* **2009**, *10*, 2397. DOI: [10.1002/cphc.200900420](https://doi.org/10.1002/cphc.200900420)
13. (FP) Redler, G.; **Lampropoulos, C.**; Datta, S.; Koo, C.; Stamatatos, T. C.; Chakov, N. E.; Christou, G.; Hill, S. “Crystal lattice desolvation effects on the magnetic quantum tunneling of single-molecule magnets” *Physical Review B* **2009**, *80*, 094408. DOI: [10.1103/PhysRevB.80.094408](https://doi.org/10.1103/PhysRevB.80.094408)
12. (FP) **Lampropoulos, C.**; Stamatatos, T. C.; Abboud, K. A.; Christou, G. “A convenient Mn<sup>III</sup> starting material for the synthesis of homo- and heterometallic manganese carboxylate clusters: Mn<sub>9</sub> and Mn<sub>10-x</sub>Fe<sub>x</sub> complexes” *Polyhedron* **2009**, *28*, 1958. DOI: [10.1016/j.poly.2008.11.026](https://doi.org/10.1016/j.poly.2008.11.026)
11. (C) **Lampropoulos, C.**; Abboud, K. A.; Stamatatos, T. C.; Christou, G. “A nontwisted, ferromagnetically coupled Mn<sup>III</sup><sub>3</sub>O triangular complex from the use of 2,6-bis(hydroxymethyl)-*p*-cresol” *Inorganic Chemistry* **2009**, *48*, 813. DOI: [10.1021/ic802084h](https://doi.org/10.1021/ic802084h)
10. (C) **Lampropoulos, C.**; Stamatatos, T. C.; Abboud, K. A.; Christou, G. “Initial use of dioximate ligands in 3d/4f cluster chemistry: Synthesis, structure, and magnetic studies of an unusual [Gd<sup>III</sup><sub>2</sub>Mn<sup>IV</sup>O]<sup>8+</sup> complex” *Inorganic Chemistry* **2009**, *48*, 429. DOI: [10.1021/ic802084h](https://doi.org/10.1021/ic802084h)

[10.1021/ic802005a](https://doi.org/10.1021/ic802005a)

