

SHULI YOU

PERSONAL INFORMATION:

Shuli You, Ph. D. (DOB: 1975.4.8)
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EDUCATION:

- Ph.D. (Chemistry) Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences 2001.
- B.S. (Chemistry) Nankai University, Tianjin, China 1996.

AWARDS:

- 中国化学会 - 约翰威立出版公司青年化学论文奖(2007)
- The Hundred-Talented Program of the Chinese Academy of Sciences (2007)
- The Top 100 Best Ph. D. Theses in 2003
- The Excellent Achievement Award of Shanghai Graduate Students (Theses) in 2003
- The Special Prize of the President Scholarship for Postgraduate Student in 2001
- BASF-SIOC Scholarship as excellent master student in 1999

RESEARCH EXPERIENCE:

- Apr. 2006-Present: Professor, State Key Laboratory of Organometallics, Shanghai Institute of Organic Chemistry, Shanghai, China
- Feb. 2004-Apr. 2006: Principal Investigator, Genomics Institute of the Novartis Research Foundation, San Diego, CA USA
- Sept. 2001-Feb. 2004: Postdoctoral fellow, Professor Jeffery W. Kelly, Department of Chemistry, The Scripps Research Institute, La Jolla, CA USA
- Sept. 1996-July 2001: Graduate student (advisor: Professor Li-Xin Dai), Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, China

AFFILIATION:

- American Chemical Society (2003-)

RESEARCH INTERESTS:

- Transitional-metal catalyzed highly selective reactions with focus on novel transformation and asymmetric synthesis.
- Small molecule organocatalysts and their applications in organic synthesis.
- Green chemistry oriented new methods and technologies.

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- Interface of chemistry and biology, new technology to facilitate the discovery of novel drugable biological targets, and new chemical scaffolds and their potential biomedical applications.

PUBLICATIONS:

1. **You, S-L**; Zhou, Y-G; Hou, X-L; Dai, L-X. Enantioselective palladium catalyzed allylic substitution with chiral thioether derivatives of ferrocenyl-oxazoline and the role of planar chirality in this reaction. *Chem. Commun.* **1998**, 2765-2766.
2. Dai, L-X; Hou, X-L; Deng, W-P; **You, S-L**; Zhou, Y-G. The application of ligands with planar chirality in asymmetric synthesis. *Pure Appl. Chem.* **1999**, *71*, 1401-1405.
3. **You, S-L**; Hou, X-L; Dai, L-X. Synthesis of planar chiral selenide derivatives of ferrocenyl-oxazoline and their application in enantioselective palladium catalyzed allylic substitution reaction. *Tetrahedron: Asymmetry* **2000**, *11*, 1495-1500.
