FANG WANG

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Cambridge, MA 02139

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EDUCATION

University of Southern California, Los Angeles, CA — Ph.D., Chemistry, 2012
Advisors: G. K. Surya Prakash and George A. Olah
Dissertation: Stereoselective Nucleophilic Fluoromethylations: From Methodology to Mechanistic Studies

Zhejiang University, Hangzhou, Zhejiang, China — B.Sc., Chemistry, 2006

RESEARCH EXPERIENCE

Massachusetts Institute of Technology, Cambridge, MA — 2013–present
Postdoctoral Research Advisors: Stephen J. Lippard (co-supervised with Ömer H. Yilmaz since 2017)

- Investigated new platinum complexes for cancer treatments
- Developed novel photoactivatable sensors for detecting mobile zinc in biology
- Designed synthetic models of the catalytic active site of carboxylate-bridged diiron proteins

University of Southern California, Los Angeles, CA — 2012–2013
Postdoctoral Research Advisors: G. K. Surya Prakash and George A. Olah

- Developed a series of nucleophilic fluoromethylating reactions
- Investigated the mechanisms of nucleophilic fluoromethylating reactions

University of Southern California, Los Angeles, CA — Graduate Research, 2006–2012
Advisors: G. K. Surya Prakash and George A. Olah

- Studied a series of nucleophilic fluoromethylating reactions
- Investigated the mechanisms of nucleophilic fluoromethylating reactions
- Developed the strategy for conformational analysis using the trifluoromethyl group as a ^{19}F NMR spectroscopic handle
- Explored the nature of weak non-covalent interactions involving the C–F bond

Shanghai Institute of Organic Chemistry, Shanghai, China — Undergraduate Research, 2005–2006
Advisor: Jinbo Hu

- Developed a sulfone-based nucleophilic difluoromethylating reagent

Zhejiang University, Zhejiang, China — Undergraduate Research, 2003–2006
Advisor: Ping Lu

- Investigated carbazole-based OLED materials

AWARDS AND FELLOWSHIPS

Best Poster Award, 22nd International Symposium on Fluorine Chemistry, Royal Society of Chemistry (2018)
Chinese Government Award for Outstanding Self-financed Students Abroad, Chinese Scholarship Council (2012)
Kenneth Nobutoshi Wachi Award, Department of Chemistry, University of Southern California (2010)
19th WFC Student Travel Award, Division of Fluorine Chemistry, American Chemical Society (2009)
Graduate Research Award for Excellence in Research, Department of Chemistry, University of Southern California (2008)
Outstanding Performance in Teaching Organic Chemistry, Department of Chemistry, University of Southern California (2008)
Harold and Lillian Moulton Fellowship in Chemistry, 2007-2011
Merit Undergraduate Student, Zhejiang University (2006)
Merit Undergraduate Student, Zhejiang Provincial Department of Education (2006)
Ferrotec China Scholarship, Zhejiang University (2005)
First-Class Scholarship on Academic Performance, Zhejiang University (2005)

First-Class Student Fellowship with Honor, Zhejiang University (2005)
Merit Undergraduate Student, Zhejiang University (2005)
First-Class Scholarship on Academic Performance, Zhejiang University (2004)
Second-Class Student Fellowship with Honor, Zhejiang University (2004)
Merit Undergraduate Student, Zhejiang University (2004)
Second-Class Student Fellowship with Honor, Zhejiang University (2003)

PROFESSIONAL SERVICE AND AFFILIATIONS

Manuscript Review: Chemistry - A European Journal, Journal of Fluorine Chemistry, European Journal of Organic Chemistry, Synthesis, Topics in Catalysis, Current Medicinal Chemistry.
ACS member: 2008-present

PEER-REVIEWED PUBLICATIONS AND PATENT APPLICATION

Publications Associated with the Lippard and Yilmaz Laboratories (* = corresponding author)

37. Ömer H. Yilmaz (PI),* Chia-Wei Cheng, George Eng, **Fang Wang**, Compositions and Methods For Inducing Intestinal Stem Cell Regeneration, U.S. Patent application filed, Application No.: 16/655,125

36. **Fang Wang**, Jonathan Braverman, Ömer H. Yilmaz (PI),* Stephen J. Lippard (PI),* Platinum-Anthracycline Derivative Conjugates and Their Therapeutic Applications, MIT# 20922, provisional patent application filed.