9. (FP) Burzurí, E.; Carbonera, C.; Luis, F.; Ruiz-Molina, D.; **Lampropoulos, C.**; Christou, G. “Alignment of magnetic anisotropy axes in crystals of Mn<sub>12</sub> molecular nanomagnets: Angle-dependent ac susceptibility study” *Physical Review B* **2009**, *80*, 224428. DOI: [10.1103/PhysRevB.80.224428](https://doi.org/10.1103/PhysRevB.80.224428)
8. (FP) Macià, F.; Hernandez, J. M.; Tejada, J.; Datta, S.; Hill, S.; **Lampropoulos, C.**; Christou, G. “Effects of quantum mechanics on the deflagration threshold in the molecular magnet Mn<sub>12</sub> acetate” *Physical Review B* **2009**, *79*, 092403. DOI: [10.1103/PhysRevB.79.092403](https://doi.org/10.1103/PhysRevB.79.092403)
7. (FP) Stamatatos, T. C.; Christou, A. G.; Mukherjee, S.; Poole, K. M.; **Lampropoulos, C.**; Abboud, K. A.; O’Brien, T. A.; Christou, G. “High-yield syntheses and reactivity studies of Fe<sub>10</sub> “ferric wheels”: Structural, magnetic, and computational characterization of a star-shaped Fe<sub>8</sub> complex” *Inorganic Chemistry* **2008**, *47*, 9021. DOI: [10.1021/ic801038r](https://doi.org/10.1021/ic801038r)
6. (FP) **Lampropoulos, C.**; Koo, C.; Hill, S.; Abboud, K. A.; Christou, G. “Synthesis, magnetism, and High-Frequency EPR spectroscopy of a family of mixed-valent cuboctahedral Mn<sub>13</sub> complexes with 1,8-naphthalenedicarboxylate ligands” *Inorganic Chemistry* **2008**, *47*, 11180. DOI: [10.1021/ic801484g](https://doi.org/10.1021/ic801484g)
5. (C) Macià, F.; Lawrence, J.; Hill, S.; Hernandez, J. M.; Tejada, J.; Santos, P. V.; **Lampropoulos, C.**; Christou, G. “Spin dynamics in single-molecule magnets combining surface acoustic waves and high-frequency electron paramagnetic resonance” *Physical Review B* **2008**, *77*, 020403. DOI: [10.1103/PhysRevB.77.020403](https://doi.org/10.1103/PhysRevB.77.020403)
4. (FP) Milios, C. J.; Wood, P. A.; Parsons, S.; Albiol, D. F.; **Lampropoulos, C.**; Christou, G.; Perlepes, S. P.; Brechin, E. K. “The use of methylsalicyloxime in manganese chemistry: A [Mn<sup>III</sup><sub>3</sub>] triangle and its oxidation to a [Mn<sup>IV</sup><sub>4</sub>Ce<sup>III</sup><sub>2</sub>] rod” *Inorganica Chimica Acta* **2007**, *360*, 3932. DOI: [10.1016/j.ica.2007.06.031](https://doi.org/10.1016/j.ica.2007.06.031)
3. (C) Moushi, E. E.; **Lampropoulos, C.**; Wernsdorfer, W.; Nastopoulos, V.; Christou, G.; Tasiopoulos, A. J. “A loop-of-loops: A [Mn<sub>10</sub>Na]<sub>4</sub> aggregate of four linked Mn<sub>10</sub> loops” *Inorganic Chemistry* **2007**, *46*, 3795. DOI: [10.1021/ic062454o](https://doi.org/10.1021/ic062454o)
2. (C) Harter, A. G.; **Lampropoulos, C.**; Murugesu, M.; Kuhns, P.; Reyes, A.; Christou, G.; Dalal, N. S. “<sup>55</sup>Mn nuclear spin relaxation in the truly axial single-molecule magnet Mn<sub>12</sub>-t-butylacetate thermally-activated down to 400 mK” *Polyhedron* **2007**, *26*, 2320. DOI: [10.1016/j.poly.2006.11.039](https://doi.org/10.1016/j.poly.2006.11.039)
1. (C) **Lampropoulos, C.**; Murugesu, M.; Abboud, K. A.; Christou, G. “A family of mixed-valent Mn<sup>IV</sup>Mn<sup>III</sup><sub>6</sub>Mn<sup>II</sup><sub>6</sub> tridecanuclear clusters and their magentostructural correlation” *Polyhedron* **2007**, *26*, 2129. DOI: [10.1016/j.poly.2006.10.038](https://doi.org/10.1016/j.poly.2006.10.038)



C = Communication    IC = Invited communication    IR = Invited Review

FP = Full Paper    IFP = Invited Full paper

### **Oral (O) and Poster (P) Presentations in Symposia and Conferences**

52. (O) Y. Chen, A. D. Kent, Q. Zhang, M. P. Sarachik, M. L. Baker, D. A. Garanin, N. Mhesn, C. Lampropoulos, “Spontaneous Magnetic Deflagration of Mn<sub>12</sub>tBuAc in a Transverse Field” *American Physical Society* - March 2015 Meeting, San Antonio, TX, March 2-6, **2015** (Abstract B31.00005). **UNF Project.**

51. (O) S. Corrales, **C. Lampropoulos\***, “Aggregation of Single-molecule Magnets via Targeted Structural Modifications” *Florida Inorganic and Materials Symposium*, Gainesville, FL, October 3-4, **2014**. (**UNF Project with undergraduate student presenter**).