4. **You, S-L**; Hou, X-L; Dai, L-X; Cao, B-X; Sun, J. Novel bis-*N*-[2-(diphenylphosphino)-ferrocenylcarbonyl]diaminocyclohexane ligands: application in asymmetric allylic alkylation of imino esters with simple allyl carbonate. *Chem. Commun.* **2000**, 1933-1934.
5. **You, S-L**; Hou, X-L; Dai, L-X; Zhu, X-Z. Highly efficient ligands for palladium-catalyzed asymmetric alkylation of ketone enolates. *Org. Lett.* **2001**, *3*, 149-151.
6. Deng, W-P; **You, S-L**; Hou, X-L; Dai, L-X; Yu, Y-H; Xia, W; Sun, J. Importance of planar chirality in chiral catalysts with three chiral elements: the role of planar chirality in 2'-substituted-1,1'-P,N-ferrocene ligands on the enantioselectivity in Pd-catalyzed allylic substitution. *J. Am. Chem. Soc.* **2001**, *123*, 6508-6519.
7. **You, S-L**; Zhu, X-Z; Luo, Y-M; Hou, X-L; Dai, L-X. Highly regio- and enantioselective Pd-catalyzed allylic alkylation and amination of monosubstituted allylic acetates with novel ferrocene P,N-ligands. *J. Am. Chem. Soc.* **2001**, *123*, 7471-7472.
8. **You, S-L**; Zhu, X-Z; Hou, X-L; Dai, L-X. Synthesis of new diphosphine ligands and their applications in palladium-catalyzed allylic alkylation to construct chiral quaternary carbon center. *Huaxue Xuebao* **2001**, *59*, 1667-1674.
9. **You, S-L**; Hou, X-L; Dai, L-X. Novel ferrocene modified P,N-ligands for enantioselective palladium-catalyzed allylic substitution reactions. *J. Organometallic Chem.* **2001**, 637-639, 762-766.
10. **You, S-L**; Luo, Y-M; Deng, W-P; Hou, X-L; Dai, L-X. Palladium-catalyzed asymmetric allylic alkylations of cycloalkenyl acetates with planar chiral phosphino-ferrocene carboxylic acids. *J. Organometallic Chem.* **2001**, 637-639, 845-849.
11. **You, S-L**; Hou, X-L; Dai, L-X; Yu, Y-H; Xia, W. Role of planar chirality of S, N- and P, N-ferrocene ligands in palladium-catalyzed allylic substitutions. *J. Org. Chem.* **2002**, *67*, 4684-4695.
12. **You, S-L**; Razavi, H; Kelly, J W. A biomimetic synthesis of thiazolines using hexaphenyl-oxodiphosphonium trifluoromethanesulfonate. *Angew. Chem. Int. Ed.* **2003**, *42*, 83-85.
13. Dai, L-X; Tu, T.; **You S-L**; Deng, W-P.; Hou, X-L. Asymmetric catalysis with chiral ferrocene ligands. *Acc. Chem. Res.* **2003**, *36*, 659-667.
14. **You, S-L**; Kelly, J W. Total synthesis of dendroamide A: oxazole and thiazole construction using an oxodiphosphonium salt. *J. Org. Chem.* **2003**, *68*, 9506-9609.
15. **You, S-L**; Kelly, J W. Highly efficient biomimetic total synthesis and structural verification of bistratamides E and J from lissoclinum bistratum. *Chem. Eur. J.* **2004**, *10*, 71-75.