35. Jacob M. Goldberg,† **Fang Wang**,† Chanan D. Sessler, Nathan W. Vogler, Daniel Y. Zhang, William H. Loucks, Thanos Tzounopoulos, Stephen J. Lippard (PI),* Photoactivatable Sensors for Detecting Mobile Zinc, *J. Am. Chem. Soc.* **2018**, *140*, 2020–2023. († **= co-first author**)

34. **Fang Wang**, Sabine Becker, Mik A. Minier, Andrei Loas, Megan N. Jackson, Stephen J. Lippard (PI),* Tuning the Diiron Core Geometry in Carboxylate-Bridged Macrocyclic Model Complexes Affects their Redox Properties and Supports Oxidation Chemistry, *Inorg. Chem.* **2017**, *56*, 11050–11058.

33. Chanan D. Sessler,‡ Sabine Becker, Martin Rahm, Jacob M. Goldberg, **Fang Wang**, Stephen J. Lippard (PI),* CF_2H, a Hydrogen Bond Donor, *J. Am. Chem. Soc.* **2017**, *139*, 9325–9332. Highlighted in *ChemistryViews.* (‡ **= undergraduate researcher)**

32. Sunghee Kim, Mikael A. Minier, Andrei Loas, Sabine Becker, **Fang Wang**, Stephen J. Lippard (PI),* Achieving Reversible Sensing of Nitroxyl by Tuning the Ligand Environment of Azamacrocyclic Copper(II) Complexes, *J. Am. Chem. Soc.* **2016**, *138*, 1804–1807.

31. Kogularamanan Suntharalingam, Samuel G. Awuah, Peter M. Bruno, Timothy C. Johnstone, **Fang Wang**, Wei Lin, Yao-Rong Zheng, Julia E. Page, Michael T. Hemann, Stephen J. Lippard (PI),* Necroptosis-Inducing Rhenium(V) Oxo Complexes, *J. Am. Chem. Soc.* **2015**, *137*, 2967–2974.

Publications Associated with the Olah-Prakash Laboratory (* = corresponding author)

As a convention in the Olah-Prakash laboratory, the first student author was typically listed as the second author in publications co-supervised by both Prof. G. K. Surya Prakash and Prof. George A. Olah.

30. Paul Hebeisen, Urs Weiss, André Alker, Bernd Kuhn, Klaus Müller (PI),* **Fang Wang**, G. K. Surya Prakash (PI),* Molecular Structure and Crystal Packing of Monofluoromethoxyarenes, *Eur. J. Org. Chem.* **2018**, 3724-3734.

29. Socrates B. Munoz, Chuanfa Ni, Zhe Zhang, **Fang Wang**, Nan Shao, Thomas Mathew, George A. Olah (PI), G. K. Surya Prakash (PI),* Selective Late-Stage, Hydrodefluorination of Trifluoromethylarenes: A Facile Access to Difluoromethylarenes *Eur. J. Org. Chem.* **2017,** *2017*, 2322-2326.

28. Zhe Zhang, Ángel Puente, **Fang Wang**, Martin Rahm, Yuncai Mei, Herbert Mayr (PI),* G. K. Surya Prakash (PI),* The Nucleophilicity of Persistent α-Monofluoromethide Anions, *Angew. Chem. Int. Ed.* **2016**, *55*, 12845–12849.

27. G. K. Surya Prakash (PI),* Farzaneh Paknia, Aditya Kulkarni, Arjun Narayanan, **Fang Wang**, Golam Rasul, Thomas Mathew, George A. Olah (PI), Taming of Superacids: PVP-Triflic Acid as An Effective Solid Triflic Acid Equivalent for Friedel-Crafts Hydroxyalkylation and Acylation, *J. Fluorine Chem.* **2015**, *171*, 102–112.