50. (P) **C. Lampropoulos\***, N. Mhesn, S. Corrales, T. Jenkins, C. Papatriantafyllopoulou, A. J. Tasiopoulos, B. Noll “The Syntheses of One-Dimensional SMM-based Chains” *Florida Inorganic and Materials Symposium*, Gainesville, FL, October 3-4, **2014**. (**UNF Project with undergraduate student presenters**).

49. (P) **C. Lampropoulos\***, J. M. Cain, N. Mhesn, A. M. Mowson, C. Papatriantafyllopoulou, A. J. Tasiopoulos, G. Christou “Transition Metal Clusters: From Molecules to Supramolecular Aggregates” *Florida ACS Meeting and Exposition (FAME2014)*, Tampa, USA, May 8-10, **2014**. (**UNF Project with undergraduate student presenters**).

48. (P) **C. Lampropoulos\***, “Molecular Magnetic Materials: From Synthesis to Characterization”, Poster on display at the Museum of Science and History, Jacksonville, FL. <http://www.themosh.org>

47. (P) J. M. Cain, **C. Lampropoulos\***, “Molecular Magnetic Materials: From Synthesis to Characterization”, *Florida Inorganic and Materials Symposium*, Gainesville, FL, October 18-19, **2013**. (**UNF Project with undergraduate student presenters**). *Best undergraduate poster award*.

46. (O) J. M. Cain, **C. Lampropoulos\***, “The First Family of One-Dimensional Arrays of Mn<sub>12</sub> SMMs”, *Florida Inorganic and Materials Symposium*, Gainesville, FL, October 18-19, **2013**. (**UNF Project with undergraduate student presenter**).

45. (O) **C. Lampropoulos\***, “Taking Single-Molecule Magnets to New Directions: From Molecules to Hybrid Materials and to Devices”, *National ACS Meeting and Exposition*, Indianapolis, IN, September 8-12, **2013** (Abstract INOR 198).

44. (IO) **C. Lampropoulos\***, “Interlacing STEM Disciplines in the Search for New Molecular Magnetic Materials & Science Education Technologies”, *invited seminar*, Indiana University (IU), Bloomington, IN, September 12<sup>th</sup>, **2013**.