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16. Songpon, D; **You, S-L**; Kelly, J W. Synthesis of all nineteen appropriately protected chiral α -hydroxy acid equivalents of the α -amino acids for Boc solid-phase depsi-peptide synthesis. *Org. Lett.* **2004**, *6*, 497-500.
 17. **You, S-L**; Kelly, J W. Highly efficient enantiospecific synthesis of imidazoline-containing amino acids using bis(triphenyl)oxodiphosphonium trifluoromethanesulfonate. *Org. Lett.* **2004**, *6*, 1681-1683.
 18. **You, S-L**; Songpon, D; Kelly, J W. Solid-phase synthesis and stereochemical assignments of tenuencyclamides A-D employing heterocyclic amino acids derived from commercially available Fmoc α -amino acids. *Org. Lett.* **2004**, *6*, 2627-2630.
 19. **You, S-L**; Hou, X-L; Dai, L-X Application of chiral ferrocene ligands in asymmetric palladium catalyzed allylic substitution reactions *J. Graduate School of the Chinese Academy of Sciences* **2004**, *21*, 413.
 20. **You, S-L**; Kelly, J W. The total synthesis of Bistratamides F-I. *Tetrahedron* **2005**, *61*, 241-249.
 21. **You, S-L**; Kelly, J W. Total synthesis of didmolamides A&B. *Tetrahedron Lett.* **2005**, *46*, 2567-2570.
 22. Songpon, D; Powers, E. T.; **You, S-L**; Kelly, J W. Controlling the morphology of cross β -sheet assemblies by rational design. *J. Am. Chem. Soc.* **2005**, *127*, 8562-8570.
 23. Hou, X-L; **You, S-L**; Tao, T.; Deng, W.-P.; Wu, X.-W.; Li, M.; Yuan, K.; Dai, L-X Enantioselective transition-metal catalyzed carbon-carbon bond formation reactions using novel chiral ferrocenes and cyclophanes. *Top. in Catalysis* **2005**, *35*, 87-103.
 24. **You, S-L***; Dai, L-X. Enantioselective Palladium-Catalyzed Decarboxylative Allylic Alkylations. *Angew. Chem. Int. Ed.* **2006**, *45*, 5246-5248.
 25. Li, G-Q; Dai, L-X; **You, S-L***. Thiazolium-Derived N-Heterocyclic Carbene-Catalyzed Cross-Coupling of Aldehydes with Unactivated Imines. *Chem. Commun.* **2007**, 852-854.
 26. Kang, Q; Zhao, Z-A; **You, S-L***. Highly Enantioselective Friedel-Crafts Reaction of Indoles with Imines by a Chiral Phosphoric Acid. *J. Am. Chem. Soc.* **2007**, *129*, 1484-1485. (a Most-Accessed Article for the first-quarter of 2007)
 27. **You, S-L***. Recent Development of Asymmetric Transfer Hydrogenation with Hantzsch Esters: A Biomimetic Approach. *Chem. Asian J.* **2007**, *2*, 820-827.
 28. Kang, Q; Zhao, Z-A; **You, S-L***. Highly Enantioselective Transfer Hydrogenation of α -Imino Esters by a Phosphoric Acid. *Adv. Synth. Catal.* **2007**, *349*, 1657-1660. (a Most-Accessed Article in August, 2007)
 29. Li, G-Q; Li, Y; Dai, L-X; **You, S-L***. N-Heterocyclic Carbene Catalyzed Ring Expansion of 4-Formyl- β -lactams: Synthesis of Succinimide Derivatives. *Org. Lett.* **2007**, *9*, 3519-3521. (a Most-Accessed Article for the third-quarter of 2007)
 30. Xia, J.-B.; **You, S-L***. Carbon-Carbon Bond Formation through Double sp^2 C-H Activations: Synthesis of Ferrocenyl Oxazoline Derivatives. *Organometallics* **2007**, *26*, 4869-4871. (a Most-Accessed Article for the third-quarter of 2007)
 31. He, H.; Zheng, X.-J.; Li, Y; Dai, L-X; **You, S-L***. Ir-catalyzed Regio- and Enantio-selective Decarboxylative Allylic Alkylations. *Org. Lett.* **2007**, *9*, 4339-4341.
 32. Li, Y.; Feng, Z; **You, S-L***. D-Camphor-derived triazolium salts for catalytic intramolecular crossed aldehyde-ketone benzoin reactions. *Chem. Commun.* **2008**, 2263-2265.
 33. Kang, Q; Zheng, X-J; **You, S-L***. Highly Enantioselective Friedel-Crafts Reaction of 4,7-Dihydroindoles with Imines by Chiral Phosphoric Acids: Facile Access to 2-Indolyl Methanamine Derivatives. *Chem. Eur. J.* **2008**, *14*, 3539-3542.