26. G. K. Surya Prakash (PI),* **Fang Wang**, Zhe Zhang, Ralf Haiges, Martin Rahm, Karl O. Christe, Thomas Mathew, George A. Olah (PI), The Long-Lived Trifluoromethide Anion: A Key Intermediate in Nucleophilic

Trifluoromethylations, *Angew. Chem. Int. Ed.* **2014**, *53*, 11575–11578. Designated as being a "Very Important Paper" (VIP). Cover picture. Highlighted in *Angew. Chem. Int. Ed.* **2014**, *53*, 11414–11415; *C&EN* **2014**, *92*, 4; *Science* **2014,** *346,* 206.

25. G. K. Surya Prakash (PI),* **Fang Wang**, Martin Rahm, Zhe Zhang, Chuanfa Ni, Jingguo Shen, George A. Olah (PI), The Trifluoromethyl Group as a Conformational Stabilizer and Probe: Conformational Analysis of Cinchona Alkaloid Scaffolds, *J. Am. Chem. Soc.* **2014**, *136*, 10418–10431.

24. Bo Yang, Lena Hoober-Burkhardt, **Fang Wang**, G. K. Surya Prakash (PI),* S. R. Narayanan (PI),* An Inexpensive Aqueous Flow Battery for Large-Scale Electrical Energy Storage Based on Water-Soluble Organic Redox Couples, *J. Electrochem. Soc.* **2014**, *161*, 1371–1380.

23. G. K. Surya Prakash (PI),* Laxman Gurung, Philipp Christoph Schmid, **Fang Wang**, Tisa Elizabeth Thomas, Chiradeep Panja, Thomas Mathew, George A. Olah (PI), *ipso*-Nitrosation of Arylboronic Acids with Chlorotrimethylsilane and Sodium Nitrite, *Tetrahedron Lett.* **2014**, *55*, 1975–1978.

22. G. K. Surya Prakash (PI),* Zhe Zhang,† **Fang Wang**,† Marc Iuliucci, Chuanfa Ni, Martin Rahm, Ralf Haiges, George A. Olah (PI), *N*-Substituent-Governed Stereoselective Synthesis of Fluoroalkenoates: Utilization of Bromofluoroacetate as an α-Fluorocarbene Equivalent and an α-Fluoroketene Equivalent, *Chem. Eur. J.* **2014**, *20*, 831–838. (**† = co-first student author**)

21. G. K. Surya Prakash (PI),* Chuanfa Ni, **Fang Wang**, Zhe Zhang, Ralf Haiges, George A. Olah (PI),* Difluoro(sulfinato)methylation of N-Sulfinyl Imines Facilitated by 2-Pyridyl Sulfone: Stereoselective Synthesis of Difluorinated beta-Amino Sulfonic Acids and Peptidosulfonamides, *Angew. Chem. Int. Ed.* **2013**, *52*, 10835–10839.

20. G. K. Surya Prakash (PI),* Zhe Zhang, **Fang Wang**, Socrates Munoz, George A. Olah (PI), Nucleophilic Trifluoromethylation of Carbonyl Compounds: Trifluoroacetaldehyde Hydrate as a Trifluoromethyl Source, *J. Org. Chem.* **2013**, *78*, 3300–3305.

19. G. K. Surya Prakash (PI),* Nan Shao, **Fang Wang**, Chuanfa Ni, Preparation of α-Fluorobis(phenylsulfonyl)methane, *Org. Synth.* **2013**, *90*, 130–144.

18. G. K. Surya Prakash (PI),* **Fang Wang**, Fluorine: the New Kingpin of Drug Discovery, *Chimica Oggi* **2012**, *30*, 5.

17. G. K. Surya Prakash (PI),* **Fang Wang**, Zhe Zhang, Chuanfa Ni, Ralf Haiges, George A. Olah (PI), Enantioselective Synthesis of α-Stereogenic γ-Keto Esters via Formal Umpolung, *Org. Lett.* **2012**, *13*, 3260**–**3263.

16. G. K. Surya Prakash (PI),* Nan Shao, Zhe Zhang, Chuanfa Ni, **Fang Wang**, Ralf Haiges, George A. Olah (PI), Facile Synthesis of α-Monofluoromethyl Alcohols: Nucleophilic Monofluoromethylation of Aldehydes Using $(PhSO_2)_2CFTMS$, *J. Fluorine Chem.* **2012**, *133*, 27–32.