43. (IO) **C. Lampropoulos\***, “Interlacing STEM Disciplines in the Search for New Molecular Magnetic Materials & Science Education Technologies”, *invited seminar*, Indiana University Purdue University Indianapolis (IUPUI), Indianapolis, IN, September 10<sup>th</sup>, **2013**.
42. (IO) **C. Lampropoulos\***, “Taking Single-Molecule Magnets to New Directions: From Molecules to Hybrid Materials and to Devices”, *North-America Greece Cyprus workshop on Paramagnetic Materials (NAGC2013)*, *invited oral presentation*, Limassol, Cyprus, May 22-26, **2013**.
41. (P) K. A. Johnson, A. Javed, J. M. Cain, S. Datta, A. M. Mowson, C. Papatriantafyllopoulou, D. Alexandropoulos, A. J. Tasiopoulos, T. C. Stamatatos, G. Christou, **C. Lampropoulos\***, “The Search for New Molecular Magnetic Materials: Altering Current Single-Molecule Magnets, Or Starting from Scratch?” *Florida ACS Meeting and Exposition (FAME2013)*, *poster presentation*, Tampa, USA, May 9-11, **2013**. (UNF Project with undergraduate student presenters).
40. (P) M. Pegram, J. S. Huebner, **C. Lampropoulos\***, “Chasing the “Magic” Analyte – Analyte Recognition Compound (ARC) Pair: Molecular Clusters as ARCs on Photoelectric Chemical Sensors (PECS)”, *Florida ACS Meeting and Exposition (FAME2013)*, Tampa, USA, May 9-11, **2013**. (UNF Project with undergraduate student presenters).
39. (IO) **C. Lampropoulos\***, “Taking Single-Molecule Magnets to New Directions: From Molecules to Hybrid Materials and to Devices”, *Florida ACS Meeting and Exposition (FAME2013)*, *invited oral presentation at the Materials session*, Tampa, USA, May 9-11, **2013**.
38. (P) M. D. Pegram, J. Henthorn, N. Mishra, C. D. Haun, J. S. Huebner, **C. Lampropoulos\***, “The Development of Chemical Sensors”, *Florida Undergraduate Research Conference*, Gainesville USA, February 22-23, **2013**.
37. (IO) **C. Lampropoulos\***, “Taking Single-Molecule Magnets to New Directions: From Molecules to Hybrid Materials and to Devices”, *Florida Institute of Technology*, *invited seminar*, Melbourne, USA, November 1<sup>st</sup>, **2012**.
36. (P) C. McDaniel, **C. Lampropoulos\***, A. Castro, C. Papatriantafyllopoulou, A. M. Mowson, A. J. Tasiopoulos, G. Christou, “Attempts to Assess the Dimensionality-Property Relationship in SMMs”, *13<sup>th</sup> International Conference on Molecule-based Magnets*, Orlando, USA, October 7-11, **2012**, [MP-089] in the Book of Abstracts.
35. (P) J. Henthorn, N. Mishra, J. S. Huebner, **C. Lampropoulos\***, “Magnetic Clusters as Analyte Recognition Compounds in Sensors”, *13<sup>th</sup> International Conference on Molecule-based Magnets*, Orlando, USA, October 7-11, **2012**, [MP-090] in the Book of Abstracts.
34. (O) Anastasios J. Tasiopoulos, E. E. Moushi, M. Charalambous, C. Papatriantafyllopoulou, **C. Lampropoulos**, T. C. Stamatatos, V. Nastopoulos, W. Wernsdorfer, G. Christou, “High Nuclearity, High Spin Clusters and Single Molecule Magnets from the use of 1,3-Propanediol in Mn Chemistry”, *13<sup>th</sup>*

*International Conference on Molecule-based Magnets*, Orlando, USA, October 7-11, **2012**, [ThC-03] in the Book of Abstracts.

33. (P) J. Henthorn, N. Mishra, C. D. Haun, M. D. Pegram, J. S. Huebner, **C. Lampropoulos\***, “Magnetic Clusters as Analyte Recognition Compounds in Sensors”, *Florida Inorganic & Materials Symposium*, Gainesville, USA, September 28-29, **2012**.

32. (P) C. McDaniel, **C. Lampropoulos\***, A. Castro, C. Papatriantafyllopoulou, A. M. Mowson, K. Johnson, N. Spadaro, A. J. Tasiopoulos, G. Christou, “Synthesis and Characterization of the First 1D chain based on the Mn<sub>12</sub> building block”, *Florida Inorganic & Materials Symposium*, Gainesville, USA, September 28-29, **2012**.

31. (O) K. Johnson, **C. Lampropoulos\***, “Attempts to Assess the Dimensionality-Property Relationship in SMMs”, *Florida Inorganic & Materials Symposium*, Gainesville, USA, September 28-29, **2012**.

30. (P) C. McDaniel, **C. Lampropoulos\***, “Active Investigations of the Dimensionality-Property Relationship in Single-Molecule Magnets”, *Florida ACS Meeting and Exposition*, Tampa, USA, May 17-19, **2012**. (UNF Project with undergraduate student presenters).

29. (P) C. Haun, A. Castro, J. S. Huebner, **C. Lampropoulos\***, “Transition Metal Clusters as Analyte Recognition Compounds in Sensors”, *Florida ACS Meeting and Exposition*, Tampa, USA, May 17-19, **2012**. (UNF Project with undergraduate student presenters).

28. (O) A. J. Tasiopoulos, E. E. Moushi, M. Charalampous, C. Papatriantafyllopoulou, **C. Lampropoulos**, T. C. Stamatatos, V. Nastopoulos, W. Wernsdorfer, G. Christou, “High Nuclearity, High Spin Clusters and Single-Molecule Magnets from the Use of 1,3-Propanediol in Mn Chemistry”, *12<sup>th</sup> Eurasia Conference on Chemical Sciences (EuAsC<sub>2</sub>S-12)*, Corfu, Greece, April 16-21, **2012**.

