

## 平成22年度 研究業績

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### 1. 発表論文等 (査読付き論文, 著書, 総説等の発表状況)

- (1) Nickel-Catalyzed Alkyl Coupling Reactions: Evaluation of Computational Methods  
Pratt, Lawrence M.; Voit, Stewart; Okeke, Fabian N.; Kambe, Nobuaki  
*J. Phys. Chem. A*, in press.
- (2) Cross-coupling of Grignard reagents with Alkyl Halides or Tosylates by the Use of Nickel or Palladium Containing Perovskite  
Singh, Surya Prakash; Iwasaki, Takanori; Terao, Jun; Kambe, Nobuaki  
*Tetrahedron Lett.* **2011**, *52*, 774-776.
- (3) Synthesis of Highly Insulated Molecular Wires by Polymerization of Organic-Soluble Symmetrical Linked Inclusion Complex Monomers  
Terao, Jun; Tsuda, Susumu; Tsurui, Keisuke; Kambe, Nobuaki  
*Macromol. Symp.* 2010, *297*, 54-60.
- (4) Palladium-Catalyzed Hydrophenoxy carbonylation of Internal Alkynes by Phenol and CO: the Use of Zn for the Formation of Active Catalyst  
Kuniyasu, Hitoshi; Yoshizawa, Takahiro; Kambe, Nobuaki  
*Tetrahedron Lett.* **2010**, *51*, 6818-6821.
- (5) Pd-Catalyzed Regioselective Iminothiolation of Alkynes: A Remarkable Effect of the CF<sub>3</sub> Group of Iminosulfides  
Minami, Yasunori; Kuniyasu, Hitoshi; Sanagawa, Atsushi; Kambe, Nobuaki  
*Org. Lett.* **2010**, *12*, 3744-3747.
- (6) Regioselectivity of Selenium-Mediated Carbonylation of Organolithium Compounds with Carbon Monoxide  
Fujiwara, Shin-ichi; Nishiyama, Akira; Okada, Kazuhiro; Maeda, Hajime; Shin-ike, Tsutomu; Sonoda, Noboru; Kambe, Nobuaki  
*Phosphorus, Sulfur, and Silicon.* **2010**, *185*, 1117-1123.

### 2. 学会発表等 (国内外の招待講演および国際会議での発表状況)

- (1) Transition Metal Catalyzed Alkylation Reactions  
Nobuaki Kambe, The 6<sup>th</sup> Asian European Symposium on Metal Mediated Efficient Reactions, Nanyang Technological University, Singapore, 2010.6.7-9 (招待講演).

- (2) Transition Metal Catalyzed Alkylation Reactions  
Nobuaki Kambe, 2nd Joint Symposium between Strasbourg and Osaka, 2010, Strasbourg, France, 2010.6.30-2010.7.3 (招待講演).
- (3) Synthetic Reactions via Transition Metal Ate Complexes Intermediates  
Nobuaki Kambe, Aachen Symposium, Aachen, Germany, 2010.9.5-8 (招待講演) .
- (4) Transition Metal Catalyzed Alkylation Reactions by the Use of Grignard Reagents  
Nobuaki Kambe, 2010 International Chemical Congress of Pacific Basin Societies (Pacifichem 2010), Honolulu, USA, 2010.12.15-20 (招待講演).
- (5) Alkyl Fluorides as Promising Alkylating Reagents  
Nobuaki Kambe, 2010 International Chemical Congress of Pacific Basin Societies (Pacifichem 2010), Honolulu, USA, 2010.12.15-20 (招待講演) .
- (6) Rhodium-catalyzed cross-coupling of vinyl ethers and esters with organometallic reagents  
Takanori Iwasaki, Yoshinori Miyata, Yuuki Fujii, Hitoshi Kuniyasu, Nobuaki Kambe, The 3rd EuCheMS Chemistry Congress, Nürnberg, Germany, 2010.8.29-2010.9.2 (ポスター発表).
- (7) Transition metal catalyzed cross-coupling reaction of alkyl halides with Grignard reagents  
Takanori Iwasaki, Suruya P. Singh, Ryohei Shimizu, Willbe W. S. Ho, Hitoshi Kuniyasu, Nobuaki Kambe, The Sixth International Symposium on Integrated Synthesis, Kobe, Japan, 2010.10.23-24 (ポスター発表).
- (8) Palladium-Catalyzed Vinylselenation of Allenes  
Maiko Okuyama, Susumu Tsuda, Shin-ichi Fujiwara, Takanori Iwasaki, Hitoshi Kuniyasu, Nobuaki Kambe, 2010 International Chemical Congress of Pacific Basin Societies (Pacifichem 2010), Honolulu, USA, 2010.12.15-20 (ポスター発表) .
- (9) Evaluation of relative  $\Delta G$  of the oxidative addition of benzoyl halides to platinum(0) utilizing ligand exchange reaction  
Daisuke Nakane, Kana Kumamoto, Takanori Iwasaki, Hitoshi Kuniyasu, Nobuaki Kambe, 2010 International Chemical Congress of Pacific Basin Societies (Pacifichem 2010), Honolulu, USA, 2010.12.15-20 (ポスター発表) .
- (10) Facile Ligand Exchange Reaction as a Convenient Tool for Measurement of  $\Delta\Delta G$  of the Oxidative Addition of Benzoyl Halides to Palladium(0) Complex  
Atsushi Sanagawa, Hitoshi Kuniyasu, Takanori Iwasaki, Nobuaki Kambe, 2010 International Chemical Congress of Pacific Basin Societies (Pacifichem 2010), Honolulu, USA, 2010.12.15-20 (ポスター発表) .

(11)(sp<sup>3</sup>)C-(sp<sup>3</sup>)C cross-coupling reaction catalyzed by transition metals having unsaturated carbon ligands

Ryohei Shimizu, Takanori Iwasaki, Hitoshi Kuniyasu, Nobuaki Kambe,  
2010 International Chemical Congress of Pacific Basin Societies (Pacifichem 2010),  
Honolulu, USA, 2010.12.15-20 (ポスター発表) .

(12)Transition-metal-catalyzed decarbonylative isomerization of

*N*-allenylcarbamochoalcogenate to 3-chalcogeno-1-azadienes

Daisuke Shiro, Hiroyuki Nagai, Susumu Tsuda, Shin-ichi Fujiwara, Takanori Iwasaki,  
Hitoshi Kuniyasu, Nobuaki Kambe, 2010 International Chemical Congress of Pacific  
Basin Societies (Pacifichem 2010), Honolulu, USA, 2010.12.15-20 (ポスター発表) .

(13)Rhodium-catalyzed cross-coupling of vinyl ethers with Grignard reagents

Yoshinori Miyata, Yuuki Fujii, Takanori Iwasaki, Hitoshi Kuniyasu, Nobuaki Kambe,  
2010 International Chemical Congress of Pacific Basin Societies (Pacifichem 2010),  
Honolulu, USA, 2010.12.15-20 (ポスター発表) .

### 3. 特許

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### 4. 学会・シンポジウム等の開催状況

(1) 石油学会第40回石油・石油化学討論会，神戸国際会議場，2010.11.25-26（神戸宣明，実行委員長）。

### 5. 受賞等

(1) 岩崎孝紀（助教）

Reaxys PhD Prize 2010（Reaxys 若手研究者賞），Runner-up  
エルゼビア&EuChemS（ヨーロッパ化学会議），2011.8.30

### 6. 新聞報道等

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7. 領域内の共同研究の準備・実施状況とその成果

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8. その他特記事項

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