15. G. K. Surya Prakash (PI),* **Fang Wang**, Chuanfa Ni, Jingguo Shen, Ralf Haiges, Andrei Yudin, Thomas Mathew, George A. Olah (PI),* Conformational Study of 9-Dehydro-9-Trifluoromethyl Cinchona Alkaloids via ^{19}F NMR Spectroscopy: Emergence of Trifluoromethyl Moiety as a Conformational Stabilizer and a Probe, *J. Am. Chem. Soc.* **2011**, *133*, 9992–9995.

14. G. K. Surya Prakash (PI),* **Fang Wang**, Martin Rahm, Jingguo Shen, Chuanfa Ni, Ralf Haiges, George A. Olah (PI),* On the Nature of C–H···F–C Interactions in Hindered CF_3–C(sp^3) Bond Rotations, *Angew. Chem. Int. Ed.* **2011**, *50*, 11761–11764.

13. G. K. Surya Prakash (PI),* Zhe Zhang, **Fang Wang**, Chuanfa Ni, George A. Olah (PI),* *N*,*N*-Dimethyl-*S*-difluoromethyl-*S*-phenylsulfoximinium Tetrafluoroborate: a Versatile Electrophilic Difluoromethylating Reagent, *J. Fluorine Chem.* **2011**, *132*, 792–798.

12. G. K. Surya Prakash (PI),* Chuanfa Ni, **Fang Wang**, Jinbo Hu, George A. Olah (PI),* From Difluoromethyl 2-Pyridyl Sulfone to Difluorinated Sulfonates: A Protocol for Nucleophilic Difluoro(sulfonato)methylation, *Angew. Chem. Int. Ed.* **2011**, *50*, 2559-2563. Highlighted in *Synfact*, **2011**, 0498–0498.

11. G. K. Surya Prakash (PI),* **Fang Wang**, Chuanfa Ni, Tito J. Thomas, George A. Olah (PI),* Efficient Synthesis of α-(Fluoro/chloro/methoxy)disulfonylmethane Derivatives as Tunable Substituted Methyl Synthons via A New C–S Bond Forming Strategy, *J. Fluorine Chem.* **2010**, *131*, 1007–1012.

10. G. K. Surya Prakash (PI),* Clement Do, **Fang Wang**, Thomas Mathew, George A. Olah (PI),* Cyclodehydration of Fluorinated Diols Using the Mitsunobu Reaction: Highly Efficient Synthesis of Trifluoromethylated Cyclic Ethers, *Synthesis*, **2010**, 1891–1898.

9. G. K. Surya Prakash (PI),* **Fang Wang**, Nan Shao, Thomas Mathew, Golam Rasul, Ralf Haiges, Timothy Stewart, George A. Olah (PI),* A Persistent α-Fluorocarbanion and Its Analogues: Preparation, Characterization, and Computational Study, *Angew. Chem. Int. Ed.* **2009**, *48*, 5358–5362.

8. G. K. Surya Prakash (PI),* **Fang Wang**, Timothy Stewart, Thomas Mathew, George A. Olah (PI),* α-Fluoro-α-nitro(phenylsulfonyl)methane as A Fluoromethyl Pronucleophile: Efficient Stereoselective Michael Addition to Chalcones, *Proc. Natl. Acad. Sci. USA.* **2009**, *106*, 4090–4094.

7. G. K. Surya Prakash (PI),* Xiaoming Zhao, Sujith Chacko, **Fang Wang**, Habiba Vaghoo, George A. Olah (PI),* Efficient 1, 4-Addition of α-Substituted Fluoro(phenylsulfonyl)methane Derivatives to α, β-Unsaturated Compounds, *Beils. J. Org. Chem*. **2008**, *4*, 17.

Publications during the Undergraduate Period

6. Chuanfa Ni, **Fang Wang**, Jinbo Hu (PI),* Enantioselective Nucleophilic Difluoromethylation of Aromatic Aldehydes with $Me_3SiCF_2SO_2Ph$ and $PhSO_2CF_2H$ Reagents Catalyzed by Chiral Quaternary Ammonium Salts, *Beils. J. Org. Chem*. **2008**, *4*, 21.