27. (P) C. McDaniel, H. Douglas, C. Haun, A. Castro, **C. Lampropoulos\***, “Single-Molecule Magnets: A Playground for Magnetochemists, Physicists, and Spectroscopists”, *2<sup>nd</sup> Annual Florida Undergraduate Research Conference*, DeLand, USA, March 16-17, **2012**. (UNF Project with undergraduate student presenters).

26. (P) H. Douglas, C. Haun, **C. Lampropoulos\***, “Single-Molecule Magnets: A Playground for Magnetochemists, Physicists, and Spectroscopists”, *Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy PITTCON*, Orlando, USA, March 11-15, **2012**, Abstract 790-26P in the Book of Abstracts. (UNF Project with undergraduate student presenters).

25. (O) **C. Lampropoulos**, “High-symmetry and High-Barrier Mn<sub>12</sub> Single Molecule Magnets (SMMs): Engineering the Highest Barrier Mn<sub>12</sub> SMM”, *4<sup>th</sup> N. America – Greece – Cyprus Workshop on Paramagnetic Materials*, Patras, Greece, June 14-18, **2011**.

24. (O) S. Li, P. Subedi, Y. Yeshurun, M. P. Sarachik, A. D. Kent, **C. Lampropoulos**, G. Christou, “The effect of sample aspect ratio on Curie temperature of Mn<sub>12</sub>-ac”, *American Physical Society March Meeting*, Portland, USA, March 15-19, **2010**, Abstract P33.00005 in the Book of Abstracts.
23. (O) B. Wen, P. Subedi, L. Bo, Y. Yeshurun, M. P. Sarachik, A. D. Kent, **C. Lampropoulos**, G. Christou, “The role of ligand disorder in the long range dipolar ordering of Mn<sub>12</sub>-ac”, *American Physical Society March Meeting*, Portland, USA, March 15-19, **2010**, Abstract P33.00004 in the Book of Abstracts.
22. (O) P. Subedi, B. Wen, L. Bo, M. Sarachik, Y. Yeshurun, A. Kent, **C. Lampropoulos**, G. Christou, “Susceptibility of single molecule magnet Mn<sub>12</sub>-acetate single crystals as a function of temperature and transverse field”, *American Physical Society March Meeting*, Portland, USA, March 15-19, **2010**, Abstract P33.00003 in the Book of Abstracts.
21. (O) **C. Lampropoulos**, “Probing Magnetic Interactions With Triangular Clusters: Homo- and Heterometallic Oxide-Centered Mn Triangles”, *3<sup>rd</sup> N. America – Greece – Cyprus Workshop on Paramagnetic Materials*, Portaras, Cyprus, June 15-19, **2009**.
20. (O) **C. Lampropoulos**, “Probing Magnetic Interactions With Triangular Clusters: Homo- and Heterometallic Oxide-Centered Mn Triangles”, *Florida Annual Meeting and Exposition*, Orlando, USA, May 14-17, **2009**, p. 48 in the Book of Abstracts.
19. (O) **C. Lampropoulos**, “High-Symmetry Mn<sub>12</sub> SMMs: Synthesis, and physical and spectroscopic characterization”, *Florida Inorganic & Materials Symposium*, Gainesville, USA, September 12-13, **2008**.
18. (O) **C. Lampropoulos**, “Polynuclear homo- and heterometallic manganese clusters: Synthesis, structures, and magnetic properties”, *Department of Chemistry, University of Florida, Seminar*, Gainesville, USA, September 10, **2007**.
17. (O) **C. Lampropoulos**, “Homo- and heterometallic manganese clusters: New ligands, synthetic routes, and research directions”, *Department of Chemistry, University of Florida, Seminar*, Gainesville, USA, January 8, **2007**.
16. (O) **C. Lampropoulos**, “Dicarboxylate ligands in manganese cluster chemistry: A new family of tridecanuclear manganese clusters”, *Department of Chemistry, University of Florida, Seminar*, Gainesville, USA, February 13, **2006**.
15. (P) G. Redler, C. Koo, S. Datta, **C. Lampropoulos**, T. C. Stamatatos, G. Christou, S. Hill, “Magnetization barrier reduction in Mn<sub>12</sub> single-molecule magnets”, *American Physical Society March Meeting*, Pittsburgh, USA, March, **2009**, Abstract A31.0004 in the Book of Abstracts.
14. (O) J.R. Friedman, E. H. da Silva Neto, **C. Lampropoulos**, G. Christou, N. Avraham, Y. Myaesoedov, H. Shtrikman, E. Zeldov, “Geometric-phase effect in the thermally assisted resonant