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34. Li, G-Q; Li, Y; Dai, L-X; **You, S-L***. Enantioselective Synthesis of *cis*-4-Formyl- β -lactams via Chiral *N*-Heterocyclic Carbene-Catalyzed Kinetic Resolution *Adv. Synth. Catal.* **2008**, *350*, Early View, DOI: 10.1002/adsc.200700553.
 35. Sheng, Y.-F.; Zhang, A.-J.*; Zheng, X.-J.; **You, S.-L.***. Organocatalytic Asymmetric Friedel-Crafts Reactions *Chin. J. Org. Chem.* **2008**, *28*, 605-616 (in Chinese).
 36. W.-B. Liu, He, H.; Dai, L-X; **You, S-L***. Ir-Catalyzed Regio- and Enantioselective Friedel-Crafts-Type Allylic Alkylation of Indoles *Org. Lett.* **2008**, *10*, 1815-1818.
 37. Kang, Q; Zhao, Z-A; **You, S-L***. Asymmetric Transfer Hydrogenation of β,γ -Alkynyl α -Imino Esters by a Brønsted Acid. *Org. Lett.* **2008**, *10*, 2031-2034.

PATENTS:

1. **You, S.**; Hou, X.; Dai, L. Preparation of chiral oxazolinylderocenyldiphosphine ligands. *Faming Zhuanli Shenqing Gongkai Shuomingshu* **2001**, 27. (CN 1299820A)
2. Hou, X.; **You, S.** Preparation of chiral ferrocenyl diphosphine pocket ligands and their application. *Faming Zhuanli Shenqing Gongkai Shuomingshu* **2002**, 20. (CN 1349994A)
3. Sim, T.; Lee, H. S.; Ren, P.; Ding, Q.; Wang, X.; Uno, T.; Zhang, G.; Liu, Y.; Li, B.; Li, L.; Gray, N.; **You, S.** Preparation of pyrimidopyrimidines as protein kinase inhibitors. PCT Int. Appl. **2005**, 148. (WO2005011597A2)
4. Ding, Q.; Xie, Y.; Gray, N. S.; **You, S.**; Chopiuk, G.; Jiang, J.; Liu, Y.; Steensma, R.; Wang, X.; Sim, T. Preparation of [1,6]naphthyridin-3-ones as protein kinase inhibitors. PCT Int. Appl. **2005**, 77. (WO2005034869A2)
5. Ren, P.; Wang, X.; Zhang, G.; Ding, Q.; **You, S.**; Zhang, Q.; Chopiuk, G.; Pamela, A.; Sim, T.; Gray, N. S. Preparation of imidazolylpyrimidinamines as protein kinase inhibitors. PCT Int. Appl. **2005**, 103. (WO2005123719A1)
6. Sim, T.; Gray, N. S.; Lee, H. S.; Liu, Y.; Ren, P.; **You, S.**; Zhang, Q.; Ding, Q.; Wang, X.; Jiang, S.; Albaugh, P. A. Compounds and compositions as protein kinase inhibitors. PCT Int. Appl. **2006**, 61. (WO2006081172A2)
7. Adait, N.; Gray, N. S.; Liu, Y.; Ren, P.; Sim, T.; **You, S.** Preparation of pyrrolopyrimidinyl phenyl ureas as protein kinase inhibitors. PCT Int. Appl. **2006**, 52. (WO2006124462A2)
8. Molteni, V.; Li, X.; Chianelli, D.; Loren, J.; Liu, Y.; Karanewsky, D. S.; Furet, P.; Guagnano, V.; **You, S.**; Nabakka, J.; Liu, X.; Pan, S. Diarylamine-containing compounds and compositions, and their use as modulators of c-kit receptors. PCT Int. Appl. **2007**, 241. (WO2007038669A2)
9. Ren, P.; Zhang, G.; **You, S.**; Sim, T.; Gray, N. S.; Xie, Y.; Wang, X.; He, Y. Compositions and methods for fgf receptor kinases inhibitors. PCT Int. Appl. **2007**, 65. (WO2007136465A2)
10. Chianelli, D.; Cow, C.; He, Y.; Jiang, S.; Li, X.; Liu, X.; Liu, Z.; Loren, J.; Molteni, V.; Nabakka, J.; Ren, P.; Sim, T.; Wang, X.; **You, S.** Compositions and methods for modulating c-kit and pdgfr receptors. PCT Int. Appl. **2008**, 155. (WO2008051757A1)
11. **You, S.**; Kang, Q.; Zhao, Z. Process for highly enantioselective preparation of 3-indolylmethanamine derivatives. *Faming Zhuanli Shenqing Gongkai Shuomingshu* **2007**, 26. (CN 100999490A)
12. **You, S.**; Li, G.-Q. Process for preparation of 3-substituted lactam compounds. *Faming Zhuanli Shenqing Gongkai Shuomingshu* **2007**, 19. (CN 101066945A)

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13. **You, S.**; Hu, H. Method for synthesizing 1,3-disubstituted-4-alkenyl-1-pentanone. *Faming Zhuanli Shenqing Gongkai Shuomingshu* **2007**, 17. (CN 101085726A)
 14. **You, S.**; Li, G.; Li, Y. Process for synthesis of aldehyde-substituted circler amine compounds with high enantioselectivity and 3-substituted lactam compounds with optical activity. *Faming Zhuanli Shenqing Gongkai Shuomingshu* **2008**, 18. (CN 101125817A)