5. Jun Liu, Chuanfa Ni, **Fang Wang**, Jinbo Hu (PI),* Stereoselective Synthesis of α-Difluoromethyl-β-Amino Alcohols via Nucleophilic Difluoromethylation with $Me_3SiCF_2SO_2Ph$, *Tetrahedron Lett.* **2008**, *49*, 1605–1608.

4. Zujin Zhao, Peng Zhang, **Fang Wang**, Zixing Wang, Ping Lu (PI),* Wenjin Tian (PI),* Blue Light-Emitting, Electron-Transporting Materials Based on Ethynyl-Linked D-A Systems, *Chem. Phys. Lett.* **2006**, *4-6*, 239–296.

3. Zujin Zhao, Xinjun Xu, **Fang Wang**, Gui Yu, Ping Lu (PI),* Daoben Zhu (PI),* Synthesis and Characterization of Light-Emitting Materials Composed of Carbazole Pyrene and Fluorene, *Synth. Met.* **2006**, *156*, 209–212.

2. Yajun Xing, Haiyao Lin, **Fang Wang**, Ping Lu (PI),* An Efficient D-A Dyad for Solvent Polarity Sensor, *Sens. Actuators B* **2006**, *114*, 28–31.

1. Yajun Xing, Xuanyan Xu, **Fang Wang**, Ping Lu (PI),* Optical Properties of a Series of Tetraarylthiophenes, *Opt. Mater.* **2006**, *29*, 407–409.

BOOK CHAPTERS

*** = Ph.D. advisor and corresponding author**

5. G. K. Surya Prakash (PI),* Zhe Zhang, **Fang Wang**, 2,2,2-Trifluoro-1-methoxyethanol in *Encyclopedia of Reagents for Organic Synthesis*, John Wiley & Sons, Ltd, **2013**. DOI: 10.1002/047084289X.rn01620.

4. G. K. Surya Prakash (PI),* **Fang Wang**, Flourishing Frontiers in Organofluorine Chemistry in *Organic Chemistry – Breakthroughs and Perspectives*, K. Ding, L.-X. Dai, Eds. Wiley-VCH Verlag GmbH & Co. KGaA: **2012**; 413–476.

3. G. K. Surya Prakash (PI),* **Fang Wang**, Preparation of Silicon- and Sulfur-Based Fluorinated Methane Derivatives as Versatile Fluoromethylation Reagents in *Efficient Preparations of Fluorine Compounds*, H. W. Roesky, Ed. John Wiley & Sons, Inc.: **2012**; pp 173–204.

2. G. K. Surya Prakash (PI),* **Fang Wang**, 1,1,1-Trifluoroacetone in *Encyclopedia of Reagents for Organic Synthesis*, John Wiley & Sons, Ltd, **2011**. DOI: 10.1002/047084289X.rn01348.

1. G. K. Surya Prakash (PI),* **Fang Wang**, Trifluoromethyltriethylsilane in *Encyclopedia of Reagents for Organic Synthesis*, John Wiley & Sons, Ltd, **2010**. DOI: 10.1002/047084289X.rn01198.

CONFERENCE PUBLICATIONS

*** = Ph.D. or postdoctoral advisor. ‡ = presenter.**
Selected Invited Lectures:

3. **Fang Wang**,‡ The "Magic" of the Fluoromethyl Groups, Department of Chemistry, Justus Liebig University of Giessen, Jul. 17, **2019**, Giessen, Germany.

2. **Fang Wang**,‡ The "Magic" of the Fluoromethyl Groups, Department of Chemistry, Ludwig Maximilian University of Munich, Jul. 16, **2019**, Munich, Germany.

1. **Fang Wang**,‡ Stories of the Trifluoromethyl Group, Department of Chemistry, Technische Universität Kaiserslautern, Aug. 2, **2018**, Kaiserslautern, Germany.

Conferences:

20. **Fang Wang**,‡ Chanan D. Sessler, Martin Rahm, Sabine Becker, Jacob M. Goldberg, Stephen J. Lippard (PI),* Difluoromethyl Group, a Hydrogen Bond Donor, *The 16th Annual Young Investigator Award Symposium*, **2018**, Cambridge, MA, USA (Poster).