tunneling of  $\text{Mn}_{12}$ - $^t\text{BuAc}$ ”, *American Physical Society March Meeting*, Pittsburgh, USA, March, **2009**, Abstract A31.0008.

13. (P) **C. Lampropoulos**, J. Lawrence, A. Harter, W. Wernsdorfer, K. A. Abboud, N. S. Dalal, S. Hill, G. Christou, “A new  $\text{Mn}_{12}$  single-molecule magnet with tetragonal (axial) symmetry: magnetic characterization, and single-crystal spectroscopy studies using  $^{55}\text{Mn}$  NMR and high-field EPR (HFEPR)”, *Southeastern Magnetic Resonance Conference*, Tallahassee, USA, October 17-19, **2008**.

12. (O) S. Hill, J. Lawrence, F. Macia, J. M. Hernandez, J. Tejada, P. Santos, **C. Lampropoulos**, G. Christou, “Spin dynamics in single-molecule magnets combining surface acoustic waves and high frequency electron paramagnetic resonance”, *American Physical Society March Meeting*, New Orleans, LA, March 10-14, **2008**, Abstract V32.00012 in the Book of Abstracts.

11. (O) S. Hill, G. Redler, S. Datta, C. Koo, **C. Lampropoulos**, G. Christou, “The effective barrier to magnetization reversal in single-molecule magnets”, *53rd Conference on Magnetism and Magnetic Materials (MMM)*, Austin, USA, November 10-14, **2008**.

10. (O) E. Burzurí, C. Carbonera, F. Luisa, D. Ruiz-Molina, **C. Lampropoulos**, G. Christou, “How well aligned are the magnetic anisotropy axes in crystals of  $\text{Mn}_{12}$  molecular nanomagnets? An angle-dependent ac susceptibility study”, *Nano Spain 2008*, Braga, Portugal, April 14-18, **2008**.

9. (P) E. E. Moushi, **C. Lampropoulos**, Th. C. Stamatatos, V. Nastopoulos, W. Wernsdorfer, G. Christou, A. J. Tasiopoulos, “Synthesis, crystal structures and magnetic properties of two new high nuclearity manganese clusters with 1,3-propanediol”, *9<sup>th</sup> FIGIPAS Meeting in Inorganic Chemistry*, Vienna, Austria, July 4-7, **2007**. Abstract PO-110.

8. (P) Th. C. Stamatatos, **C. Lampropoulos**, K. A. Abboud, W. Wernsdorfer, G. Christou, “High nuclearity, high symmetry, high spin molecules: A mixed-valence  $\text{Mn}_{10}$  cage possessing rare  $T$  symmetry and an  $S = 22$  ground state”, *Florida Inorganic Mini-Symposium*, Gainesville, Florida, USA, October 14, **2006**. One page in the Book of Abstracts.