19. **Fang Wang**,‡ Jacob M. Goldberg, Chanan D. Sessler, Nathan W. Vogler, Daniel Y. Zhang, William H. Loucks, Thanos Tzounopoulos, Stephen J. Lippard (PI),* Development of Photoactivatable Sensors for Detecting Mobile Zinc, INOR 765, *256th ACS National Meeting*, INOR 747, August 18-23, **2018**, Boston, USA (Poster).

18. **Fang Wang**,‡ Chanan D. Sessler, Martin Rahm, Sabine Becker, Jacob M. Goldberg, Stephen J. Lippard (PI),* Difluoromethyl Group, a Hydrogen Bond Donor, ORGN 443, *256th ACS National Meeting*, INOR 747, August 18-23, **2018**, Boston, USA (SciMix Poster).

17. **Fang Wang**,‡ Zhe Zhang, Ralf M. Haiges, Martin Rahm, Karl O. Christe, Thomas Mathew, G. K. Surya Prakash (PI),* Trifluoromethyl Anion (CF_3^-): What We Do and Do Not Know, ORGN 190, *256th ACS National Meeting*, ORGN 190, August 18-23, **2018**, Boston, USA (Oral).

16. **Fang Wang**,‡ Chanan D. Sessler, Martin Rahm, Sabine Becker, Jacob M. Goldberg, Stephen J. Lippard (PI),* Difluoromethyl Group, a Hydrogen Bond Donor, *22nd International Symposium on Fluorine Chemistry*, Royal Society of Chemistry, **2018**, Oxford, UK (Poster).

15. **Fang Wang**,‡ Chanan D. Sessler, Martin Rahm, Sabine Becker, Jacob M. Goldberg, Stephen J. Lippard (PI),* CF_2H, a Hydrogen Bond Donor, *45th National Organic Chemistry Symposium*, # W42, June 23-26, **2017**, University of California, Davis, USA (Poster).

14. **Fang Wang**,‡ From Organofluorine Chemistry to Bioinorganic Chemistry: Methodology, Mechanistic Studies, and Applications, *250th ACS National Meeting*, AEI 79, August 16-20, **2015**, Boston, USA (Poster).

13. **Fang Wang**,‡ Mik Minier, Andrei Loas, Stephen J. Lippard (PI),* Synthetic Modeling of the sMMO Diiron Active Site with a Preorganized Macrocyclic Ligand Framework, *250th ACS National Meeting*, INOR 747, August 16-20, **2015**, Boston, USA (SciMix Poster).

12. G. K. Surya Prakash (PI),* Zhe Zhang,‡ **Fang Wang**, Chuanfa Ni, George A. Olah (PI),* Preparation and Synthetic Utility of *N*,*N*-dimethyl-*S*-difluoromethyl-*S*-phenylsulfoximinium Salt as a Viable Electrophilic Difluoromethylating Reagent, *241th ACS National Meeting*, ORGN 112, March 27-31, **2011**, Anaheim, USA (Poster).

11. G. K. Surya Prakash (PI),* Chuanfa Ni,‡ **Fang Wang**, Zhe Zhang, George A. Olah (PI),* Synthesis of α,α-Difluoro-β-amino Sulfonic Acids with Difluoromethyl Sulfone as a Masked Nucleophilic Difluoro(sulfonato)methylation Reagent, *241th ACS National Meeting*, ORGN 197, March 27-31, **2011**, Anaheim, USA (Poster).

10. G. K. Surya Prakash (PI),* **Fang Wang**,‡ Chuanfa Ni, George A. Olah (PI),* Utilization of Formal Umpolung Strategy in Asymmetric Organocatalysis: (Phenylsulfonyl)nitromethane as Versatile C1 Synthons, *241th ACS National Meeting*, ORGN 737, March 27-31, **2011**, Anaheim, USA (Poster).

9. G. K. Surya Prakash (PI),* **Fang Wang**,‡ Nan Shao, Clement Do, Chuanfa Ni, George A. Olah (PI),* Stereoselective Organocatalytic Conjugate Addition with α-Fluoro-α-nitro-(phenylsulfonyl)methane: Mechanistic Studies and Synthetic Applications, *241th ACS National Meeting*, ORGN 738, March 27-31, **2011**, Anaheim, USA (Poster).