7. (P) Th. C. Stamatatos, **C. Lampropoulos**, W. Wernsdorfer, K. A. Abboud, G. Christou, “A new world record for the spin on a molecule: A new  $\text{Mn}_{25}$  complex possessing an  $S = 61/2$  ground state and single-molecule magnetism behavior”, *Florida Inorganic Mini-Symposium*, Gainesville, Florida, USA, October 14, **2006**. One page in the Book of Abstracts.

6. (P) Th. C. Stamatatos, **C. Lampropoulos**, K. A. Abboud, W. Wernsdorfer, G. Christou, “High nuclearity, high symmetry, high spin molecules: A mixed-valence  $\text{Mn}_{10}$  cage possessing rare  $T$  symmetry and an  $S = 22$  ground state”, *10<sup>th</sup> International Conference on Molecule-based Magnets*, Victoria, Canada, August 13-17, **2006**, p. 0174 in the Book of Abstracts.

5. (P) Th. C. Stamatatos, **C. Lampropoulos**, W. Wernsdorfer, K. A. Abboud, G. Christou, “A new world record for the spin on a molecule: A new  $\text{Mn}_{25}$  complex possessing an  $S = 61/2$  ground state and

single-molecule magnetism behavior”, *10<sup>th</sup> International Conference on Molecule-based Magnets*, Victoria, Canada, August 13-17, **2006**, p. 0170 in the Book of Abstracts.

4. (P) A. G. Harter, **C. Lampropoulos**, R. Bagai, E. Hicks, P. Kuhns, A. Reyes, G. Christou, N. S. Dalal, “Longitudinal-Relaxation in a Family of Single-Molecule Magnets”, *10<sup>th</sup> International Conference on Molecule-based Magnets*, Victoria, Canada, August 13-17, **2006**, p. 0102 in the Book of Abstracts.

3. (P) **C. Lampropoulos**, M. Murugesu, K. A. Abboud, G. Christou, “A family of mixed-valent  $\text{Mn}^{\text{IV}}\text{Mn}^{\text{III}}_6\text{Mn}^{\text{II}}_6$  tridecanuclear clusters, and their magnetostructural correlation”, *10<sup>th</sup> International Conference on Molecule-based Magnets*, Victoria, Canada, August 13-17, **2006**, p. 0169 in the Book of Abstracts.

2. (O) A. Harter, N. Chakov, **C. Lampropoulos**, G. Christou, P. Kuhns, A. Reyes, N. S. Dalal, “Working Hard to Understand Relaxation: NMR and Single-Molecule Magnets”, *Florida Regional ACS Meeting*, Orlando, FL, May 11-13, **2006**.

1. (P) **C. Lampropoulos**, M. Murugesu, K. A. Abboud, G. Christou, “Synthesis and characterization of a family of mixed-valent  $\text{Mn}^{\text{II}}\text{-Mn}^{\text{IV}}\text{-Mn}^{\text{III}}$  tridecanuclear clusters”, *231<sup>st</sup> National American Chemical Society Meeting*, Atlanta, USA, March 26-30, **2006**. Abstract INOR 197.

NOTE: this list excludes various internal events and poster sessions on the UNF campus

#### **Attendance of Seminars and Schools**

- “*It Doesn’t Always Have to be a Single Crystal*”, Bruker X-ray Crystallography Webinar, October 7, **2014**.

- “*Absolute Structure Determination for Light Atom Structures*”, Bruker X-ray Crystallography Webinar, April 7, **2014**.

- “*Chemical Weapons Workshop*”, Nicosia, Cyprus, May 28<sup>th</sup>, **2013**.

- “*Course Redesign for Effective Learning Workshop*” CREL 2013, University of North Florida, Jacksonville, Florida, USA, May 1-7, **2013**.

- “*Current trends in nanoscopic and mesoscopic magnetism*”, Santorini, Greece, September 6-9, **2006**.

- “*Characterization of paramagnetic molecules*”, Department of Chemistry, University of Florida, Gainesville, Florida, USA, October-December, **2005**.