8. G. K. Surya Prakash (PI),* Chuanfa Ni,‡ **Fang Wang**, Jinbo Hu, George A. Olah (PI),* Synthesis of Lightly Fluorinated Sulfonates from A Difluoromethyl Sulfone via Unique Nucleophilic Difluoro(sulfonato)methylation Reactions, *20th Winter Fluorine Conference*, # 93, January 8-14, **2011**, St. Pete Beach, USA (Oral).

7. G. K. Surya Prakash (PI),* **Fang Wang**,‡ Chuanfa Ni, Jingguo Shen, Ralf Haiges, Andrei K. Yudin, Thomas Mathew, George A. Olah (PI),* Conformational Study of Cinchona Alkaloids via ^{19}F NMR Spectroscopy: Emergence of Trifluoromethyl Label as a Conformational Stabilizer and a Probe, *20th Winter Fluorine Conference*, # 89, January 8-14, **2011**, St. Pete Beach, USA (Oral).

6. G. K. Surya Prakash (PI),* **Fang Wang**, Clement Do,‡ Tito J. Thomas, Thomas Mathew, George A. Olah (PI),* Stereoselective Conjugate Addition and Construction of Fluorinated chiral Carbon Centers: Application of α-

Nitro(phenylsulfonyl)methane as A Pronucleophile, at the *239th ACS National Meeting*, ORGN 179, March 21-25, **2010**, San Francisco, USA (Poster).

5. G. K. Surya Prakash (PI),* **Fang Wang**,‡ Jingguo Shen, Chuanfa Ni, Thomas Mathew, Golam Rasul, George A. Olah (PI),* Stereoselective Synthesis, Conformational and Computational Study of Trifluoromethylated Natural Products, *239th ACS National Meeting*, ORGN 512, March 21-25, **2010**, San Francisco, USA (Oral).
4. G. K. Surya Prakash (PI),* **Fang Wang**, Chuanfa Ni, Tito J. Thomas, Thomas Mathew,‡ George A. Olah (PI),* Highly Efficient Synthesis of α-Fluoro, Chloro, and Methoxysulfonylmethane Derivatives by Novel C–S Bond Forming Strategy, *239th ACS National Meeting*, ORGN 519, March 21-25, **2010**, San Francisco, USA (Oral).
3. G. K. Surya Prakash (PI),* **Fang Wang**,‡ Thomas Mathew, George A. Olah (PI),* Organocatalyst-mediated Stereoselective Monofluoromethylation of α,β-Unsaturated Compounds, *238th ACS National Meeting*, ORGN 336, August 16-20, **2009**, Washington, DC, USA (Oral).
2. G. K. Surya Prakash (PI),* **Fang Wang**, Nan Shao, Thomas Mathew,‡ George A. Olah (PI),* Fluorine Effects in α-Fluorocarbanion: Investigation of Persistent α-Fluorocarbanion, *238th ACS National Meeting*, ORGN 565, August 16-20, **2009**, Washington, DC, USA (Oral).
1. G. K. Surya Prakash (PI),* **Fang Wang**,‡ Xiaoming Zhao, Thomas Mathew, George A. Olah (PI),* Highly Selective 1,4-Addition of Fluoroalkyl Phenyl Sulfones α,β-Unsaturated Carbonyl Compounds, *19th Winter Fluorine Conference*, # 5, January 11-16, **2009**, St. Pete Beach, USA (Poster).

TEACHING EXPERIENCE

Courses

Teaching Assistant for Chemistry 322a and 322b (Introductory organic chemistry courses at the University of Southern California for undergraduate students). Supervised approximately 150 students for over six semesters from 2006 to 2009.
Duties included: Conducting laboratory classes; Tutoring students during office hours/seminars; Grading exams and laboratory reports.

Student Research Projects

During graduate school, I mentored six graduate students and trained them in research laboratory techniques.
During postdoctoral training period, I helped to mentor one undergraduate researcher. A manuscript based on the results of this research project was published in the *J. Am. Chem. Soc*. with the undergraduate student as the first author (*J. Am. Chem. Soc*. **2017**, *139*, 9325–9332.)

REFERENCES

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